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## CHAPTER 2

THE SOURCES OF  
KNOWLEDGE

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KNOWLEDGE can be adequately explicated only in relation to its sources. This is in part why perception, intuition, and other generally recognized sources of knowledge have been so extensively discussed in epistemology. These and other apparent sources of knowledge are also widely considered sources of justification, and they can serve as such even if justification is not entailed by knowledge. My concern here will be primarily with sources of knowledge; but in order to bring out their epistemological importance, I will connect these sources with justification as well. I am speaking, of course, as if we may suppose that there is knowledge. Anyone who accepts some version of skepticism may simply take what is said to apply to what would be sources of knowledge or justification if there should be any knowledge or justification of the kind in question. I begin with what might be called the standard basic sources of knowledge, proceed to distinguish them from nonbasic sources and from grounds of knowledge, and, with the account of epistemic sources then before us, turn to questions of defeasibility and completeness.

## I. BASIC SOURCES OF KNOWLEDGE AND JUSTIFICATION

If, in the history of epistemology, any sources of knowledge deserve to be called the classical basic sources, the best candidates are perception, memory, consciousness (sometimes called *introspection*), and reason (sometimes called *intuition*). Some writers have shortened the list under the heading, "experience and reason." This heading is apt insofar as it suggests that there might be some unity among the first three sources and indeed some possibility of other experiential sources; it is misleading insofar as it suggests that experience plays no role in the operation of reason as a source of knowledge. Any operation of reason that is an element in consciousness may be considered a kind of intellectual experience. The reflection or other exercise of understanding required for "reason" to serve as a source of knowledge is certainly one kind of experience.

Let us first explore what it is for a source to be basic and some of the conditions under which beliefs it yields constitute knowledge (these might be called *success conditions*). We can then consider what kind of source might be nonbasic and whether the four standard basic sources are the only basic ones.

I take it that a source of knowledge (or justification) is roughly something in the life of the knower—such as perception or reflection—that yields beliefs constituting knowledge. To call a source of knowledge (or of justification) *basic* is to say that it yields knowledge without positive dependence on the operation of some other source of knowledge (or of justification). Thus, I might perceptually know that the clock says ten by virtue of seeing its face displaying that time; and I might know by brief reflection that if two people are first cousins, they share a pair of grandparents.

It may seem that the perceptual knowledge is possible only if I remember how to read a clock and that therefore perception cannot yield knowledge independently of memory. It is true that perceptual knowledge of the kind in question depends on memory in a certain way. But consider this. A being could acquire the concepts needed for reading a clock at the very time of seeing one, and hence would not need to remember anything in order to form the belief that the clock says ten. One possibility here is the creation of a duplicate of someone like me: reading a clock would be possible at his first moment of creation. It appears, then, that although perceptual knowledge ordinarily depends in a certain way on memory, neither the *concept* of perception nor that of perceptual knowledge is *historical*. That of memory, however, is historical, at least in this sense: one cannot remember something unless one has *retained* it in memory over some period of time.

The concept of a basic source can be better understood through a different

kind of example, one that brings out how even a basic source *can* yield beliefs that fail to constitute knowledge and how its success in producing knowledge may depend on what we believe through other basic sources. Suppose that I see the clock on the wall only at dusk, but still make out the hands and come to believe (correctly) that it says ten. I now turn on a bright light that shows me a system of mirrors which I remember my son has installed to deceive me in ways that amuse him. I realize that it can display a different clock with the same appearance. I now may have good reason to doubt that the clock on the wall says ten; for I realize that I would believe it did, even if I did not actually see it, but saw only the mirror image of a similar clock that does say ten. Here my would-be perceptual knowledge that the clock says ten is *defeated* by my realization that I might well be deceived. That realization, in turn, depends in part on my memory of my son's antics. We have, then, a case illustrating that, even ordinarily, I would not know the clock says ten unless there were no suitably strong "opposition" from a source different from perception. This dependence of perception on factors beyond perceptual experience, however, is what I call *negative dependence*; it does not show that perception is not a source of knowledge, but only that (at least) on occasion the source can be in some way blocked.<sup>1</sup>

One may now suggest that perception is not even a positively independent source because it depends on consciousness. The idea would be that one cannot perceive without being conscious; hence, perception cannot yield knowledge apart from the operation of another source of knowledge. Let us grant for the sake of argument that perception requires consciousness.<sup>2</sup> If it does, that is because it is a kind of consciousness: consciousness of an external object. We might then simply grant that perception is perceptual consciousness and treat only "internal consciousness" (consciousness of what is internal to the mind) as a source of knowledge distinct from perception. Internal consciousness, understood strictly, occurs only where the object is either internal in the way images and thoughts are (roughly phenomenal) or abstract, as in the case of concepts and (presumably) numbers. On a wider interpretation, we might have internal consciousness of dispositional mental states, such as beliefs, desires, and emotions. But even when we do, it seems to be *through* consciousness of their manifestations that we are conscious of them, as when we are conscious of anxiety through being aware of a sense of foreboding or of felt discomfort, or of unpleasant thoughts of failure, or the like.

To be sure, one might also treat consciousness as a kind of perception: external perception where the perceived object is outside the mind, internal where that is inside. But abstract objects are not "in" the mind, at least in the way thoughts and sensations are. In any case, it is preferable not to consider consciousness of these a kind of perception. One reason for this is that there is apparently a causal relation between the object of perception and whatever sensation or other mental element constitutes a perceptual response to it, and it is at least not clear that

abstract entities have causal power, or at any rate the requisite kind.<sup>3</sup> This issue is too large to pursue here, but it may be enough to note that not all mental phenomena seem to be either perceptual in any sense or to be directed toward abstract objects. Consider daydreaming or planning. Neither need concern the abstract, nor must we suppose that there are objects in the mind having properties in their own right.<sup>4</sup> It would be unwise to assume that perception exhausts the activity of consciousness.

It does appear, however, that we may take perception to be a partly causal notion. If you see, hear, touch, taste, or smell something, then it affects you in some way. And if you may be said to perceive your own heartbeat or even your own anxiety, this is owing to their causing you to have some experiential impression analogous to a sense impression you might have through the five senses. Conceived in this way, perception is not a *closed concept*: it leaves room for hitherto unfamiliar kinds of experiential response to count as the mental side of perceiving an object and indeed for new or unusual kinds of objects to be perceptible.<sup>5</sup> This is not the place, however, to give an account of exactly what perception is. Any of the basic sources could be the subject of a deservedly long study. Let us proceed to memory as an epistemic or justificational source.

