

Epistemology

A Contemporary Introduction to the
Theory of Knowledge

Third Edition

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Introduction

A sketch of the sources and nature of belief, justification, and knowledge

Before me is a grassy green field. A line of trees marks its far edge, which is punctuated by a spruce on its left side and a maple on its right. Birds are singing. A warm breeze brings the smell of roses from a nearby trellis. I reach for a glass of iced tea, still cold to the touch and flavored by fresh mint. I am alert, the air is clear, the scene is quiet. My perceptions are quite distinct.

It is altogether natural to think that from perceptions like these, we come to know a great deal—enough to guide us through much of daily life. But we sometimes make mistakes about what we perceive, just as we sometimes misremember what we have done, or infer false conclusions from what we believe. We may then think we know something when in fact we do not, as when we make errors through inattention or are deceived by vivid dreams. And is it not possible that we are mistaken more often than we think?

Perception, belief, and justification

Philosophers have thought a great deal about these matters, especially about the nature of perceiving and about what we can know—or may mistakenly think we know—through perception or through other sources of knowledge, such as memory as a storehouse of what we have learned in the past, consciousness as revealing our inner lives, reflection as a way to acquire knowledge of abstract matters, and testimony as providing knowledge originally acquired by others. In approaching these topics in epistemology—the theory of knowledge and justification—it is appropriate to begin with perception. In my opening description, what I detailed was what I *perceived*: what I saw, heard, smelled, felt, and tasted. In describing my experience, I also expressed some of what I *believed*: that there was a green field before me, that there were bird songs, that there was a smell of roses, that my glass felt cold, and that the tea tasted of mint.

It seems altogether natural to believe these things given my experience, and I think I *justifiedly* believed them. I believed them, not in the way I would if I accepted the result of wishful thinking or of merely guessing, but with justification. By that I mean above all that the beliefs I refer to were *justified*.

This a good thing; justified beliefs are of a kind it is desirable and reasonable to hold.

Justification as process, as status, and as property

Being justified, in the sense illustrated by my beliefs about what is clearly before me, need not be the result of a process. Being justified is not, for instance, like being purified, which requires a process of purification. My beliefs about what is before me are not justified because they have been through *a process of being justified*, as when we defend a controversial belief by giving reasons for it. They have not; the question whether they are justified has not even come up. No one has challenged them or even asked why I hold them. They are justified—in the sense that they have the *property of being justified—justifiedness*—because there is something about them in virtue of which they are natural and appropriate for me as a normal rational person.

We can see what justifiedness is by starting with a contrast. Unlike believing something that one might arrive at through a wild guess in charades, our justified perceptual beliefs are justified for us simply through their arising in the normal way from our clear perceptions. Roughly, they are justified in the sense that they are quite in order from the point of view of the standards for what we may reasonably believe. That, in turn, is roughly what we may believe without being subject to certain kinds of criticism, say as intellectually lax, as sloppy, as overhasty, or the like. Justified beliefs are also a kind that we tend to expect to be true. Imagine someone's saying 'His belief is justified, but I don't expect it to turn out to be true'. Without special explanation, this would be to take away with one hand something given by the other.

In saying that I justifiedly believe there is a green field before me, I am implying something else, something quite different, though it sounds very similar, namely that I am *justified in believing* there is a green field before me. To see the difference, notice that we can be justified *in* believing something—roughly in the sense that we *have* a justification for believing it—without believing it at all, quite as we can be justified in doing something, such as criticizing a person who has failed us, without doing it. Similarly, I might be justified in believing that I can do a certain difficult task, yet fail to believe this until someone helps me overcome my hesitation. I may then see that I *should* have believed it.

Being justified in believing something is having justification *for* believing it. This, in turn, is roughly a matter of having ground for believing it (and we also speak of having *a* ground or *a* justification or *a* reason). Just as we can have reason to do things we do not do, we can have reason to believe things we do not believe. You can have reason to go to the library and forget to, and I can have reason to believe someone is making excuses for me but—because I have no inkling that I need any—fail to believe this. Our justification for believing is basic raw material for actual justified belief; and justified belief is commonly good raw material for knowledge.

The two justificational notions are intimately related: if one justifiably believes something, one is also justified *in* believing it, hence *has* justification for believing it. But the converse does not hold: not everything we are justified *in* believing is something we *do* believe. When I look at a lawn, I am justified *in* believing it has more than ten blades of grass per square foot, but I would not normally have any belief about the number of blades per square foot. We have more justificational raw material than we need or use. We do not believe anywhere near the number of things that we have justification to believe. This holds not just in trivial matters but also in, for instance, mathematics.

There are many things we are justified in believing which we do not actually believe, such as the proposition that normal people do not drink 100 liters of water a day. Let us call the first kind of justification—justifiably believing—*belief justification*, as it belongs to actual beliefs. It is also called *doxastic* justification, from the Greek *doxa*, translatable as ‘belief’. Call the second kind—being justified *in* believing—*situational justification*, since it is based on the informational situation one is in. It is a *status* one has in virtue of that situation. This situation includes not just what one perceives, but also one’s background beliefs and knowledge, such as the belief that people drink at most a few liters of water a day. Situational justification is also called *propositional justification*, since the proposition in question is justified *for* the person whose situation provides justification for believing it, and the person *has* justification for it.

In any ordinary situation in waking life, we have both a lot of general information stored in memory and much specific information presented in our perceptions. We do not need all this information, and our situational justification for believing something is often unaccompanied by our actually believing that it is so. We have situational justification for vastly more justified beliefs than we actually have. Here nature is very generous. We are built to gain from a mere glance enough information to ground vastly more beliefs than we normally form or rely on.

Without situational justification, such as the kind that comes from seeing a green field, there would be no belief justification. I would not, for instance, justifiably believe that there is a green field before me. We cannot have a justified belief without being in a *position* to have it. Without situational justification, we are not in such a position. Without belief justification, on the other hand (i.e., doxastic justification), we would have no beliefs of a kind we want and need, those with a positive status—being justified—that makes them appropriate for us as rational creatures and warrants us in expecting them to be true. Belief justification, then, is more than the situational kind it presupposes.

Belief justification occurs when there is a certain kind of connection between what yields situational justification and the justified belief that benefits from it. Belief justification occurs when a belief is *grounded in*, and thus in a way supported by (or *based on*), something that gives one situational

justification for that belief, such as seeing a field of green. Seeing is of course perceiving; and perceiving is a basic source of knowledge—perhaps our most elemental source, at least in childhood. This is largely why perception is so large a topic in epistemology.

Knowledge and justification

Knowledge would not be possible without belief justification—or a kind of grounding significantly like it. If I did not have the kind of justified belief I do—if, for instance, I were wearing dark sunglasses and could not tell the difference between a green field and a smoothly ploughed one that is really an earthen brown—then on the basis of what I now see I would not know that there is a green field before me.

To see how knowledge fits into the picture so far sketched, consider two points. First, justified belief is important for knowledge because at least the typical things we know we *also* justifiedly believe on the same basis that grounds our knowing them. If I know someone is making excuses for me, say by the way she explains my lateness, I do not just believe this but justifiedly believe it. Second, much of what we justifiedly believe we also know. Surely I could have maintained, regarding each of the things I have said I justifiedly believed through perception, that I also knew it. And do I not know these things—say that there is a lawn before me and a car on the road beyond it—on the *same* basis on which I justifiedly believe them, for instance on the basis of what I see and hear? This is very plausible.

As closely associated as knowledge and justified belief are, there is a major difference. If I know that something is so, then it is *true*, whereas I can justifiedly believe something false. If a normally reliable friend tricked me into believing something false, say that he lost my car keys, I could still justifiedly believe he lost them. We must not assume, then, that everything we learn about justified belief applies to knowledge. We should look at both concepts independently.

I said that I *saw* the green field and that my belief that there was a green field before me arose from my seeing it. If the belief arose, under normal conditions, from my seeing the field (so that I believed it is there simply because I saw it there), then the belief was true, justified, and constituted knowledge. Again, however, we can alter the example to bring out how knowledge and justification may diverge: the belief might remain justified even if, unbeknownst to me, the grass had been burned up since I last saw it, and there was now a perfect artificial replica of it spread out in grassy-looking strips of cloth that hide the charred ground. Then, although I might think I know the green field is there, I would only falsely believe I know this. Such a bizarre happening is, to be sure, improbable. Still, a justified but false belief *could* arise in this way.

