# Knowledge and Skepticism

EDITED BY

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To the lecturers and participants of the 1986 Summer Institute on Theory of Knowledge, Boulder, Colorado

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### Introduction

We present this collection of essays as characteristic of philosophical writing in the theory of knowledge. The articles contain a number of major themes: skepticism, externalism, reliabilism, probability, and justification. Many of the articles articulate the relationship among these notions. The majority of them concern themselves one way or another with a problem raised by some form of skepticism and answered by some form of reliabilism. The articles by Alston, Stroud, Sosa, Dretske, and Lehrer belong in this category. Skepticism arises from the risk of error. The risk of error is, however, compatible with a high probability of truth, which may suffice for knowledge. Chisholm offers an explication of probability. Kyburg builds an account of knowledge on epistemic probability and an interest in minimizing error. The probability of truth may, however, be the result of the reliability of the processes generating our beliefs as Goldman, Dretske, and Alston argue, or of our trustworthiness in the quest for truth as Lehrer proposes.

Whether the skeptic prevails depends on the justification we have for rejecting skeptical hypotheses—those concerning dreams, hallucinations, deceptions, and other skeptical favorites. The question of the justification of what we believe is considered by Goldman and Lehrer and, indirectly, by Chisholm. Replying to the skeptic depends on finding access to information that will answer the questions raised. Hintikka provides an interrogative model to explicate how the game we play with some internal or external source of information provides us with knowledge. Though not all of the authors conceive of their problem as that of answering skepticism, we believe that the skeptic provides a useful heuristic device for understanding our various authors and the connections between their work. So let us embrace the skeptic, not so much as an opponent to be vanquished but as a source of enlightenment.

How should we think of the skeptic? That depends on what the skeptic affirms, or, more exactly, on what the skeptic denies. The skeptic denies that we know some things that we think we know. In this way, all of us are

skeptics about some things on some occasions, and wisely so. We do not always know as much as we think we do. That provides an opening for the skeptic. If we sometimes are in error when we think we know something, and, indeed, in error in just those circumstances in which we think there is little or no chance that this is so, then we must admit that in all matters of the same sort we are fallible and may fall into error. So we are fallible. Does that mean that knowledge is an illusion? Should we declare, as some have suggested, that epistemology is dead because we are fallible and may err?

There are many replies. Some think and argue that there is no satisfactory reply to the skeptic and, therefore, that the traditional attempt to construct an epistemology that will answer the skeptic is a failure. Stroud belongs to this group. Sosa opposes it. Kyburg argues, contrary to the skeptic, that we are infallible in our reports simply because they are reports, and that the rest of the things we know result from convention — indeed, from conventions depending on the risk of error. There are those, however, who think the challenge of the skeptic may be answered. Alston, Goldman, and Dretske contend that we attain knowledge when our beliefs are generated in a reliable way. Some have denied that this is a necessary condition of knowledge, and others that it suffices. But suppose Alston, Goldman, and Dretske are right. Suppose that reliably generated true beliefs are knowledge. Would that send the skeptic packing? Perhaps, but it will be

a long, mind-bending farewell.

The foregoing argument against skepticism has been formulated in terms of what is called externalism, a position that, though variously defined, is based on the idea that the relationship between belief and truth that converts true beliefs into knowledge may be one of which the knower herself is completely ignorant. The relationship is external in that the knower may have no idea that the relationship holds. In other words, some external person may know that the relationship holds while the knower herself does not. My belief that I see a computer may be the product of some reliable belief-forming process, though I am ignorant of this fact. Indeed, on this account, children and animals — the family dog, for example — who have no conception of reliable belief-forming processes or, for that matter, of truth or error, have knowledge nonetheless when their beliefs result from such processes. The dog believes that meat is near. His trusty nose makes the generation of his belief reliable. He is rarely wrong about meat. The knowledge of the dog suffices to refute the skeptic. It also shows that we do not need to be able to refute the skeptic in order to have knowledge. Fido knows, but he is unable to refute anyone. Is this line of thought to be taken seriously? Qualifications might be added. One might hold that knowledge is reliably generated true belief but reject the thesis that dogs have beliefs of the requisite kind. The same might be said of children. In fact, however,

reliabilists such as Dretske and Goldman take pride in ascribing knowledge to children and animals, and they regard this as an advantage of their theory.