If, in speaking of perception, we are talking about a capacity to perceive, in speaking of memory we are talking about a capacity to remember. But remembering does not exhaust the operation of our memorial capacity to the extent that perceiving exhausts the operation of the perceptual capacity. There is also *recalling*, which entails but is not entailed by remembering; there is *recollecting*, which is similar to recalling but tends to imply an episode of (sometimes effortful) recall, usually of a sequence or a set of details; and there are memory *beliefs*, which may be mistaken and do not entail either remembering or even recalling. It is plausible to maintain, however, that remembering that *p* (where *p* is some arbitrarily chosen proposition) entails knowing it; and we also speak of knowing things from memory. When we do know things (wholly) in this way, it is not on the basis of other things we know. One may know a theorem from memory *and* on the basis of a simple proof from an axiom, but where one knows *p* wholly from memory—simply by virtue of remembering it—one does not at the time know it on the basis of knowing or believing anything else.

These points make it natural to think of memory as a basic source of knowledge. But I think it would be a mistake to claim that it is one. It is an epistemically *essential source*; that is, what we think of as “our knowledge,” in an overall sense, would collapse if memory did not sustain it: we could know only what we could hold in consciousness at the time (at least this is so *if* what we know dispositionally at a time must be conceived as held in memory at that time, even though it is true then that if we *were* to try to bring any one of the propositions to consciousness then, we would normally have it there then<sup>6</sup>). By virtue of playing this role, memory is an epistemic source in an important sense. But surely one cannot

know anything from memory without coming to know it through some *other* source. If we remember it and thereby know it, we *knew* it, and we must have come to know it through, say, perception or reasoning.<sup>7</sup>

If memory is not a basic source of knowledge, it surely is a basic source of justification. It is not easy to capture just how it plays this role. But consider believing that one sent a certain friend a holiday card. There is a way this belief—or at least its propositional object—can present itself to one that confers some degree of justification on the belief (I think it can confer enough to allow the belief to constitute knowledge if one is correct and there is no defeater of one’s would-be knowledge, but there is no need to try to show that here). Someone might object that it is only by virtue of knowledge, though consciousness, of one’s memorial images that we can be justified in such beliefs, but I very much doubt this.<sup>8</sup> A remembered proposition can surface in consciousness without the help of images and, often, can spontaneously surface upon the need for the proposition as an answer to a question or as a premise for an inference one sets out to make or sees to be needed.

Given the points made about memory so far, I suggest that it is an essential source of knowledge and a basic source of justification. In the former case it is *preservative*, retaining knowledge already gained; in the latter it may be *generative*, producing justification not otherwise acquired.

It is worth noting here that we may not say ‘not otherwise *acquirable*’. Whatever can be known or justifiedly believed by a given person on the basis of memory can *also* be known or justifiedly believed in some other way, say through the testimony of someone else. This indicates another notion we need in understanding sources of justification and knowledge. A *basic* source of justification need not be a *unique source*, even relative to a single kind of justification (or knowledge).

If, however, memory is not a unique source, it remains true that the non-memorial source that is in principle available to one may depend, for its production of genuine knowledge, on memory or on knowledge of, or justification about, the past. If testimony is the source, for instance, the person attesting to a past event depends either on his own memory or on someone else’s. If so, we might think that although memory is not a unique source for *primary* knowledge or primary justification regarding the past—where primary knowledge and justification are the kinds that do not (evidentially) depend on the knowledge or justification of anyone else—it is a unique source for *secondary* knowledge or justification *regarding the past*, as in the case in which I rely on someone’s testimony about it. Perhaps, however, at the moment of his creation my duplicate could see smoke and know, by the visible facts, that there *has been* a fire. If so, then simultaneous testimony from him could give others such historical knowledge without dependence, for any of them, on (the operation of) their own memory. My duplicate would, arguably, “inherit” a capacity for induction from me, and I could not have acquired that capacity without relying on my memory; but he would

still not actually have to rely on his own memory to know that there has been a fire. Here, then, we could have knowledge of the past that does not require the exercise of memory *by* the primary knower. Even if memory is not a unique source of any kind of knowledge or justification, the concept of such a source is significant, and it will surface again shortly.

Consciousness has already been mentioned as a basic source of knowledge. It seems clear that if any kind of experience of what is going on in the world can yield knowledge, it is introspective consciousness. Even philosophers who take pains to give skepticism its due, such as David Hume, do not deny that we have knowledge—presumably noninferential knowledge—of our own current mental life.<sup>9</sup> Granted, it is only consciousness of the inner world—or at least of whatever can exist “in” consciousness—that is a basic source *if* outer perception—consciousness of the external world—is not a basic source. But the inner world is a very important realm. It might include abstract objects, such as numbers and concepts, as well as sensations, thoughts, and other mental entities.

When we come to reason, there is, as with memory, a need to clarify what aspects of this general capacity are intended. Like ‘memory’, the term ‘reason’ can designate quite different things. One is reflection, another reasoning, another understanding, and still another, intuition. We reflect on a subject, reason from a premise, understand a concept or proposition, and intuit certain truths. These are only examples, and there is overlap: any of the objects in question must be understood (adequately, though not perfectly) if it is to be an object of reason, and one may need to reflect on a truth that one intuitively grasps its truth.

It will help to focus on a simple example, such as the logical truth that if all human beings are vulnerable and all vulnerable beings need protection, then all human beings need protection. We can reason from the “premises” (in the if-clause) to the “conclusion” (in the then-clause); but an assertive use of the if-then sentence in question need not represent giving an argument. Moreover, the proposition it expresses is not the kind that would (normally) be known by reasoning. It would normally be known by “intuition” or, in the case in which such direct apprehension of the truth does not come to a person, by reflection that indirectly yields understanding. (The *conclusion*—that all human beings need protection—may of course be known wholly by reasoning from the premises. One’s knowledge of it then depends on one’s knowledge of them, which will surely require reliance on a different basic source. But the proposition in question is the conditional one connecting the premises with the conclusion, and knowledge of it does not require knowledge of either the former or the latter.)

I suggest, then, that “reasoning” is not a good heading under which to capture the ratiocinative basic source we are considering, and that indeed if we distinguish reasoning from reflection of a kind that yields knowledge that *p apart from* reliance on independent premises, it is best not to use the term ‘reasoning’ in explicating this source. What seems fundamental about the source is that when knowledge

of, or justification for believing, a proposition comes from it, it derives from an exercise of reason regarding the proposition. This may take no time beyond that required to understand a sentence expressing the proposition (which may be virtually none; nor need we assume that all consideration of propositions is linguistically mediated, as opposed to conceptual in some sense). Here it is natural to speak of intuiting. But the proposition may not be so easily understood, as (for some people) in the case of the proposition that if *p* entails *q* and *q* entails *r*, and either not-*q* or not-*r* is the case, then it is false that *p*. Here it is more natural to speak of reflection. In either case the source seems to operate by yielding an adequate degree of understanding of the proposition in question and thereby knowledge. It does not appear to depend (positively) on any other source and is plausibly considered basic.<sup>10</sup>

It also seems clear that reason is a basic source of justification. Such simple logical truths as those with the form of, ‘if all *As* are *Bs* and all *Bs* are *Cs*, then all *As* are *Cs*’ can be justifiably believed, as well as known, simply on the basis of (adequately) understanding them. In at least the vast majority of the kinds of cases in which reason yields knowledge it apparently also yields justification. It can, however, yield justification without knowledge. Careful reflection can make a proposition seem highly plausible even though it later turns out to be false. If we are talking only of *prima facie* (hence defeasible) justification, there are many examples in logic and mathematics. Consider Russell’s paradox. There seems to be a class of nonteaspoons in addition to a class of teaspoons. The latter, however, is plainly not a teaspoon, since it is a class. So, it is a nonteaspoon and hence a member of itself. The same holds for the class of nonphilosophers: being a non-philosopher, it is a member of itself. There must then be a class of such classes—a class of all and only those classes that are not members of themselves. But there cannot be one: this class would be a member of itself if and only if it is not a member of itself. Thus, what appears, on the basis of an exercise of reason, to be true may be false.