Memory, introspection, and self-consciousness

As I look at the field before me, I *remember* carefully cutting a poison ivy vine from the trunk of the spruce. Surely, my memory belief that I cut off this vine is justified. I think I also know that I did this. But here I confess to being less confident than I am of the justification of my perceptual belief, held in the radiant sunlight, that there is (now) a green field before me.

As our memories become less vivid, we tend to be correspondingly less sure that our beliefs apparently based on them are justified. Still, I distinctly recall cutting the vine. The stem was furry; it was bonded to the tree trunk; the cutting was difficult and slightly wounded the tree. By contrast, I have no belief about whether I did this in the summer or the fall. I *entertain* the proposition that it was in the summer; I *consider* whether it is true; but, being utterly uncertain, I *suspend judgment* on it. I thus neither believe it nor *disbelieve* it, that is, believe it is false. My stance is one of *non-belief*. I need not try to force myself to resolve the question and judge the proposition either way. I might need to resolve it if something important turned on when I did the pruning; but here suspended judgment, with the resulting non-belief, is not uncomfortable.

As I think about cutting the vine, it occurs to me that in recalling that task, I am vividly imaging it. Here, I seem to be looking into my own consciousness, thus engaging in a kind of *introspection*. I can still see, in my mind's eye, the furry vine clinging to the tree, the ax, the sappy wound along the trunk where the vine was severed from it. I have turned my attention inward to my own imagery. The object of my attention, my own imaging of the scene, seems internal and is present to my consciousness, though *its* object is external and long gone by. But clearly, I believe that I am imaging the vine; and there is no apparent reason to doubt that I justifiably believe this and know that it is so. This is a simple case of *self-knowledge*.

Reason and rational reflection

I now look back at the field and am struck by how perfectly rectangular it looks. If it is perfectly rectangular, then its corners are right angles. Here I believe something different in kind from the things cited so far: that if the field is rectangular, then its corners are right angles. This is a geometrical belief. I do not hold it on the same sort of basis I have for the other things I have mentioned believing. My conception of geometry as applied to ideal figures seems to be my basis. On that basis, my belief seems to be firmly justified and to constitute knowledge.

I can see that the spruce is taller than the maple, and that the maple is taller than the crab apple tree on the lawn closer by. I now realize that the spruce is taller than the crab apple. My underlying belief here is that if one thing is taller than a second and the second taller than a third, then the first is taller than the third. And, perhaps even more than the geometrical belief,

this abstract belief seems to arise simply from my grasp of the concepts in question, above all the concept of one thing's being taller than another.

Testimony

The season has been dry, and it now occurs to me that the roses will not flourish without a good deal of water. But this I do not believe simply on the basis of perception. One source from which I learned it is repeated *observation*. But there is another possible source: although much knowledge comes directly from our own experience, much also originates with *testimony* from others. I have received testimony as to where on the stem to trim off dead roses. If I did not learn about watering roses from my own experience, I could have learned the same things from testimony, just as I learned from a friend how far back to clip off dead roses.

To be sure, I need perception, such as hearing what I am told, to acquire knowledge on the basis of testimony, just as I needed perception to *learn* these things about roses on my own; and I need memory to *retain* them whatever their source. They are, however, generalizations and hence do not arise from perception in the direct and apparently simple way my visual beliefs do, or emerge from memory in the way my beliefs about past events I witnessed do. But do I not still justifiably believe that the roses will not flourish without a lot of water? The commonsense view is that I both justifiably believe and know this about roses, and that I can know it either through generalizing—a kind of reasoning—from my own observations, or from testimony, or from both.

Basic sources of belief, justification, and knowledge

The examples just given represent what philosophers have called perceptual, memorial, introspective, a priori, inductive, and testimony-based beliefs. The first four kinds are basic in epistemology. My belief that the glass is cold to the touch is *perceptual*, being based as it is on tactual perception. My belief that I cut the poison ivy vine from the spruce is *memorial*, since it is stored in my memory and held because of that fact. My belief that I am imagining a green field is called *introspective* because it is conceived as based on “looking within” (the etymological meaning of ‘introspection’); but it could also be called simply *self-directed*: no “peering” within or special concentration is required. My belief that if the spruce is taller than the maple and the maple is taller than the crab apple then the spruce is taller than the crab apple is called *a priori* (meaning, roughly, based on what is “prior” to observational experience) because it apparently arises not from experience of how things actually behave, but simply in an *intuitive* way. It arises from a rational grasp of the key concepts one needs in order to have the belief, such as the concept of one thing's being taller than another.

By contrast, my belief that the roses will not grow well without abundant

water does not arise directly from one of the four basic sources just mentioned: perception, memory, introspection, and a priori intuition (reason, in one sense of the term). It is called *inductive* because it is formed (and held) on the basis of a generalization from something more basic, in this case what I learned from perceptual experiences with roses. Those experiences, apparently through my beliefs recording them, “lead into” the generalization about roses, to follow the etymological meaning of ‘induction’. For instance, I remember numerous cases in which roses have faded when dry, and I eventually concluded that they need abundant water.

Each of the four basic kinds of belief I have described—perceptual, memorial, introspective, and a priori—is grounded in the source from which it arises. The nature of this grounding is explored in detail in Part One, which concerns perception, memory, consciousness, and reason. These sources are commonly taken to provide raw materials for inductive generalizations, as where observations and memories about roses yield a basis for generalizing about their needs.

Any of the beliefs we considered could instead have been grounded in testimony (the topic of Chapter 7), had I formed the beliefs on the basis of being given the same information by someone I trust. That person, however, would presumably have acquired it through one of these *other* sources (or ultimately through someone’s having done so), and this makes testimony a different kind of source. This is why testimony is not a basic source of knowledge. It is still, however, incalculably important for human knowledge and unlimitedly broad. It can, for instance, justify a much wider range of propositions than perception can. We can credibly tell others virtually anything we know.

Three kinds of grounds of belief

Our examples illustrate not only grounding of beliefs *in* a source, such as perception or introspection, but also *how* they are grounded in these sources. There are at least three important kinds of grounding of beliefs—ways they are grounded. These are causal, justificational, and epistemic grounding. All three are important for many major epistemological questions.

Consider my belief that there is a green field before me. It is *causally grounded* in my experience of seeing the field because that experience produces or underlies the belief. It is *justificationally grounded* in that experience because the experience, or at least some element in the experience, justifies my belief. And it is *epistemically grounded* in the experience because in virtue of that experience my belief constitutes knowledge that there is a green field before me (‘epistemic’ comes from the Greek *episteme* meaning, roughly, ‘knowledge’). These three kinds of grounding very often coincide (though Chapter 11 will describe important cases in which knowledge and justification do not). I will thus often speak simply of a belief as *grounded* in a source, such as visual experience, when what grounds the belief does so in all three ways.

Causal, justificational, and epistemic grounding each go with a very common kind of question about belief. Let me illustrate.

Causal grounding goes with ‘Why do you believe that?’ An answer to this, asked about my belief that there is a green field before me, would be that I see it. This is the normal kind of reply; but as far as mere causal production of beliefs goes, the answer could be brain manipulation or mere hypnotic suggestion. If, however, mere brain manipulation or mere hypnotic suggestion produces a belief, then the causal ground of the belief would not justify it. If, under hypnosis, I am told that someone dislikes me and as a result I believe this, the belief is not thereby justified.

Justificational grounding goes with such questions as ‘What is your justification for believing that?’ or ‘What justifies you in thinking that?’ or ‘Why should I accept that?’ (‘Why do you believe that?’ *can* be asked with this same justification-seeking force.) Again, I might answer that I see it. I might, however, have a justification (the situational kind) that, unlike seeing the truth in question, is not a *cause* of my believing it.

The justification I cite could also be the testimony of a credible good friend. It could be this even when, by a short circuit, brain manipulation does the causal work of *producing* my belief and leaves the testimony like a board that slides just beneath a roof beam but bears none of its weight. This shows that an element that provides situational justification for a belief may play no role in producing or supporting the belief, even if this element, like the auxiliary unstressed board, stands ready to play a supporting role if the belief is put under pressure by a challenge.

Epistemic grounding goes with ‘How do you know that?’ Once again, saying that I see it will commonly answer this. Here, however, it may be that a correct answer *must* cite something that is *also* a causal ground for the belief (a matter discussed in Chapter 10). Certainly a justificational ground need not be a ground of knowledge. One can justifiably believe a proposition without knowing it.

Clearly, the same sorts of points can be made for the other five cases I have described: memorial beliefs are grounded in memory, self-directed (“introspective”) beliefs in consciousness, inductively based beliefs in further, premise-beliefs that rest on experience, a priori beliefs in reason, and testimony-based beliefs in testimony.