It may be objected that it is only inferentially that one could here believe there is a class of all and only classes that are not members of themselves and that therefore it is not only on the basis of the operation of reason that one would believe this. But surely we may take reasoning to be *one* kind of such operation, particularly deductive reasoning. It is true that the *basic kind* of knowledge or justification yielded by a source of either is noninferential; there is no good reason, however, to rule that inferential cases may not be included.

To be sure, there is still the question whether inference depends on the operation of memory, in the sense that one may draw an inference from a proposition only if one *remembers* it. But surely one can hold some simple premises before one’s mind and at that very time draw an inference from them. If we allow that knowledge or justification deriving from simple inferences such as those in question here need not depend on memory, we may conclude that it can be on

the basis of inferential reason that the proposition in question is believed. It is a contingent matter whether such an inference *does* depend on the operation of memory. If one must write down the premises to keep track of them, it would. If, however, one can entertain the premises and conclusion together and at that time see their logical relation, it does not. The distinction between these two cases is not sharp but is often quite clear.<sup>11</sup>

Even regarding reason, then, we cannot say that we have an *infallible source* of knowledge: one whose every cognitive deliverance is a case of knowledge. To call a source basic is to affirm a measure of epistemic autonomy; it is not to affirm any wholesale epistemic guarantee. It is not even clear that every "deliverance" of a basic source has *prima facie* justification. But this is a plausible view, if (1) we take a deliverance of a source to be a belief based on it and not merely caused by it, and (2) we allow that a belief can be *prima facie* justified even when its justification is massively overridden. Let us suppose (1) and (2) hold. Plainly this would not entail indefeasible justification. If we suppose, then, that there would be no knowledge or justification *without* basic sources of them, we still cannot reasonably conclude that every belief those sources deliver is justified on balance or, if true, constitutes knowledge.

If we now return to the question of uniqueness, we find that, for reason, a plausible case for uniqueness is available, since some propositions, such as simple logical truths, seem (ultimately) knowable and justifiedly believable only on the basis of reason. To be sure, even simple logical truths can be known on the basis of testimony, as where someone who is logically slow first comes to know one through the testimony of a teacher. But can such truths be known or justifiedly believed without dependence on reason *somewhere* along the line? It would seem that the teacher must depend on it, or on testimony from someone who does, or who at least must rely on testimony from someone else who depends on reason, and so forth.<sup>12</sup> If this is right, then at least for primary knowledge and justification regarding simple logical truths, uniqueness holds.

Might we, however, make the parallel claim for perceptual and introspective cases? Could anyone (say) know the colors and feel of things if no one had perceptual knowledge? If we assume the possibility of an omnipotent and omniscient God, we might have to grant that God could know this sort of thing by virtue of (fully) knowing God's creation of things with these colors and textures. Still, wouldn't even God have to know what these properties are *like* in order to create the things in question with full knowledge of the nature of the things thus created? Suppose so. That knowledge is arguably of a phenomenal kind; if it is, the point would only show that consciousness is a unique source. Perhaps it is. If reason and consciousness are not only basic, but also the only unique sources, one can understand why both figure so crucially in the epistemology of Descartes or indeed any philosopher for whom what is accessible to conscious experience

and to thought is epistemically fundamental in the far-reaching way that is implied by the combination of basicity and uniqueness.

## II. TESTIMONY AS AN ESSENTIAL SOURCE

The four standard basic sources do not include testimony. At least since Thomas Reid,<sup>13</sup> however, there has been controversy over whether testimony belongs with these other sources or is nonbasic. There is no question of the importance of testimony. The issue is whether gaining knowledge or justification from it depends on the operation of another source.

It might seem that since to know that *p* on the basis of your testimony, I must perceptually know that you have attested to *p*, testimony-based knowledge cannot be basic. I suggest that this admittedly natural assumption is a mistake: I do not even have to believe that you have attested to *p*, though to be sure I must be *disposed* to believe something to this effect and may not *disbelieve* it.<sup>14</sup> But quite apart from whether I did have to believe this, perception would have to operate for me to *receive* your testimony. Granted, your attesting to *p* could cause a machine to produce the belief that *p* (perhaps even knowledge that *p*) directly in me; but this would at best be a case of knowledge *due to*, not *on the basis of*, testimony. A mere cause of my knowing something is not a source of knowledge. A sudden curiosity can cause me to look up a phone number and thereby come to know it; the curiosity is not the source of my knowledge. If, by contrast, your attestation causes me to receive your testimony directly in my mind, like a message appearing in my interior monologue, I could acquire knowledge on the basis of the testimony; but this would show only that perception can be telepathic—or perhaps that there is a basic nonperceptual source of knowledge of other minds. There would still be no need for me to have my knowledge that *p* based (partly) on knowledge that you attested to it.<sup>15</sup>

With justification, it seems equally clear that apart from perceptual justification for believing something to the effect that you attested to *p*, I cannot acquire justification for believing it on the basis of your testimony. If, however, I am right in thinking that one need not believe, as opposed to having grounds adequate for knowing or justifiedly believing, that the attester gave testimony that *p*, then something important about testimony emerges: it is a source of *basic knowledge*, that is, knowledge not grounded in other knowledge (or in justified belief of some other proposition). My knowledge that *p* need not be inferred from any premises

nor based on a belief that *p* was attested to. The point that testimony is a source of basic knowledge distinguishes it from other nonbasic sources of knowledge, such as inference. (Even in the case of knowledge by virtue of an inferential operation of reason, the conclusion is known or believed on the basis of a premise, hence is not basic knowledge or basically justified.) The point also helps to explain why it is natural to consider testimony a basic source of knowledge; for it is typical of such sources that they yield noninferential knowledge.

There are four further points that distinguish testimony from the basic sources. First, one cannot test the reliability of a basic source or confirm a deliverance of it without relying on that very source. With perception one must, for instance, look again; with memory one must try harder to recall or must consult other memories—and one must remember the original belief being examined, lest the target of confirmation be lost from view. With testimony, one can check reliability using any of the basic sources.