Fallibility and skepticism

Even well-grounded beliefs can be mistaken. We can be deceived by our senses. We are fallible in perceptual matters, as in our memories, in our reasoning, and in other respects. One might now wonder, as skeptics do, whether we *know* even that it is improbable that our senses are now deceiving us. One might also wonder whether, when we take ourselves to see green grass, we are even *justified* in our belief that no such mistake has occurred.

Suppose that I am in an unfamiliar park. I might not know or even

justifiedly believe that artificial grass has not replaced the natural grass I take to be before me. (I may have heard of such substitutions and may have no good reason to believe this has not happened, though I do not consider the matter.) Am I justified in believing that there is green grass before me?

Suppose that I am not justified in believing there is green grass before me. If not, how can I be justified in believing what appear to be far less obvious truths, such as that my home is secure against the elements, my car safe to drive, and my food free of poison? And how can I know the many things I need to know in life, such as that my family and friends are trustworthy, that I can control my behavior and thus partly determine my future, and that the world we live in at least approximates the structured reality portrayed by common sense and science?

These are difficult and important questions. They indicate how insecure and disordered human life would be if we could not suppose that we possess justified beliefs and knowledge. We stake our lives every day on what we take ourselves to know. It would be unsettling to revise this stance and retreat to the view that at best we have justification to believe. But if we had to give up even this moderate view and to conclude, say, that what we believe is not even justified, we would face a crisis. Much later, in discussing skepticism, I will explore such questions at some length. Until then I will assume the commonsense view that beliefs with a basis like that of my belief that there is a green field before me are not only justified but also constitute knowledge.

Once we proceed on this commonsense assumption, it is easy to see that there are many different kinds of circumstances in which beliefs arise in such a way that they are apparently both justified and constitute knowledge. In considering this variety of circumstances yielding justification and knowledge, we can explore how beliefs are related to perception, memory, consciousness, reason, and testimony (the topics of Chapters 1–7).

Overview

There is a great deal more to be said about each of these sources of belief, justification, and knowledge and about how they ground what they do ground. The first seven chapters explore, and in some cases compare, the basic sources of belief, justification, and knowledge.

In the light of what those chapters show, we can discuss the development and structure of knowledge and justification (the task of Part Two). Much of what we believe does not come directly from perception, memory, introspection, or reflection of the kind appropriate to knowledge of such truths as those of elementary mathematics or those turning on our grasp of simple relations, for instance the proposition that if the spruce is taller than the maple, then the maple is shorter than the spruce, which we know by virtue of understanding the relations expressed by ‘taller’ and ‘shorter’. We must explore how inference and other developmental processes expand our body of knowledge and justified beliefs (this is the task of Chapter 8). Moreover,

once we think of a person as having the resulting complex body of knowledge and justified belief, we encounter the questions of what structure that large and intricate body has, and of how its structure is related to the amount and kind of knowledge and justification it contains. As we shall see in Part Two, these structural questions take us into an area where epistemology and the philosophy of mind often overlap.

On the basis of what Part One shows about sources of knowledge and justification and what Part Two shows about their development and structure, we can fruitfully proceed to consider more explicitly what knowledge and justification are and what kinds of things can be known (the task of Part Three). It is true that if we had no sense at all of what they are, we could not find the kinds of examples of them needed to explore their sources and their development and structure. If we do not have before us a wide range of examples of justification and knowledge, we lack the data appropriate to seeking a philosophically illuminating analysis of them. It is in the light of the examples and conclusions of Parts One and Two that Chapters 10 and 11 clarify the concept of knowledge, and, to a lesser extent, that of justification, in some detail.

With a conception of knowledge laid out, it is possible to explore the apparent extent of knowledge and justification in three major territories—the scientific, the ethical, and the religious. In exploring these domains, Chapter 12 applies some of the epistemological results of the earlier chapters. These chapters continue to assume the commonsense view that we have a great deal of knowledge and justification. If, however, skepticism is justified, then the commonsense assessment that the first twelve chapters make regarding the extent of knowledge and justification must be revised. Whether skepticism is justified is the focus of Chapters 13 and 14.

Along the way in all fourteen chapters, there is much to be learned about concepts that are important both in and outside epistemology, especially those of belief, causation, certainty, coherence, explanation, fallibility, illusion, inference, intellectual virtue, introspection, intuition, meaning, memory, rationality, reasoning, relativity, reliability, truth, and understanding. There are also numerous epistemological positions to be considered, sometimes in connection with historically influential philosophers. But the main focus will be on the major concepts and problems in the field, not on any particular philosopher or text. This may well be the best way to facilitate studying philosophers and epistemological texts; it will certainly simplify an already complex task.

Knowledge and justification are not only interesting in their own right as central epistemological topics; they also represent positive values in the life of every reasonable person. For all of us, there is much we want to know. We also care whether we are justified in what we believe—and whether others are justified in what they tell us. The study of epistemology can help in making this quest, even if it often does so indirectly. It can certainly help us assess how well we have done in the quest when we review our results.

Well-developed concepts of knowledge and justification can serve as ideals in human life. Positively, we can try to achieve knowledge and justification in relation to subjects that concern us. Negatively, we can refrain from forming beliefs where we think we lack justification, and we can avoid claiming knowledge where we think we can at best hypothesize. If we learn enough about knowledge and justification conceived philosophically, we can better search for them in matters that concern us and can better avoid the dangerous pitfalls that come from confusing mere impressions with justification or mere opinion with knowledge. This is not to say that epistemological knowledge can be guaranteed to yield new everyday knowledge. But the more we know about the constitution of knowledge and justification, the better we can build them through our own inquiries, and the less easily we will fall into the pervasive temptation to take an imitation to be the real thing.

I Perception

Sensing, believing, and knowing

As I look at the green field before me, I might believe not only that there is a green field there but also that I *see* one. And I do see one. I visually perceive it. Both beliefs, the belief that there is a green field there, and the self-referential belief that *I* see one, are grounded, causally, justificationaly, and epistemically, in my perceptual experience. They are produced by that experience, justified by it, and constitute knowledge in virtue of it.

The same sort of thing holds for the other senses. Consider touch. I not only believe, through touch (as well as sight), that there is a glass here, I also feel its cold surface. Both beliefs—that there is a glass here and that it is cold—are grounded in my tactual experience. I could believe these things on the basis of someone's testimony. My beliefs would then have a quite different status. For instance, my belief that there is a glass here would not be a *perceptual belief*, but only a belief *about a perceptible*, that is, a perceivable object, the kind of thing that can be seen, touched, heard, smelled, or tasted. Through testimony we have beliefs about perceptibles we have never seen or experienced in any way.

My concern is not with the hodgepodge of beliefs that are simply about perceptibles, but with perception and perceptual beliefs. Perceptual beliefs are not simply beliefs about perceptibles; they are *beliefs grounded in perception*. We classify beliefs as perceptual by the nature of their roots, not by the color of their foliage; by their grounds, not their type of content. Those roots may be visual, auditory, and so forth for each perceptual mode. But vision and visual beliefs are an excellent basis for discussing perception, and I will concentrate on them and mention the other senses only when it adds clarity.

Perception is a source of knowledge and justification mainly by virtue of yielding beliefs that *constitute* knowledge or are justified. But we cannot hope to understand perceptual knowledge and justification simply by exploring those beliefs. We must also understand what perception is and *how* it yields beliefs. We can then begin to understand how it yields knowledge and justification or—sometimes—fails to yield them.

The elements and basic kinds of perception

There are apparently at least four elements in perception: (1) the perceiver, me; (2) the object, the field I see; (3) the sensory experience, say my visual experience of colors and shapes; and (4) the relation between the object and the subject, commonly taken to be a causal relation by which the object produces the sensory experience in the perceiver. To see the field is apparently to have a certain sensory experience as a result of the impact of the field on our vision.

Some accounts of perception add to the four items on this list; others subtract from it. To understand perception we must consider both kinds of account and how these elements are to be conceived in relation to one another. But first, it is essential to explore examples of perception.

There are several quite different ways to speak of perception. Each corresponds to a different way of perceptually responding to experience. We often speak simply of what people perceive, for instance see. We also speak of what they perceive the object to be, and we commonly talk of facts they know through perception, such as that the grass is long. Visual perception most readily illustrates this, so let us start there.

I see, hence perceive, the green field. Second, speaking in a less familiar way, I see it *to be* rectangular. Thus, I might say that I know it looks irregular from the nearby hill, but from the air you can see it to be perfectly rectangular. Third, I see *that it is* rectangular. Perception is common to all three cases. Seeing, which is a paradigm perception, is central in each.

The first case is one of *simple perception*, perception taken by itself (here, visual perception). I see the field, and this experience is the visual parallel of hearing a bird (an auditory experience), touching a glass (a tactual experience), smelling roses (an olfactory experience), and tasting mint (a gustatory experience). If the first case is simply *perceiving of* some object, the second is a case of *perceiving to be*, as it is seeing something to be so: I do not just see the field, as when I drive by at high speed and do not even realize what is in my peripheral vision; rather, I see the field to be rectangular. The third case is one of *perceiving that*; it is seeing that a particular thing is so, namely that the field is rectangular.

These cases represent three kinds, or *modes*, of perception. Perception of the simplest kind (or in the simplest mode), such as seeing, occurs in all three; but, especially because of their relation to knowledge and justified belief, they are significantly different. We can best understand these three kinds (or modes) of perception if we first focus on their relation to belief.

Perceptual belief

The last two cases—perceiving *that*, and perceiving *to be*—are different from the first—perceiving *of*—in implying corresponding kinds of beliefs: seeing that the field is rectangular implies believing that it is, and seeing it

to be green implies believing it to be green. If we consider how both kinds of beliefs—beliefs *that* something is so and beliefs *of* (hence *about*) something—are related to perception, we can begin to understand how perception occurs in all three cases, the simple and the more complex. In my second and third examples of perception, visual perception (seeing) issues in beliefs that are grounded in seeing and can thereby constitute visual knowledge, such as knowing that the field is green.¹

In our example of simple perception, my just seeing the field provides a basis for both kinds of beliefs. It does this even if, because my mind is entirely occupied with what I am hearing on the radio as I glance over the field, no belief about the field actually arises in me. The visual experience is, in this instance, like a foundation that has nothing built on it but is ready to support a structure. If, for example, someone were to ask if the field has shrubbery, then given the lilacs prominent in one place, I might immediately form the belief that it does and assent. This belief is visually grounded; it comes *from* my seeing the field though it did not initially come *with* it. When visual experiences do produce beliefs, as they usually do, what kinds of beliefs are these, and how are they specifically perceptual?

Many of my beliefs arising through perception correspond to perception *that*, say to seeing that the lilacs are blooming. I believe that the field is lighter green toward its borders, that it is rectangular in shape, and that it has many ruts. But I may also have various beliefs about it that are of the second kind: they correspond to perception *to be*, for instance to seeing something to be a certain color. Thus, I believe the field to be green, to be rectangular, and so on. The difference between these two kinds of belief is significant. As we shall shortly see, it corresponds first of all to two distinct ways in which we are related to the objects we perceive and, second, to two different ways of assessing the truth of what, on the basis of our perceptions, we believe.

The first kind of belief just described is the kind people usually think of when they consider beliefs: it is called *propositional*, as it is generally considered a case of believing a proposition—say, *that* the field is rectangular. The belief is thus true or false depending on whether the proposition in question—here *that the field is rectangular*—is true or false. In holding the belief, moreover, in some way I think of what I see as a field which is rectangular: in believing that the field is rectangular, I *conceive* what I take to be rectangular as a field.

The second kind of belief might be called *objectual*: it is a belief regarding an object, say the field, with which the belief is actually connected. This is an object *of* (or about) which I believe something, say that it is rectangular. If I believe the field to be rectangular, there really is such an object, and I have a certain relation to it. A special feature of this relation is that there is no particular proposition I must believe about the field. To see that there is no particular proposition, notice that in holding this objectual belief I need not think of what I see *as* a field. I might mistakenly take it to be (for instance) a lawn or a grasslike artificial turf, yet still believe it to be rectangular. I might

think of it just in terms of what I believe it to be and not in terms of anything else.

Thus, although there is *some* property I must take the field to have—corresponding to what I believe it to *be*—there is no other particular way I must think of it. With objectual belief, then, there is no particular notion, no specific conceptual “handle,” that must yield the subject of any proposition I believe about the object: I do not have to believe that the *field* is green, that the *grass* is green, or any such thing. Perception leaves us vast latitude as to what we learn from it. People differ greatly in the beliefs they form about the very same things they see.²

The concept of objectual perception, then, is very permissive about what one believes about the object perceived. This is one reason why it leaves so much space for imagination and learning—a space often filled by the formation of propositional beliefs, each capturing a different aspect of what is perceived, say that the field is richly green, that it is windblown, and that it ends at a treeline.

A different example may bring these points out further. After seeing a distant flare and coming to believe, of something blurry and far away, that it glowed, one might ask, ‘What on Earth was it that glowed?’ Before we can believe the proposition that a *flare* glowed, we may have to think about where we are, the movement and fading of the glow, and so forth. The objectual belief is a guide by which we may arrive at propositional beliefs and propositional knowledge.

Perception, conception, and belief

The same kind of example can be used to illustrate how belief depends on our conceptual resources in a way that perception does not. Suppose I had grown up in the desert and somehow failed to acquire the concept of a field. I could nonetheless see the green field, and from a purely visual point of view it might *look* the same to me as it does now. I could also believe, regarding the field I see—and perhaps conceive as sand artificially covered with something green—that it is rectangular. But I could not believe that the *field* is rectangular. This propositional belief as it were portrays what I see *as* a field in a way that requires my having a concept of one.

There is a connection here between thought and language (or at least conceptualization). If I believe (think) that the field is rectangular, or even simply have the thought that it is, I should be able to *say* that it is and to know what I am talking about. But if I had no concept of a field, then in saying this I would not know what I am talking about.³ Similarly, a two year old, say, Susie, who has no notion of a tachistoscope, can, upon seeing one and hearing its fan, believe it to be making noise; but she cannot believe specifically that the tachistoscope is making noise. Her propositional belief, if any, would be, say, that the thing on the table is making noise. Since this is true, what she believes is true and she may know this truth, but she need not know much

about the object this truth concerns: in a way, she does not know what it is she has this true belief *about*.

The general lesson here is important. A basic mode of learning about objects is to find out truths about them in this elementary way: we get a handle on them through perceptually discriminating some of their properties; we form objectual (and other) beliefs about them from different perspectives; and (often) we finally reach an adequate concept of what they are. From the properties I believe the flare in the distance to have, I finally figure out that it is a flare that has them. This suggests that there is at least one respect in which our knowledge of (perceptible) *properties* is more basic than our knowledge of the substances that have them; but whether that is so is a question I cannot pursue here.

Unlike propositional beliefs, objectual beliefs have a significant degree of indefiniteness in virtue of which it can be misleading simply to call them true or false; they are accurate or inaccurate, depending on whether what one believes of the object (such as that it is rectangular) is or is not *true of it*. Recall Susie. If she attributes noise-making to the tachistoscope, she truly believes, *of it*, that it is making noise. She is, then, *right about it*. But this holds even if she has no specific concept of what it is that is making the noise. If we say unqualifiedly that her belief about it is true, we invite the question ‘What belief?’ and the expectation that the answer will specify a particular proposition, say that the tachistoscope is making noise. But it need not, and we might be unable to find any proposition that she does believe about it. She can be right about something without knowing or even having any conception of what kind of thing it is that she is right about.

Knowledge is often partial in this way. Still, once we get the kind of epistemic handle on something that objectual belief can provide, we can usually use that to learn more about it.⁴ Suppose I see a dog’s tail projecting from under a bed and do not recognize it as such. If I believe it to be a slender furry thing, I have a place to start in finding out what else it is. I will, moreover, be disposed to form such beliefs as that there is a slender furry thing there. I will also have justification for them. But I need not form them, particularly if my attention quickly turns elsewhere.

Propositional and objectual perception

Corresponding to the two kinds of beliefs I have described are two ways of talking about perception. I see *that* the field is rectangular. This is (visual) *propositional perception*: perceiving *that*. I also see it *to be* rectangular. This is (visual) *objectual perception*: perceiving *to be*. The same distinction apparently applies to hearing and touch. Perhaps, for example, I can hear that a piano is out of tune by hearing its sour notes, as opposed to hearing the tuner say it needs tuning. As for taste and smell, we speak as if they yielded only simple perception: we talk of smelling mint in the iced tea, but not of smelling that it is minty or smelling it to be minty. Such talk is, however,

intelligible on the model of seeing that something is so and seeing it to be so. We may thus take the distinction between perceiving *that* and perceiving *to be* to apply in principle to all the senses.