The second point has already been suggested in connection with memory. Memory is central for our knowledge at any given moment in a way testimony is not. Even if knowledge could not be acquired without the benefit of testimony given to one at least to the extent one needs in order to learn a language (a process in which what parents or others attest to is crucial to acquiring a vocabulary), once we climb that linguistic ladder we can discard it and, given normal memory, retain what we know. With the other basic sources, reason in some minimal form is indispensable to possessing any knowledge (at least in protecting us from pervasive inconsistency), and to inferential development of knowledge, which depends on deductive and inductive logic. Consciousness and perception are essential for the development of new knowledge in their domains. There is, however, no domain (except possibly that of other minds) for which continued testimony is in principle needed for increase of knowledge. Similar (but not entirely parallel) points hold for justification.

The third point is perhaps even subtler. There is a sense in which testimonially based belief passes through the will—or at least through agency: the attester must select what to attest to and in the process can also lie, in which case the belief does not constitute knowledge (and the justification the recipient may get is, in a certain way we need not pursue here, objectively defective). For the basic sources, there is no analogue of such voluntary representation of information. Indeed, testimonially based beliefs normally pass through agency twice over, since one can normally withhold belief from the proposition in a way one cannot when it is fully supported directly by experience or reason (to be sure, even in those cases there is such a thing as double support, as where someone attests to a plainly self-evident proposition one had not thought of but intuitively sees to be true on hearing it asserted).

Granted, it is a contingent matter when a person can withhold belief: some of us may be able to learn to withhold even beliefs that those speaking to us are

people as opposed to robots.<sup>16</sup> But the normal level of control here is different from that applicable to testimony, where appraisal of credibility may always involve *both* the kinds of doubts we may have about basic sources and any we may have about the attester's response to them. To be sure, we sometimes speak of the "testimony of the senses."<sup>17</sup> But this is metaphor, at least insofar as it suggests that the senses derive knowledge from another source, as attesters must eventually do, since knowledge that *p* cannot derive from an infinite or circular chain in which *no* person giving testimony that *p* knows it even in part on a nontestimonial basis.<sup>17</sup>

A fourth point of contrast between testimony and the standard basic sources has already been suggested. It concerns the need for grounds for the semantic interpretation of what is said on the basis of which it is taken to be *that p*. This is not a justificatory or epistemic burden intrinsic to the standard basic sources. Granted, much a priori knowledge and justification is acquired *through* consideration of linguistic expression of propositions. Still, on the most plausible account of the basis of such knowledge and justification, its object is nonlinguistic; the ground is apparently a kind of understanding of the proposition in question or, perhaps more directly, of the concepts figuring in or essential to it.

It must also be granted that a lack of semantic understanding will normally restrict the *range* of propositions that are even candidates for one's a priori knowledge or justification, since one's comprehension of language will (for most of us, at least) limit the range of propositions we can get before our minds. Moreover, semantic *misunderstanding*—which is of course possible even in people of wide and deep semantic comprehension—may give us the wrong proposition or range of propositions. Nonetheless, neither of these defects need affect how good our grounds are once the right object is before us. To be sure, defeaters of knowledge or justification can come from semantically interpreted items and can afflict beliefs deriving from any of the standard sources; but none of those sources seems dependent on semantic grounds in the way that testimony is.

These contrasts between testimony and the basic sources are not meant to impugn the importance of testimony. In addition to being a source of basic knowledge, testimony is, like memory, an *essential source* of our overall knowledge. Our overall knowledge depends on it in far-reaching ways, though not perhaps as much as, and certainly not in quite the same ways as, it depends on memory. The most important thing memory and testimony have in common may be that they *transmit*, rather than *generate*, knowledge (the case with justification is different, since memory is a basic source of that).

As to how testimony differs from both perception and memory, there is more to say than can be said here. It is not a question of reliability; it is only a contingent matter just how reliable each is. It is not even the semantic character of the deliverances of the source; one can see a sentence (as such), as one can hear testimony—indeed, the uttered sentence may constitute someone's testimony. A

crucial point made earlier bears repeating: the acquisition of knowledge or even justified belief on the basis of testimony depends on the agency of another person. Normally, the attester must not lie, or seek to deceive, in attesting to  $p$  if we are to come to know that  $p$  on the basis of the testimony. By contrast, our responses to the deliverances of the basic sources is not normally mediated by anyone else's action. Testimony may be unreliable—or otherwise unworthy of one's acceptance—both because of natural connections between the state(s) of affairs the testimony concerns and because of the person's exercise of agency. This is not normally so for the testimony of the senses or of memory or of reason. The point is not that the exercise of agency cannot be a "natural" phenomenon—though philosophers who think that freedom is incompatible with determinism are likely to insist that it cannot—but that the concepts of knowledge and justification apparently presuppose that if it is a natural phenomenon, it is nonetheless special.<sup>18</sup>

### III. SOURCES AND GROUNDS

To specify a source of knowledge is to indicate where it comes from, but it is also to do something more. I have already noted that to specify a mere cause of someone's knowing something is not to specify a source of the knowledge. In part this is because a source of something need not be a ground of it. As I am understanding sources of *knowledge*, and as they are generally conceived in philosophical literature, they are not just where knowledge comes from; they also provide the knower with grounds of knowledge. Grounds are what it is in virtue of which (roughly, on the basis of which) one knows or justifiedly believes. If you know that my knowledge that it is raining is perceptual, as opposed, say, to testimonial, you know not only that it comes from my perceiving something, but also that I have a perceptual ground, say a visual or auditory experience, for believing the proposition.

As this example makes clear, sources indicate the kinds of grounds to expect a person to have when the person has knowledge through that source. But the source is not itself the ground. We may of course call perception a ground of knowledge so long as we understand that so speaking of a ground does not specify just what it is. What about the converse question: Does specifying a ground of knowledge that  $p$  indicate the source of the knowledge? If the ground is epistemic as opposed to propositional, then ordinarily it does. But we can speak of knowledge based on an impression that (say) a car is moving, while leaving open

whether it is based on visual sensations or on inference from what one can see. It also seems possible for there to be grounds of knowledge that we cannot refer to any familiar source, as might be the case with certain religious experiences. Is this a kind of perception, or might there be a new nonperceptual source? There is probably no way to answer this in the abstract.

Suppose, however, one thought that a person could have knowledge simply implanted by virtue of a true belief's being reliably caused, where the person's brain is directly affected by a calculator and one comes to believe a truth of arithmetic that would ordinarily require calculation. If we think knowledge is possible for the *idiot savant* (the "lightning calculator"), we may count this as knowledge. If the person has no sense of any basis of the belief, such as a sense of "things adding up that way," it seems more accurate to speak of a *basis* for knowledge rather than a ground and of a cause rather than a source. But in a generic sense there is a source; and a basis is a ground in the widest sense of that term.

This is another of the many cases in which epistemologists may diverge, depending on whether they are internalists or externalists. For an internalist, if there is nothing that is in consciousness or accessible to it by reflective or introspective efforts and that can serve as justification or some kind of evidence for  $p$ , then we have at best a cause, not a ground, of knowledge. For an externalist, if the process by which the belief is produced is reliable and  $p$  is indeed true, that process itself may be said to be a ground of knowledge—or at least to *ground* it. Perhaps the externalist would agree with the internalist, however, that there is an important sense in which it is not *the subject's ground*. In any event, it seems fair to say that the dominant notions of source and ground in the philosophical literature are those in which sources supply *accessible* grounds (grounds accessible, by reflection or introspection, to the person for whom they are grounds). The four standard sources of knowledge and justification, moreover, are commonly taken to be the only basic ones.

### IV. THE EPISTEMIC AUTONOMY OF THE BASIC SOURCES

A basic source of knowledge does not have a positive epistemic dependency on some other source; but it does not in general yield indefeasibly justified beliefs (if it ever does), and it can produce true beliefs whose status as would-be knowledge is undermined by some defeating factor. Each source, then, is to a significant



degree subject to defeasibility. Defeat can come from a different source; hence we cannot adequately account for knowledge or justification apart from an understanding of the interconnections among the basic sources.

To what extent, then, is each basic source autonomous? To answer this we need to distinguish different kinds of autonomy. One way to focus the issue and to see the role of defeasibility in understanding the basic sources is to ask whether all the epistemic defeaters of beliefs that are well grounded in the standard basic sources (i.e., all the elements that defeat their justification or prevent their constituting knowledge) derive their defeating power from those same sources. The more general question here is whether, collectively, the standard basic sources are epistemically and justificationaly *self-sufficient*, roughly self-sustaining in providing for all the knowledge-conferring and justification-conferring grounds of belief, and self-correcting, in potentially accounting for all the grounds of defeat of (would-be) knowledge and of justification. A quite similar question is whether, taken together, they are necessarily such that if a true belief enjoys adequate support from at least one of them, hence is properly evidenced, and that support is not defeated by at least one other, then the belief constitutes knowledge (or is justified on balance).

This self-sufficiency thesis has some plausibility, particularly for justification. To show whether or not it holds would take far more space than I have, but we can go some distance toward an answer by exploring the two main aspects of the question whether the standard basic sources are autonomous. First, does each source yield the knowledge or justification it does independently of confirmation of the belief in question from any other source? Call this the question of *individual autonomy*. Second, if not, then does only the entire set of basic sources meet this independence condition? This would be *collective autonomy*, a freedom from the need for confirmation by any fifth source.

There is also a kind of *negative autonomy*: invulnerability to defeat by beliefs from another source. Such defeat may occur where "seeing is believing." For instance, suppose I see a stone wall. My visual experience may yield a belief that there is one at the edge of the field, and that belief may constitute knowledge and retain justification despite a memory belief that, as of a few minutes ago, there was only a line of trees in that place. The justification that my memory belief had is thus defeated. As this example can also indicate, invulnerability to defeat from one source may be combined with vulnerability to another. If seeing a wall can yield knowledge or justification that overrides, and presumably cannot be overridden by, any provided by a memory belief of the kind in question, justification of a visual belief may be overridden by that of a tactual one. If, on a walk in the hot summer, I am justified by vision in believing that there is a water fountain before me, yet I cannot feel anything as I sweep my hands where its cool surface should be resisting them, I will neither know, nor any longer be justified in believing, that there is one there and am likely to conclude I am hallucinating.<sup>19</sup>

Here, at least, with respect to both justification and knowledge, touch apparently takes priority over sight.

Positively, there apparently is a measure of individual autonomy. Each source can by itself yield some justification (as well as knowledge). If, for instance, I have a perceptual impression of a piano being played, I am *prima facie* justified in believing that one is being played. By contrast, if I have a sufficiently vivid and steadfast memory impression of a grassy meadow where I now see a stone wall, I may have some small degree of justification for believing the spot *was* covered with grass (and the wall has appeared quickly), even if the justification of my visual belief that there is a stone wall before me cannot be overridden by that of the memory belief alone. Certainly in the normal case, justification—of some degree—from one of the four standard sources does not wait upon corroboration from other sources. The same holds for knowledge.

To be sure, one cannot be justified in believing (or know) that a lot was vacant unless one has the required concepts, such as that of vacancy; and it may be that one does not acquire concepts adequate to make justified belief possible until one has a complex group of interrelated concepts. This may imply that one gets no justification at all in isolation from justification for many related propositions. That possibility is, however, quite compatible with some grounds of one's justification being single experiences. Epistemic autonomy is consistent with conceptual dependence. We cannot believe, and hence cannot know, a proposition essentially involving concepts we do not have. But a belief might have an isolated ground without in the least being isolated conceptually or in content from other beliefs.

Regarding negative individual autonomy on the part of a source—that is, its providing justification or knowledge that is overridable only by counterevidence from the same source—plainly the four standard sources do not have it. To take a different example, the justification of a memorially justified belief that there is a wall in the field can be overridden by a perception of smooth ground there. The same perception can prevent the belief's constituting knowledge even if it is true. It may seem that reason—our rational capacity—is privileged as a source of justification. Strong rationalists might take it to possess negative individual autonomy. But surely there are some propositions, such as some in logic or mathematics, that I might justifiably believe on the basis of reflection but, in part on the basis of sufficiently plausible testimony, can cease to be justified in believing or cease to know. Here the authority of that testimony would depend partly on perceptual and memorial factors crucial for my justifiably accepting the credibility of the person who is its source. Thus, the overriding power of that authority does not derive from reason alone.<sup>20</sup>

The case for collective negative autonomy is more plausible: there is some reason to think that where a belief constitutes knowledge or is justified in virtue of support from all four sources working together, its epistemic grounding (its

grounding qua knowledge) and its justification are defeasible only through considerations arising from at least one of those very sources. If we assume that such defeat can come only from what confers or at least admits of justification, and if we add the highly controversial assumption that all epistemic grounding and justification of belief derive wholly from the four standard sources, we may conclude that those sources are epistemically and justificatorially self-sufficient. I make neither assumption, but I would suggest that in fact these sources may well be self-sufficient. For there may in fact be no other basic sources (as opposed to causes) of knowledge or justification or of defeat.<sup>21</sup>

There are at least two reasons for the caution just expressed. One concerns collective negative autonomy. The other concerns the self-sufficiency thesis, in particular the idea that the standard basic sources are self-corrective in providing (in principle) for all the kinds of correction needed to rectify erroneous beliefs. Let us take these points in turn.

First, it is widely recognized that sources of unreliability in our belief-formation processes can prevent our beliefs from constituting knowledge even if we have no way, through the standard basic sources, of detecting the error. This is a lesson of the Cartesian demon scenario, in which our belief-forming experiences, and even our efforts to check on the truth of our beliefs, are manipulated so that we cannot detect certain false beliefs. But, in principle, inanimate factors could conspire to produce the same unfortunate results. It would be a mistake, then, to say that the basic sources are necessarily self-correcting.