It is useful to think of perceptual beliefs as *embedded* in the corresponding propositional or objectual perception, roughly in the sense that they are integrally tied to perceiving of that kind and derive their character and perhaps their authority from their perceptual grounding. Take propositional belief first. My belief that the field is rectangular is embedded in my seeing that it is, and Susie's believing the tachistoscope to be making noise is embedded in her hearing it to be doing so. In each case, the belief is an element in perception of the corresponding kind. These kinds of perception might therefore be called *cognitive*, since belief is a cognitive attitude: roughly the kind having a proposition (something true or false) as its object.⁵ The object of the belief that the field is rectangular is the specific proposition that the field is rectangular, which is true or false.

Now consider objectual perceptual beliefs. If believing the tachistoscope *to be* making noise has a propositional object, that object may be plausibly taken to be some proposition or other to the effect that it is making noise, which (though left unspecified by the ascription of the belief) is also true or false. But some objectual perceptions may also be plausibly conceived as simply attributions of a perceptible property to the thing perceived; here the embedded objectual belief is *true of* the object rather than simply true. A tiny, prelingual child might see the liquid offered to it to be milk yet not believe (or disbelieve) the proposition that it is milk. In this respect, belief is unlike attitudes of approval or admiration or indignation, which are evaluated not as true or false but rather as, say, appropriate or inappropriate.⁶

Both propositional and objectual beliefs are grounded in simple perception. If I do not see a thing at all, I do not see that it has any particular property and I do not see it to be anything. Depending on whether perceptual beliefs are propositional or objectual, they may differ in the kind of knowledge they give us. Propositional perception yields knowledge both of *what* it is that we perceive and of some *property* of it, for instance of the *field's* being *rectangular*. Objectual perception may, in special cases, give us knowledge only of a property of what we perceive, say of its being green, when we do not know what it is or have any belief as to what it is.

In objectual perception, we are, to be sure, in a good position to come to know *something* or other about the object, say that it is a green expanse. Objectual perception may thus give us information not only about objects of which we have a definite conception, such as home furnishings, but also about utterly unfamiliar objects of which we have at most a very general conception, say 'that noisy thing'. This is important. We could not learn as readily from perception if it gave us information only about objects we conceive in the specific ways in which we conceive most of the familiar things we see, hear, touch, taste, and smell.⁷

Seeing and believing

Both propositional and objectual perceptual beliefs are commonly grounded in perception in a way that apparently connects us with the outside world and assures their truth. For instance, my visual belief that the field is rectangular is so grounded in my seeing the field that I veridically (truly) see that it is rectangular; my tactually believing the glass to be cold is so grounded in my feeling it that I veridically feel it to be cold. Let us explore the relation between perception and belief.

Perceptually embedded beliefs

Must beliefs grounded in seeing be true? Admittedly, I might visually (or tactually) believe that something is rectangular under conditions poor for judging it. Compare viewing a straight stick half submerged in water (it will look bent). My visually grounded belief might then be mistaken. But such a mistaken belief is not *embedded* in propositional perception that the stick is bent—that proposition is false and hence is *not* something one sees is so (or to be so). The belief is merely *produced* by some element in the simple perception of the stick: I see the stick in the water, and the operation of reflected light causes me to have the illusion of a bent stick. I thus do not see that the stick is bent: my genuine perception is of it, but not of its curvature. Seeing that curvature or seeing that the stick is bent would entail that it *is* bent, which is false. If the stick is not bent, I cannot see that it is.

As this suggests, there is something special about both perceiving *that* and perceiving *to be*. They are *veridical experiences*, that is, they imply truth. Specifically, if I see that the field is rectangular, or even just see it to be rectangular, then it truly is rectangular. Thus, when I simply see the rectangularity of the field, if I acquire the corresponding embedded perceptual beliefs—if I believe that it is rectangular when I see that it is, or believe it to be rectangular when I see it to be—then I am correct in so believing.

Perceiving *that* and perceiving *to be*, then, imply (truly) believing something about the object perceived—and so are *factive*. Does simple perception, perception *of* something, which is required for either of these more complex kinds of perception, also imply true belief? Very commonly, simple perception does imply truly believing something about the object perceived. If I hear a car go by, I commonly believe a car is passing. But could I not hear it, but be so occupied with my reading that I form no belief about it? Let us explore this.

Perception as a source of potential beliefs

As is suggested by the case of perception overshadowed by preoccupation with reading, there is reason to doubt that simple perceiving *must* produce any belief at all. Moreover, it commonly does not produce beliefs even of

what *would* be readily believed if the question arose. Suppose I am looking appreciatively at a beautiful rug. Must I believe that it is not producing yellow smoke, plain though this fact is? I think not; there seems to be a natural economy of nature—perhaps explainable on an evolutionary basis—that prevents our minds from being cluttered with the innumerable beliefs we would have if we formed one for each fact we can see to be the case.

This line of thought may seem to fly in the face of the adage that seeing is believing. But properly understood, that may apply just to propositional or objectual seeing. In those cases, perception plainly does entail beliefs. Seeing that golf ball-size hail is falling *is* (in the sense that it entails) believing it.⁸ This fact, however, is not only perceptible; it is striking.

In any event, could I see the field and believe nothing regarding it? Must I not see it to be something or other, say green? And if so, would I not believe, of it, *something* that is true of it, even if only that it is a green object some distance away? Consider a different example.

Imagine that we are talking excitedly and a bird flies quickly across my path. Could I see it, yet form no beliefs about it? There may be no clearly correct answer. For one thing, although there is much we *can* confidently say about seeing and believing, ‘seeing’ and ‘believing’ are, like most philosophically interesting terms, not precise. They have an element of vagueness. No standard dictionary definition or authoritative statement can be expected either to tell us precisely what they mean or, especially, to settle every question about when they do and do not apply.⁹ Still, we should be wary of concluding that vagueness makes any significant philosophical question unanswerable. How, then, should we answer the question whether seeing entails believing?

A negative response might be supported as follows. Suppose I merely see the bird but pay no *attention* to it because I am utterly intent on our conversation. Why must I form any belief about the bird? Granted, if someone later asks if I saw a blue bird, I may assent, thereby indicating a belief that the bird *was* blue. But this belief is not perceptual: it is about a perceptible and indeed has visual content, but it is not grounded in seeing. Moreover, it may have been formed only when I recalled my visual experience of the bird. Recalling that experience in such a context may *produce* a belief *about* the thing I saw even if my original experience *of* the thing did not. For plainly a recollected sensory experience can produce beliefs about the object that caused it, especially when I have reason to gain information about that object. Perhaps one notices something in one’s recollected image of the bird, an image merely recorded in the original experience, but one formed no belief about the bird. Granted, perception must produce a sensory experience, such as an image, and granted such an image—and even a recollection of it—is raw material for beliefs; it does not follow that perception must produce beliefs.

It might be objected that genuinely seeing an object must produce beliefs, even if we are not *conscious* of its doing so. How else can perception guide our behavior, as it does when, on seeing a log in our path, we step over it?

One answer is that not everything we see, including the bird that flies by as I concentrate on something else, demands or even evokes a cognitive response, particularly one entailing belief-formation. If I am cataloguing local birds, the situation is different. But when an unobtrusive object we see—as opposed to one blocking our path—has no particular relation to what we are doing, perhaps our visual impressions of it are simply a *basis* for forming beliefs about it should the situation call for it, and it need not produce any belief if our concerns and the direction of our attention give the object no significance.

Despite the complexity I am pointing to in the relation between seeing and believing, clearly we may hold what is epistemologically most important here. Suppose I can see a bird without believing anything about (or of) it. Still, when I do see one, I *can* see it to be something or other, and my perceptual circumstances are such that I might readily both come to believe something about it *and* see that to be true of it. Imagine that someone suddenly interrupts a conversation to say, ‘Look at that bird!’ If I see it, I am in a position to form some belief about it, if only that it is swift, though I need not actually form any belief about it, at least not one I am conscious of.

To see these points more concretely, imagine I am alone and see the bird in the distance for just a second, mistakenly taking it to be a speck of ash. If there is not too much color distortion, I may still both know and justifiably believe it to be dark. Granted, I would misdescribe it, and I might falsely believe that it is a speck of ash. But I could still know something about it, and I might point the bird out under the misleading but true description, ‘that dark thing’. The bird *is* the thing I point at; and I can see, know, and justifiably believe that there is a dark thing there.

My perception of the bird, then, gives me a ready *basis* for some knowledge and justification, even if the perception occurs in a way that does not cause me to believe that there is, say, a *bird* before me and so does not give me *actual* knowledge of it. Seeing *is* virtual believing, or at least potential believing. A similar point holds for simple perception in the other senses, though some, such as smell, are in general less richly informative than sight.¹⁰

The perceptual hierarchy

Our discussion seems to show that simple perceiving need not produce belief, and objectual perceiving need not always yield propositional perceiving. Still, this third kind of perception is clearly not possible without the first and, I think, the second as well. I certainly cannot see *that* the bird is anything if I do not see it at all; and I must also see it in order to see it *to be* something, say a speck of blue. Thus, simple perceiving is fundamental: it is required for objectual and propositional perceiving, yet does not clearly entail either. If, for instance, you do not perceive in the simple mode, say see a blue speck, you do not perceive in the other two modes either, say see a speck to be blue or see that it is blue. And as objectual perceiving seems possible without

propositional perceiving, but not conversely, the former seems basic relative to the latter.

Simple, objectual, and propositional perception

We have, then, a perceptual hierarchy: propositional perceiving depends on objectual perceiving, which in turn depends on simple perceiving. Simple perceiving is basic, and it commonly yields, even if it need not always yield, objectual perceiving, which, in turn, commonly yields, even if it need not always yield, propositional perceiving. Simple perceiving, such as just seeing a green field, may apparently occur without either of the other two kinds, but seeing something *to be* anything at all, such as rectangular, requires seeing it; and seeing *that* it is something in particular, say green, requires both seeing it to be something and, of course, seeing it.

Thus, even if simple perception does not always produce at least one true belief, it characteristically does position us to form any number of true beliefs. It gives us cognitive *access* to perceptual information, perhaps even *records* that information in some sense, whether or not we register the information conceptually by forming perceptual beliefs of either kind.

The informational character of perception

As this suggests, perception by its very nature is *informational*; it might even be understood as equivalent to a kind—a sensory kind—of receipt of information about the object perceived.¹¹ The point here is that not all perceptually given information is *propositional* or even conceptualized. This is why we do not receive or store all of it in the contents of our beliefs. Perceptual content—conceived as the content of a simple perception—is at least in part determined by the properties we are sensorily conscious of in having that experience; it is not equivalent to the content of the perceptual belief(s) that experience may produce.

Some of the information perception yields is imagistic. Indeed, we may think of all the senses as capable of yielding images or, for the non-visual senses, at least of yielding the non-visual counterparts of images—*percepts*, to use a technical term for such elements in perceptual experience occurring in any sensory mode, whether visual or auditory or of some other kind. It is in these sensory impressions that the bulk of perceptual information apparently resides. This point explains the plausibility of the idea that a picture is worth a thousand words—which is not to deny that, for some purposes, some words are worth a thousand pictures. A single report of smoke may avert a catastrophe; a single promise may alter a million lives.

It is in part because perception is so richly informative that it normally gives us not only imagistic information but also situational justification. Even if I could be so lost in conversation that I form no belief about the passing bird, I am, as I see it pass, normally justified in believing something about it,

concerning its perceptible properties, for instance that it glides.¹² There may perhaps be nothing highly specific that I am justified in believing about it, say that it is a cardinal or that its wingspan is ten inches, but if I really see it, as opposed to its merely causing in me a visual impression too indistinct to qualify me as seeing it, then there is something or other that I may justifiably believe about it.

When we have a clear perception of something, it is even easier to have perceptual justification for believing a proposition about it without actually believing it. Just by taking stock of the size of the field in clear view before me, I am justified in believing that it has more than 289 blades of grass; but I do not ordinarily believe—or disbelieve—any such thing about grassy fields I see. It was only when I sought a philosophical example about perception and belief, and then arbitrarily chose the proposition that the field has more than 289 blades of grass, that I came to believe this proposition. Again, I was justified in believing the proposition before I actually did believe it.

Perceptual justification and perceptual knowledge

What is it that explains why seeing the bird or the field justifies us in believing something about what we see, that is, gives us situational justification for such a belief? And does the same thing explain why seeing something enables us to know various facts about it?

Seeing and seeing as

One possible answer is that if we see something at all, say a bird, we see it *as* something, for instance black or large or swift, and we are justified in believing it to be what we see it as being. The idea is that all seeing and perhaps all perceiving is *aspectual perception* of a kind that confers justification. We see things by seeing their properties or aspects, for instance their colors or their front sides, and we are justified in taking them to have the properties or aspects we see them as having.

Let us not go too fast. Consider two points, one concerning the nature of seeing *as*, the other its relation to justification.

First, might not the sort of distinction we have observed between situational and belief justification apply to seeing itself? Specifically, might not my seeing the bird imply that I am only in a *position* to see it *as* something, and not that I *do* see it as something? It is true that when we see something, we see it *by* seeing some property or aspect of it; but it does not follow that we see it as *having* this property or aspect. I might see a van Gogh painting by its colors, shapes, and distinctive brush strokes, but not see it as having them because my visual experience is dominated by the painting as a whole. Someone might reply that if I see it by those properties, I am disposed to believe it has them and so must see it as having them; but this disposition

implies at most a readiness to see it as having them. There may, to be sure, be a sense in which if we see something aright, for example see a van Gogh with recognition of it as his, then we must see it as what we recognize it to be.

Seeing *as* can also be a matter of conceptualization—roughly, *conceiving as*. But this is different from perceptual seeing *as*. The distinction between perceptual seeing *as* and perceptual seeing *by* remains. Seeing *by* is causal and discriminative but not necessarily ascriptive or, especially, conceptual. Seeing *as*, though also causal, is often ascriptive and commonly conceptual. We see faces by seeing (for example) the distinctive shape of the eyes and mouth, but need not ascribe those to those we see or conceptualize these properties. But if we see a painting as blurry, we commonly ascribe that property to it and may conceptualize the painting as blurry.

Second, suppose that seeing the bird did imply (visually) seeing it *as* something. Clearly, this need not be something one is justified in believing it to be (and perhaps it need not be something one *does* believe it to be). Charles, our biased birdwatcher, might erroneously see a plainly black bird as blue, simply because he so loves birds of blue color and so dislikes black birds that (as he himself knows) his vision plays tricks on him when he is bird-watching. He might then not be justified in believing that the bird is blue.

Assume for the sake of argument that seeing implies seeing *as* and that typically, seeing *as* implies at least objectually believing something or other about the thing seen. Still, seeing an object as having a certain property—say, a stick in the water as bent—does not entail that it has the property. Nor does it always give one (overall) situational justification for believing it to have that property.

Perceptual content

It is natural to think of perception as in some way *representational*. If we see things by seeing their properties, for instance, then our perceptual experience in some way represents the object as having them. If perceiving entailed believing, we could perhaps take it to have the same content of the entailed belief(s). But (simple) perception apparently does not entail believing, so this conception of its content is mistaken. For propositional and objectual perception, however, we might plausibly say something like this: the content of my perception that *p* includes both the proposition that *p* (hence also the content of that proposition) and also the content of my objectual perception of the thing in question; that content includes the properties I perceive the thing to have.

If we seek a broad notion of perceptual content for simple perception, we might say that all the properties represented in a perceptual experience constitute its content. Then, for greater specificity, we might call the totality of perceptually represented properties the *property content*. These include properties an object is seen *as* having.¹³ They apparently also determine “what it

is like” to perceive the object, say a squirrel in a tree. In seeing it, one’s visual field is determined mainly by the grey, the distinctive furry shape, and the arboreal background.

For propositional and objectual perception, we might call the property-ascriptive propositions that the perceiver perceptually believes on the basis of the perceptual experience their *doxastic propositional content*. If we want to capture all the propositions that one might justifiably believe (and know) on the basis of the perception, we might speak of its *total propositional content*. This would include such propositions as that the squirrel is crouching, has a nut in its mouth, is in sunlight, and many more that need not be believed as a result of simply seeing the animal.¹⁴

Seeing as and perceptual grounds of justification

Whether or not seeing always implies seeing *as*, it does have property content and normally puts one in a position to form at least one justified belief about the object seen. Suppose I see the bird so briefly and distractedly that I do not see it as anything in particular; still, my visual impression of it has some feature or other by which I am justified in believing something of the bird, if only that it is a moving thing. Even Charles would be justified in believing something like this. His tendency to see black birds as blue is irrelevant to his perception of movement and does not affect his justification for believing such moving objects to be in motion.

Suppose, however, that for hours Charles had been hallucinating all manner of unreal things, and he knows this. Then he might not be justified in taking the bird he sees to be *anything* real, even though it is real. For as a rational person in this position he should see that if his belief is true, it may well be true only in the way a lucky guess is. Thus, the best conclusion here—and I suggest that this is an important justification principle concerning perception—is that normally, seeing an object gives one situational justification for believing something or other about it.