Second, there is reason to think that the concept of knowledge, as opposed to that of justification, is external in roughly this sense: knowledge is possible without the knower's having internally accessible grounds for the belief constituting it.<sup>22</sup> Thus, suppose that, through the operation of a special mechanism in one's brain, one could know what a person very near one was thinking. Such a mechanism might deliver the beliefs constituting the knowledge whenever one concentrates attention on the person in question in a certain way but might yield no sense of any grounds for them; nor would there have to be any access to such grounds. Granted, one might gain inductive evidence of one's success, but if such knowledge is possible at all, one could presumably have it without dependence on inductive evidence of that success. There is much controversy over whether such externally grounded knowledge is possible; but, if it is, then the standard basic sources are not necessarily collectively self-sufficient regarding knowledge even if they are for justification. There can be other sources of knowledge.

For justification as opposed to knowledge, however, there is reason to think that the four standard sources are indeed individually autonomous and, collectively, both self-sufficient and self-corrective. Each can provide grounds that can by themselves confer justification (as well as knowledge where the belief in question is true), though defeat by counterevidence can arise from the same or a different source and hence each lacks autonomy in the negative sense; and the

entire set of sources seems, as regards justification, to be autonomous: self-sufficient in accounting for justification (as well as for normally grounded knowledge) and, independently of any other sources, capable of accounting for defeaters of justification and, in part in that way, for correction of our beliefs. In addition, it is arguable that, at least in the case of reason and perception, there is also uniqueness, in the sense that there are kinds of knowledge and justification not possible apart from dependence on these sources. None of these properties holds for testimony, though it is like the basic sources in being both a source of direct knowledge and also epistemically essential in the ways I have described.

It has been plausibly argued, however, that one source, and perhaps *the* basic source, of justification is coherence among one's beliefs. Isn't my belief that the car was moving perhaps justified by its *coherence* with the beliefs that its orientation to the adjacent building seemed to be changing, that I recall tire sounds, and that cars are built to move? And isn't the justification of my belief that the ground where the wall stands was smooth later undermined mainly by its *incoherence* with the belief that I now see one there (one that looks quite old)? Let us explore the role of coherence in justification.

## V. COHERENCE

Unfortunately, there is no account of coherence which we may simply presuppose. The notion is elusive, and there are highly varying accounts.<sup>23</sup> But this much is clear: we cannot assess the role of coherence in justification unless we distinguish the thesis that coherence is a basic source of justification from the thesis that *incoherence* can defeat justification. The power to defeat is destructive; the power to provide grounds is constructive. To see that the destructive power of *incoherence* does not imply that coherence has any basic constructive power, we should first note that *incoherence* is not the contradictory of coherence, its mere absence. It is something with a definite negative character: two beliefs that are logically and semantically irrelevant to each other, such as my beliefs that the sun is shining and that I am thinking about sources of knowledge, are neither mutually coherent nor mutually incoherent. The paradigm of *incoherence* is blatant logical inconsistency; positive coherence is widely taken to be far more than mutual consistency, yet far less than mutual entailment.

Clearly, that *incoherence* can defeat justification does not imply that coherence can create it. If it does create it (which is far from obvious), seeing this point is complicated because wherever coherence is plausibly invoked as a source of

justification, there one or more of the four standard sources apparently operates in a way that provides for an explanation according to which *both* the coherence and the justification arise from the same elements responsible for well-groundedness.<sup>24</sup> This is best seen through cases.

Consider my belief that a leaf blower is running, grounded in hearing the usual sharp blaring sounds. This appears to be justified by the relevant auditory impressions, together with background information about what the corresponding sounds indicate. If, however, I acquired a justified belief that someone is imitatively creating the blare, my justification for believing that a leaf blower is running would be undermined by the incoherence in my belief system. Does the defeating power of incoherence imply that my original justification requires coherence among my beliefs, including the belief that no one is doing that? Does one even have that belief in such a case? It would surely not be normal to have it when there is no occasion to suspect such a thing. But suppose the belief were required. Notice how many beliefs one would need in order to achieve coherence that is of sufficient magnitude to be even a plausible candidate to generate the justification in question, for example that my hearing is normal, that there is no other machine nearby that makes the same sounds, and so on. It is not quite clear how far this must go. Do we even form that many beliefs in the normal cases in which we acquire justified beliefs of the ordinary kind in question? To think so is to fall victim to a kind of intellectualism about the mind that has afflicted coherentist theories and opposing accounts of justification alike.

A further analogy may help to show how incoherence can be a defeater of justification without its absence, or beliefs that it is absent, or justification for believing something to this effect, being a source of justification. One's job may be the source of one's income, yet a severe depression might eliminate the job. It does not follow that the absence of a depression is a source of one's income. Surely it is not. Even positive economic conditions are not a source, though one's source *depends* on them. The idea of (positive) dependence is central in understanding that of a source. It must be granted that there is a negative sense in which one's job does depend on the absence of a depression; but that dependence—a kind of vulnerability—is too negative a condition to count as a source (much less a ground) of income. For one thing, it provides no explanation of why one has the income. Similarly, we might say that one's justification negatively depends on the absence of defeaters and positively depends on one's sources. But negative dependence on incoherence does not imply positive dependence on anything in particular, including coherence, as a source, any more than an income's negative dependence on the absence of a depression implies any particular source of that income.

To be sure, nothing can serve as a source of anything without the existence of indefinitely many *enabling conditions*. Some of these are conceptual. One may, for instance, be unable to believe a proposition even when evidence for it is before

one; if a child has no concept of an insurance adjuster, then seeing one examining a damaged car and talk to its owner about deductibles will not function as a source of justification for the proposition that this is an insurance adjuster. Other enabling conditions are psychological, concerning our capacities or dispositions relevant to forming beliefs. If my sensory receptors are malfunctioning, or if I do not respond to their deliverances by forming beliefs in the normal way, then I may fail to be justified in certain perceptual beliefs.

Specifying a source provides both a genetic explanation of where a thing comes from and, through supplying a ground, a contemporaneous explanation of why it is as it is; enabling conditions, by contrast, provide neither. Taken together, they explain its possibility, but not its genesis or its character. It is neither correct nor theoretically illuminating to construe the absence of the enabling conditions as part of the source or as a ground. They are indispensable, but their role should be understood in terms of the theory of defeasibility rather than the theory of sources or of positive grounds.

The importance of incoherence as a defeater of justification, then, is not a good reason to take coherence to be a source of justification. This by no means implies that justification has no relation to coherence. Indeed, at least normally, justified beliefs will cohere, in one or another intuitive sense, with other beliefs one has, typically other justified beliefs. Certainly, wherever there is justification for believing something, there at least tends to be justification for believing a number of related propositions and presumably for believing a coherent set of them. This is easily seen by reflecting on the point that a single perceptual experience provides information sufficient to justify many beliefs: that someone is blowing leaves, that there is a lawn before me, that these blaring motors should be muted, and far more.

The conception of sources of knowledge and justification that I have sketched provides a way to explain why coherence apparently accompanies justified beliefs—actual and hypothetical—namely, that both are ultimately grounded in the same basic sources. In sufficiently rich forms, coherence may, for all I have said, commonly be a *mark* of justification: an indication of its presence. The coherence conception of knowledge and justification, however, does not well explain why justification of beliefs is apparently dependent on the standard sources. Indeed, as an internal relation among beliefs, coherence may be at least as easily imagined in artificial situations where the coherence of beliefs is unconstrained by our natural tendencies. In principle, wishful thinking could yield as coherent a network of beliefs as the most studious appraisal of evidence.<sup>25</sup>

There is one kind of coherence that is entirely consistent with the well-groundedness conception of justification that goes with taking it to derive from basic sources in the ways I have suggested. To see this, note first that one cannot believe a proposition without having the concepts that figure essentially in it. Whereof one cannot understand, thereof one cannot believe. Moreover, concepts

come, and work, in families. This point is the core of a coherence theory of conceptual function: of the acquisition of concepts and their operation, most notably in discourse, judgment, and inference. That theory—call it *conceptual coherence*, for short—is both plausible and readily combined with the kind of view I am developing. For instance, I am not justified in believing that there is a piano before me unless I have a concept of a piano. I cannot have that unless I have many other concepts, such as the concept of an instrument, of a keyboard, of playing, of sound, of music—no one highly specific concept need be necessary, and various alternative sets will do. In part, to have a concept (of something perceptible) is (at least for remotely normal persons) to be disposed to form beliefs under appropriate sensory stimulations, say to believe a specimen of the thing to be present when one can see it and is asked if there is such a thing nearby; thus, again it is to be expected that from a single perceptual experience, many connected propositions will be justified for the perceiver.

The coherence theory of conceptual function belongs more to semantics and philosophy of mind than to epistemology. But it has profound epistemological implications. That concepts are acquired in mutual relationships may imply that justification does not arise atomistically, in one isolated belief (or desire or intention) at a time. This does not imply, however, that, once a person acquires the conceptual capacity needed to achieve justification, justification cannot derive from one source at a time. This theory of conceptual acquisition and competence is also quite consistent with the view that, far from deriving from coherence, justification, by virtue of the way it is grounded in its sources, brings coherence with it.

## VI. CONCLUSION

We have seen reason to consider perception, memory, consciousness, and reason to be basic sources of justification and, except in the case of memory, of knowledge. All can yield beliefs that are both noninferential in not being based on other beliefs and noninferentially justified in not deriving their justification from being based on any other beliefs. Testimony can also yield noninferential beliefs and even what might be called basic knowledge, but it is not a basic source or knowledge or justification. Like inference, it yields knowledge and justification only given the positive cooperation of at least one of the basic sources, but because it (commonly) yields noninferential beliefs, it is closer than inference to constituting a basic source.

The basic sources yield not only knowledge and justified belief, but also coherence. For instance, it is common for a single observation to produce a goodly number of cohering beliefs. The operation of reason—our rational capacity—tends to employ an interconnected group of concepts, such as those involving perceptible objects, psychological concepts, and logical relations, which dispose us to discover certain apparently a priori truths and to reason with and from them in ways that produce an integrated view; and memory preserves not only individual beliefs, but also our sense of some of their interconnections.

The operation of basic sources allows for defeasibility even when it yields amply justified beliefs or knowledge. Among the defeaters that can undermine would-be justification or would-be knowledge is incoherence. But it is essential to see that the pervasive possibility of defeat does not entail that each basic source has a positive dependence on any of the others, in the sense that in order to yield knowledge or justification, one source must rely on the operation of another one, or that any basic source positively depends on coherence.

At several points, I have indicated something about perception that may not apply to the other basic sources. Within very wide limits, the notion of perception is open-ended. There is no fixed a priori list of perceptual modalities. In a way the notion is schematic: definite by virtue of paradigms like sight and touch that anchor it, yet capable of being filled out by changes in our relation to the world.

Might the same be said of the notion of a basic source of knowledge or of justification? Perhaps it might. The distinction between a schematic concept being filled out over time and a change of concepts by replacement is, to be sure, not sharp. I certainly want to make room for the possibility that there are or can be basic sources of knowledge or justification not considered here. Whether we call them new basic sources or instead should say that our concepts of knowledge or justification have changed would depend in large part on how they are related to the clearly basic sources that are now essential for understanding the notions of knowledge and justification. My concern has been to clarify those in relation to their sources, especially their basic sources but also testimony and inference, which are essential though not basic sources. How those two sources extend knowledge and justification gained through the basic ones is a large problem that cannot be even be approached here.<sup>26</sup>

For each source of knowledge or justification, I have left room for cooperation between sources: two or more basic sources can together produce knowledge or justification, as can two or more nonbasic sources. Two or more sources from the different categories can also cooperate, as where testimony, a nonbasic source of justification, supports memory, which is a basic source of it, or where reason, by producing an inference to a proposition confirmed by memory, supports that faculty. The possibility of cooperation is matched by that of conflict. Skeptics find the latter possibility highly damaging to common-sense views of the extent of our knowledge and justification. If I have been right, it may well be that the basic

sources are collectively autonomous in a way that permits adjudication of this matter. I should like to think this is so; but even if it is, on some aspects of the question the jury is still out.<sup>27</sup>

## NOTES

1. For detailed discussion of the distinction between positive and negative epistemic dependence, see my *Epistemology* (London: Routledge, 1998), esp. chap. 7.
2. If "blind sight" is a case of perception, this may not be so (though it is arguable that the subject simply does not believe there are visual sensations or other experiential elements corresponding to perception).
3. The apparent noncausal character of abstract entities is a main reason that knowledge of them—indeed their very existence—is often considered problematic. For one kind of challenge to the causal inertness claim see Alvin Plantinga, *Warrant and Proper Function* (Oxford: Oxford University Press, 1993).
4. For introspection and consciousness, as for external perception, one can devise a plausible adverbial view, as described in chap. 1 of *Epistemology*.
5. See Fred I. Dretske, *Knowledge and the Flow of Information* (Cambridge, Mass.: MIT Press, 1981), and William Alston, *Perceiving God* (Ithaca, N.Y.: Cornell University Press, 1991), for indications of how broad the notion of perception is.
6. The need for 'if' here has been suggested already: a duplicate of me would, at the moment of creation, know dispositionally a great deal I now know from memory (not all of it, of course, because some depends on my actual history and it would have no history yet); but it is unclear how this depends on memory. Perhaps we should say that it does not depend on *remembering*—hence does not require the *operation* of memory—but does depend on *memorial capacity*, since it would not be true of me that if I needed to bring a certain item of knowledge to mind I could, unless I had sufficient memorial capacity to retain it from the moment I needed it (e.g., a phone number) to the "next" moment, at which I bring it to mind.
7. Granted, I could memorially believe *p* but not know it (having too little evidence, say) and then be told by you that *p*. But if I now know it, this is on the basis of your testimony; I don't know it from memory until I retain the knowledge and not just the belief. Believing from memory can instantaneously become knowing, but does not instantaneously become knowledge from memory.
8. For a detailed discussion of the epistemology of memory, with many references to relevant literature, see my "Memorial Justification," *Philosophical Topics* 23 (1995): 31–45.
9. See, for example, Hume's extraordinary affirmation of privileged access in the *Treatise*, cited and discussed in my *Epistemology*, chap. 3.
10. The relevant kind of understanding and the notions of a priori knowledge and justification in general are discussed in detail in chap. 4 of *Epistemology* and in my "Self-Evidence," in *Philosophical Perspectives* 13 (1999): 205–228.
11. Thus, for God or any being with infinite memorial capacity, no use of reason essentially depends on the exercise of memory. I might add even if the points made here

about inference and memory are mistaken, the overall point that reason may ground justification for *p* without yielding knowledge of it can be illustrated by many other cases, presumably including the proposition that some classes are members of themselves (since this embodies a type-error).