More broadly, it is very plausible to hold that *the evidence of the senses*—including above all the sensory experiences characteristic of perception—normally provides justification for beliefs with content appropriate to that evidence. If your experience is of a green expanse, you are justified in believing there is something green before you; if it is of something cool in your hand, you are justified in believing there is something cool in your hand; and so on.

One might also say something slightly different, in a terminology that is from some points of view preferable: seeing an object (always) gives one *prima facie justification* for believing something or other about it. *Prima facie* justification is roughly justification that prevails unless *defeated*. The two main kinds of defeater are such overriding factors as a strong justification for believing something to the contrary and such undermining (or undercutting) factors as my knowledge that I have been hallucinating and at present cannot

trust my senses. Overrides defeat prima facie justification by justifying an incompatible proposition instead; undermining defeaters simply prevent the would-be justification from succeeding. If I see a green field, I have a justification for believing it to be green; but I may not be justified, *overall*, in believing this if credible friends give me compelling reason to believe that despite appearances the field is entirely covered by blue grass, or that I am not seeing a field at all but hallucinating one.¹⁵ In the former case, my justification is defeated by my acquiring better justification for a contrary proposition; in the latter, my visual justification is reduced below the threshold of success. If it is not eliminated, it is too weak to license saying I am justified in believing the proposition.

If seeing is typical of perception in (normally) putting us in a position to form at least one justified belief about the object seen, then perception in general normally gives us at least situational justification. This is roughly justification *for holding* a belief of the proposition for which we have the justification. As our examples show, however, it does not follow that every perceptual belief is justified. Far from it. Some perceptual beliefs, such as perceptual beliefs that are evidentially undermined by one's having formed similar beliefs based on hallucinations, are not. As with the biased bird-watcher, belief can be grounded in perception under conditions that prevent its being justified by that grounding.

Nevertheless, there is a simple principle of justification we can see to be plausible despite all these complexities: normally, a visual belief that is embedded in seeing that something is so or in seeing it *to be* so is justified (and it is always prima facie justified). If we see that an object has a property (say, that a field is rectangular) and, in virtue of seeing that it has that property (say, is rectangular), believe that it does, then (normally) we justifiedly believe that it does. Call this *the visual justification principle*, since it applies to cases of belief based on seeing that what is believed is true (or seeing it to be true).

I say *normally* (and that the justification is prima facie) because even here one's justification can be defeated. Thus, Charles might see that a bird is blue and believe on this basis that it is, yet realize that all morning he has been seeing black birds as dark blue and thus mistaking the black ones for the blue ones. Until he verifies his first impression, then, he does not justifiedly believe that the bird is blue, even though it in fact is. (We could say that he has *some* justification for believing this, yet better justification for not believing it; but to simplify matters I am ignoring degrees of justification.) He does indeed see a bird and may justifiedly believe that, but his belief that the bird is blue is not justified.

Suppose, on the other hand, that Charles has no idea that he has been hallucinating. Then, even when he does hallucinate a blue bird, he may be justified in believing that there is a blue bird before him. This suggests a related principle of justification, one that applies to visual experience whether it is a case of seeing or merely of visual hallucination: *When, on the basis of an apparently normal visual experience (such as the sort we have in seeing a bird*

nearby), one believes something of the kind the experience seems to show (for instance that the bird is blue), normally this belief is justified. Call this the *visual experience principle*, since it applies to cases in which one has a belief based on visual experience even if not an experience of actually seeing (the veridical kind). The visual principle takes us from seeing (vision) to justification; the visual experience principle takes us from visual experience—conceived as apparent seeing—to justification. The latter is wider: it indicates that visual experience can justify a huge range of beliefs, not just a belief to the effect that an object in fact has a property one sees it to have.

Similar principles can be formulated for all of the other senses, though the formulations will not be as natural. If, for example, you hear a note to be flat and on that basis believe that it is flat, normally your belief is justified. It is grounded in a veridical perception in which you have discriminated the flatness you believe the note has. And suppose, by contrast, that in what clearly seem to be everyday circumstances you have an utterly normal-seeming auditory hallucination of a flat note. If that experience makes it seem clear that you are hearing a flat note, then if you believe on the basis of the experience that this is a flat note, normally your belief would be justified. You have no reason to suspect hallucination, and the justification of your belief that the note is flat piggybacks, as it were, on the principle that normally applies to veridical beliefs.¹⁶

Seeing as a ground of perceptual knowledge

Some of what holds for the justification of perceptual beliefs also applies to perceptual knowledge. Seeing the green field, for instance, normally yields knowledge about the field as well as justified belief about it. This suggests another visual principle, a visual knowledge principle. It might be called an *epistemic principle*, since it states a condition for the visual generation of knowledge: *At least normally, if we see that a thing (such as a field) has a property (say is rectangular), we (visually) know that it has it.* A parallel principle holds for objectual seeing: *At least normally, if I see something to have a property (say to be rectangular), I know it to have the property.*

There are, however, special circumstances that explain why these epistemic principles may have to be restricted to “normal” cases. It may be possible to see that something is so, believe on that basis that it is, and yet not know that it is. Charles’s case seems to show this. For if, in the kind of circumstances he is in, he often takes a black bird to be blue, then even if he sees that a certain blue bird is blue and, on that basis, believes it is blue, he apparently does not know that it is.¹⁷ He might as well have been wrong, one wants to say; he is just lucky that this time his belief is true and he was not hallucinating. As he has no reason to think he has been hallucinating, and does not realize he has been, one cannot fault him for holding the belief that the bird is blue or regard the belief as inappropriate to his situation. Still, knowledge apparently needs better grounding than is provided by his blameless good fortune. This

kind of case has led some philosophers to maintain that when we know that something is so, our being right is not *accidental*.

There is an important difference here between knowledge and justification. Take knowledge first. If Charles is making errors like this, then even if he has no idea that he is and no reason to suspect he is, he does not know that the bird he believes to be blue is blue. But even if he has no idea that he is making errors, or any reason to suspect he is, he *may* still justifiably believe that the bird is blue. The main difference between knowledge and justification here may be this: he can have a true belief that does not constitute knowledge because there is something wrong for which he is in no way criticizable (his errors might arise from a handicap which he has no reason to suspect, such as sudden color blindness); but he cannot have a true yet unjustified belief without being in some way criticizable. The standards for knowledge, one might say, permit fewer unsuspected weaknesses in discriminating the truth than those for justification, if the standards for knowledge permit any at all.

This difference between knowledge and justification must be reflected in the kinds of principles that indicate how justification, as opposed to knowledge, is generated. Justification principles need not imply that the relevant basis of a belief's justification assures its truth; but since a false belief cannot constitute knowledge, epistemic principles (knowledge principles) cannot capture elements that generate knowledge unless they rule out factors that might produce a false belief. A ground of knowledge must, in *some* way, suffice for the truth of the proposition known; a ground of justification must, in some way, *count toward* the truth of the proposition one is justified in believing, but need not rule out its falsehood.

On the basis of what we see, hear, feel, smell, and taste, we have a great many beliefs, propositional and objectual. There is apparently no good reason to doubt that these perceptual beliefs are commonly justified or that, quite often, they are true and constitute knowledge. But to see that perception is a basis of justification and knowledge is to go only part way toward understanding what perception, justification, and knowledge are. Here the main question is what constitutes perception, philosophically speaking. Until we have a good understanding of what it is, we cannot see in detail how perception grounds belief, justification, and knowledge. These problems cannot be fully resolved in this book, but we can achieve partial resolutions. I want to discuss (further) what perception is first and, later, to illustrate in new ways how it grounds what it does. The next chapter, then—also concentrating on vision—will start by considering some of the major theories of the nature of perception.

Notes

- 1 Perceiving *of*, perceiving *to be*, and perceiving *that* may also be called perception of, perception to be, and perception that, respectively; but the

second expression is not common, and in that case at least, the *-ing* form usually better expresses what is intended.

- 2 A related way to see the difference between objectual and propositional beliefs is this. If I believe something to have a property, say a British Airways plane to be a Boeing 777, then this same belief can be ascribed to me using any correct description of that plane, say, as the most traveled plane in the British Airways fleet: to say I believe BA's most traveled plane to be a 777 is to ascribe the same belief to me. This holds even if I do not believe it meets that description—and it can hold even when I cannot understand the description, as a child who believes a tachistoscope to be making noise cannot understand 'tachistoscope'. By contrast, if I have a propositional belief, say that the United Airlines plane on the runway is the most traveled in its fleet, this ascription cannot be truly made using just any correct description of that plane, say the plane on which a baby was delivered on Christmas Day, 2001. I may have no inkling of that fact—or may mistakenly think it holds for a BA plane. A rough way to put part of the point here is to say that propositional beliefs about things are about them *under a description or name*, and objectual beliefs about things are not (even if the believer could describe them in terms of a property they are believed to have, such as being noisy). It is in part because we need not conceptualize things—as by thinking of them under a description—in order to have objectual beliefs about them that those beliefs are apparently more basic than propositional ones.
- 3 In terminology common in epistemology, objectual belief is *de re*—of the thing—whereas propositional belief is *de dicto*—of the proposition—and I am similarly distinguishing between objectual and propositional perception. The objectual cases, unlike the propositional ones, require no particular concept of the thing perceived. To be sure, those who do have the concept of a field and know that I believe it to be rectangular may say, 'He believes the field is rectangular', meaning that I believe it *to be* rectangular. English idiom is often permissive in this way, and in everyday life nothing need turn on the difference. Moreover, some philosophers have held that a thing, such as a field, can be a constituent in a proposition—in which case it might be considered a kind of content of a belief of that proposition—and this might provide a basis for saying that the two belief ascriptions may be properly interchangeable. I am ignoring that controversial and uncommon conception of a proposition. For detailed discussion of the extent to which perception is conceptual and of how it yields perceptual beliefs, see Michael Pendelbury, 'Sensibility and Understanding in Perceptual Judgments', *South African Journal of Philosophy* 18, 4 (1999), 356–69.
- 4 It may be best to leave open here that Susie could, at least for a moment, believe (in an admittedly weak sense of the term), of a tachistoscope, that it is making noise, yet not believe any proposition about it: she *attributes* noise-making to it, yet does not conceptualize it in the way required for

having a propositional belief about it, the kind of belief expressed in a complete declarative sentence such as ‘The thing on the table is making noise’. She would then have no propositional belief about the instrument, the kind of belief that should unqualifiedly be called true (or false), such as that the tachistoscope is making noise. On this approach, what I am calling objectual belief is (or often is) better called *property attribution*. It is an attribution *to* the thing in question because of the kind of causal role that thing plays in grounding the attribution; and if it is not strictly speaking a belief, it does imply a disposition to form one, such as that the thing on the table is making noise.

- 5 Specifically, these are *doxastic* attitudes (from the Greek *doxa*, for ‘belief’). A fear can be propositional and thereby cognitive, but it need not entail believing the proposition one fears is so, for example that the man approaching one will attack. Some might consider objectual awareness, say awareness of perfect symmetry, cognitive, at least when the person has the concept of relevant property. By contrast, desires, the paradigm *conative* attitudes, should not, I think, be taken to have propositional objects (e.g. ‘to swim’ in ‘my desire to swim’ does not express a truth or falsehood).
- 6 Perceptions that embody beliefs in the ways illustrated are also called *epistemic*, since the embedded belief is commonly considered to constitute knowledge. Their connection with knowledge is pursued in this chapter and others.
- 7 The distinction between simple and propositional perceiving and other distinctions drawn in this chapter are not always observed. At one point W.V. Quine says:

think of “*x* perceives *y*” rather in the image of “*x* perceives that *p*”. We say “Tom perceives the bowl” because in emphasizing Tom’s situation we fancy ourselves volunteering the observation sentence “Bowl” rather than “Surface of a bowl,” “Front half of a bowl,” “Bowl and background,” and so on. When we ask “What did he perceive?” we are content with an answer of the form “He perceived that *p*”.

(Pursuit of Truth, revised edn [Cambridge, MA: Harvard University Press, 1992], p. 65)

Notice that because seeing that (say) there is a bowl in front of one obviously entails seeing a bowl, it is no surprise that we are content with a report of the propositional perception even if we wanted to know only what object was seen: we get what we sought and more. It does not follow that simple seeing *is* or even entails propositional seeing. It is also worth noting that Quine is apparently thinking only of seeing here; for the other four senses, there is less plausibility in maintaining what he does.

- 8 The adage could not be taken to refer to simple seeing, for what we simply

see, say a glass or leaf or field, is not the sort of thing that can be believed (to be true or false). To be sure, seeing something, especially something as striking as golf ball-size hail, produces a *disposition to believe* certain propositions, say that this is a dangerous storm. But, by what seems an economy of nature, there are many things we are disposed to believe but do not. I have defended these points in detail in ‘Dispositional Beliefs and Dispositions to Believe’, *Noûs* 28 (1994), 419–34.

- 9 This applies even to full-scale philosophical dictionaries written by teams of experts, though such a work can provide concise statements of much valuable information. See, for example, the entries on blind sight and perception in Robert Audi (ed.), *The Cambridge Dictionary of Philosophy* (Cambridge: Cambridge University Press, 1995, 1999).
- 10 In the light of what has been said in this chapter so far we can accommodate much of what is plausible in the common view that, as D.M. Armstrong puts it:

[perception] is an acquiring of knowledge or belief about our physical environment (including our own body). It is a flow of information. In some cases it may be something less than the acquiring of knowledge or belief, as in the cases where perceptions are entirely discounted or where their content has been confidently anticipated.

(*Belief, Truth and Knowledge* [Cambridge: Cambridge University Press, 1973], p. 22)

First, I can agree that perception entails acquisition of *information*; the point is that *not all our information is possessed as the content of a belief*. Second, Armstrong himself notes an important way in which perception might fail to produce belief: it is “discounted,” as, for example, where one is sure one is hallucinating and so resolutely refuses to accept any of the relevant propositions.

- 11 This is the kind of view developed in detail by Fred Dretske. See esp. *Knowledge and the Flow of Information* (Cambridge, MA: MIT Press, 1981).
- 12 The notion of normality here is not statistical; it implies that what is not normal calls for explanation. In the world as we know it, exceptions to the normality generalizations I propose seem at least rare; but the point is not that statistical one, but to bring out that the very concepts in question, such as those of seeing and knowing, have a connection in virtue of which explanation is called for if what is normally the case does not occur.
- 13 A property that something is seen as having need not be a property it actually has; but here seeing *as* is phenomenal, not doxastic. Roughly, the perceptual content represents what the object is like if it in fact has the properties it is seen as having.

- 14 A detailed discussion of the representationality of perception and the kind of content it has is provided by Fred Dretske in *Naturalizing the Mind* (Cambridge, MA: MIT Press, 1997). He deals with the sense in which perceptual content is external. If, loosely speaking, we call the perceived object the *objectual content* then simple perception obviously has a kind of external content; but as the object is “in” the experience, it might be considered a kind of content, as indeed it may for propositional and objectual perceptions as well. With this idea in mind, it is clear how the perceptually believed propositions themselves may also be conceived as having external content. I have discussed internal and external content in relation to such examples in ‘Internalism and Externalism in Epistemology and Semantics’, in Mark Timmons, John Greco, and Alfred R. Mele (eds.), *Rationality and the Good: Critical Essays on the Ethics and Epistemology of Robert Audi* (Oxford: Oxford University Press, 2007). (This responds to a challenge from Timothy Williamson, ‘On Being Justified in One’s Head’, *ibid.*, 106–122)
- 15 In speaking of justification that prevails, and of overall justification, I have in mind the kind appropriate to a rational person’s believing the proposition in question, construed as roughly the kind such that when we believe a true proposition with that kind of justification then (apart from the kinds of case discussed in Chapter 10 that show how justified true beliefs *need not* constitute knowledge) we know it.
- 16 There are complexities I cannot go into, such as how one’s competence figures. I am imagining here someone competent to tell whether a note is flat (hence someone not tone deaf): in general, if we are not competent to tell whether a kind of thing has a property or not, an experience in which it seems to have it may not justify us in believing it does. There is also the question of *what* the belief is about when the “object” is hallucinatory, a problem discussed shortly. Still other problems raised by this justification principle are discussed in Chapter 11 in connection with the controversy between internalism and externalism.
- 17 If, as is arguable, seeing that it is blue entails knowing that it is, then he does *not* see that it is, though he sees its blue color. But this entailment claim is far from self-evident. Suppose he clearly sees a blue bird and believes it is blue, but does not know that it is because of his frequent hallucinations. A moment before, he hallucinated such a bird; a moment later, he will again; and he realizes his senses have been playing such tricks on him. Still, he cannot help believing this bird is blue and believes that *on the basis of* clearly seeing it and its color in normal light. Might we say that he sees that the bird is blue, but does not know this? We cannot say that he “can’t believe his own eyes,” because he does; but if, in the normal way, they show him the truth and he thereby believes it, might he not see it through them?