12. This point must be qualified if W. V. Quine is right in denying that there is a viable distinction between the empirical and the a priori—at least one would have to speak in terms of, say, differences in degree. For extensive criticism of Quine, see Bonjour, "Against Naturalized Epistemology," *Midwest Studies in Philosophy* 19 (1994): 283–300, and for the notion of a priori justification see also my "Self-Evidence."
13. See Thomas Reid, *Essays on the Intellectual Powers of Man* (Cambridge, Mass.: MIT, 1969). For a defense of a Reidian view see C. A. J. Coady, *Testimony* (Oxford: Oxford University Press, 1992). For a contrasting account of testimony more sympathetic to a Humean perspective see Elizabeth Fricker's chapter on testimony in *Handbook of Epistemology*, ed. Ilkka Niiniluoto and Matti Simtonen (Dordrecht: Kluwer, 2002).
14. For a developed distinction between these and a case for positing fewer beliefs than most philosophers apparently do, see my "Dispositional Beliefs and Dispositions to Believe," *Nous* 28 (1994): 419–434.
15. This point may be more controversial for internalist than for externalist views, since an externalist can hold that my belief can constitute knowledge so long as it is reliably produced, even if I do not have accessible grounds for *p*, as I would if I had good inferential grounds for it. I cannot discuss the contrast between internalism and externalism in this paper. For discussion see, for example William P. Alston, *Epistemic Justification* (Ithaca, N.Y.: Cornell University Press, 1989), Paul K. Moser, *Knowledge and Evidence* (New York: Cambridge University Press, 1989), and my *Epistemology*, chap. 8.
16. I discuss the issue of voluntary control of belief and cite much relevant literature in "Doxastic Voluntarism and the Ethics of Belief," *Facta Philosophica* 1, no. 1 (1999): 87–109.
17. This point is explained and defended in my "The Place of Testimony in the Fabric of Knowledge and Justification," *American Philosophical Quarterly* 34 (1997): 404–422.
18. This point may support my view, defended in "The Place of Testimony," that to acquire justification for *p* from testimony, one needs some degree of justification for taking the attester to be credible. (I do not think one needs this to acquire prima facie justification from one of the standard basic sources.)
19. This is not to imply that just *any* factual belief is better justified than any conflicting visual one. Matters are far more complicated, but need not be pursued in detail here.
20. This is not to deny that there may be justified beliefs of logical truths so luminous that the justification of these beliefs cannot be overridden. The point is that doxastic justification grounded in reflection can be overridden by factors that are at least not entirely a priori. That can be so even when the beliefs in question are true. For further discussion of this issue see Laurence Bonjour, *In Defense of Pure Reason* (Cambridge: Cambridge University Press, 1997), and my "Self-Evidence," cited in note 10.
21. Another possibility is that there are other basic sources which are comparatively weak, so that although they may add to the justification available through the standard sources, they are not sufficient to yield belief that is justified on balance (roughly, justified to a degree ordinarily sufficient to render a true belief knowledge). On the other

hand, if they can add to justification from the standard sources, then they could render a belief that would not ordinarily defeat the justification of another belief able to do so. This would limit the self-sufficiency of the basic sources. We should surely be cautious about affirming even the *de facto* self-sufficiency of the sources, and I leave it open.

22. A brief treatment of externalism is provided in my *Epistemology*, for a more extensive treatment see Ernest Sosa, *Knowledge in Focus, Skepticism Resolved* (forthcoming from Princeton University Press), and chapter 8 in the present volume.

23. For two major accounts see Keith Lehrer, *Knowledge* (Oxford: Oxford University Press, 1974), and Laurence Bonjour, *The Structure of Empirical Knowledge* (Cambridge, Mass.: Harvard University Press, 1985); and for much discussion see John Bender, ed., *The Current State of the Coherence Theory* (Dordrecht: Kluwer, 1989). It should be noted that in "The Dialectic of Foundationalism and Coherentism," in John Greco and Ernest Sosa, eds., *The Blackwell Guide to Epistemology* (Oxford: Blackwell, 1999), Bonjour has since abandoned coherentism.

24. This is suggested and to some degree argued in my *Belief, Justification, and Knowledge* (Belmont, Calif.: Wadsworth, 1988) and *The Architecture of Reason* (Oxford: Oxford University Press, 2001).

25. If it is taken to be an internal relation among beliefs, their content does not matter, nor does their fit with experience. This sort of thing has been widely noted; see Moser, *Knowledge and Evidence*, and John Bender, *The Current State of the Coherence Theory* (Dordrecht: Kluwer, 1989), for some relevant points and many references.

26. An approach to understanding the inferential extension of justification and knowledge is developed in chap. 6 of *Epistemology*. Testimonial extension of justification and knowledge is approached in my "The Place of Testimony."

27. For helpful comments on an earlier version of this article (which derives, in part, from chap. 1 of my *Architecture of Reason* and from my paper on testimony, cited above), I heartily thank Paul Moser and Richard Swinburne.

## CHAPTER 3

# A PRIORI KNOWLEDGE

ALBERT CASULLO

## 1. INTRODUCTION

THE prominence of the a priori within traditional epistemology is largely due to the influence of Immanuel Kant. In the Introduction to the *Critique of Pure Reason*,<sup>1</sup> he introduces a conceptual framework that involves three distinctions: (1) the *epistemic* distinction between a priori and empirical knowledge; (2) the *metaphysical* distinction between necessary and contingent propositions; and (3) the *semantic* distinction between analytic and synthetic propositions. Within this framework, Kant poses four questions:

1. What is a priori knowledge?
2. Is there a priori knowledge?
3. What is the relationship between the a priori and the necessary?
4. Is there synthetic a priori knowledge?

These questions remain at the center of the contemporary debate.

Kant maintains that a priori knowledge is "absolutely independent of all experience."<sup>2</sup> This characterization is not fully perspicuous since he allows that such knowledge can depend on experience in *some* respects. For example, according to Kant, we know a priori that every alteration has its cause, despite the fact that the concept of alteration is derived from experience. Yet he is not explicit about the respect in which such knowledge must be independent of experience.

Since Kant does not offer a fully articulated analysis of the concept of a priori knowledge, he is not in a position to argue *directly* for its existence by showing