Before considering a skeptical reply, we should note that the main feature of reliabilism — the claim that knowledge may result from something of which we are ignorant, namely, the appropriate relationship between belief and truth — is also a feature of a traditionally opposed epistemology, to wit, foundationalism. A foundationalist may hold that beliefs of a specified sort, foundational beliefs, are justified in themselves because of some intrinsic quality — that of being an introspective, perceptual, or memory belief of a securely circumscribed sort, for example — even though the subject is ignorant of the existence of this intrinsic quality. Chisholm once suggested, for example, that all sensible perceptual takings were evident, where a sensible taking was one having a certain sort of internal content. If that principle were correct, then my taking something to be red would be evident for me, even if I were ignorant of the intrinsic feature, that is, even if I had no idea that my taking was a sensible taking. This sort of foundationalism might be called internal foundationalism. It holds that some internal feature of beliefs is what converts basic beliefs to knowledge, rather than some relationship between the belief and what makes it true. But this sort of foundationalism shares with reliabilism a common reply to the skeptic, namely, that we may have no idea of the feature of belief that converts true belief to knowledge. Other sorts of theories, including some coherence theories that define coherence in terms of internal relations between beliefs, might employ a similar reply, to wit, that what converts true belief to knowledge is coherence among one's beliefs even if one is ignorant of such coherence.

What might we say on behalf of the skeptic? It would be best to let her speak for herself. "You claim that beliefs have a feature that converts them to knowledge even if the subject is ignorant of them. Is this something you claim to know? If so, you must show me how you know it. If not, for all you know, beliefs might be true and reliably generated, or they might be true and sensible takings, which are not knowledge." In short, to refute a skeptic, you must show that we have knowledge, and, to do that, you must proceed from premises you can show to be true. If you do not, then, though the skeptic may be in error, you may know as you say you do, but you will not have shown that the skeptic is in error. If you concede that you have not shown the skeptic to be in error but insist nonetheless that she is in error, you have abandoned epistemology for the dogmatism of the vulgar.

The paper by Alston is directly relevant to these issues. Alston has argued in earlier work that if beliefs are reliably formed, then they are justified, whether or not we know they are reliable. In this paper, however, he notes that the "if" contained in the claim provides the basis for a skeptical challenge. How can we show that the beliefs are reliably formed? Any

attempt to do so appears to lead to epistemic circularity. Is there any escape from such circularity? After detailed consideration of the problem, Alston proposes, following Wittgenstein, that it is a consequence of our social practices pertaining to epistemic matters that it is rational to judge certain beliefs to be reliably formed. This consequence raises the question, he notes, of whether the practices can be shown to yield reliably formed beliefs, and he notes that the attempt to establish this connection appears again to be circular. He contends that not all kinds of circularity are vicious, but the major defense of our judgments of reliability based on a social practice must be based on some features of the practice. The question that he seeks to answer is what renders one practice superior to another. We leave it to the reader to discover the answer in the last section of his article.

Stroud agrees with Alston that the challenge of skepticism is not met by the appeal to externalism and, more specifically, to reliabilism. Again, assuming the externalist principle — if our beliefs are reliably formed, then they are justified — it follows that we might have justified beliefs and even knowledge without knowing that the principle is true. Such an account might give us the conditions under which sense experience yields knowledge, but it does not provide any general explanation of how knowledge is possible. We can, of course, explain how we know some specific thing, but we will be at a loss to explain how we can know anything at all. The latter problem arises when we attempt to explain how our knowledge in one domain - our knowledge of the data of sense, for example - could give us knowledge in a wider domain, knowledge of external objects, for example. To explain this, we must be able to account for the connection between the one sort of knowledge and the other, or our explanation of how we know the latter will be incomplete. But then, contrary to the externalist, we must know what the connection is and how it holds. For otherwise we shall fail to explain how we have the wider knowledge. But the problem is that to know that such a connection holds, we must already have knowledge of the things in the wider domain, which is what we were seeking to explain. So, though we may, contrary to affirmations of the skeptic, know some of the things she denies we know, she remains correct in saying that we can offer no epistemology to explain how we know. In other words, we cannot have a completely general understanding of how we know.

Sosa offers a critical account of skepticism that he considers important to providing not only an account of knowledge and other epistemic concepts but also, contrary to Stroud, a general understanding of the conditions under which we have knowledge. Sosa's current paper focuses on a detailed critique of skeptical argumentation. Such argumentation may involve principles of deductive closure (that we know what we deduce from what we know), principles of reasonable belief (that we know only what we have some reasons to believe), or principles of verification (that we do not know

something until we have verified the consequences of it). Skeptical argumentation, when precisely formulated, rests on principles we may reasonably reject. It is, however, one thing to find specific arguments of the skeptic to be defective. It is another to explain why she is, in general, incorrect.

Maybe there is no proof of skepticism. Might it not be reasonable to accept skepticism, even total skepticism, without proof? If, however, the total skeptic goes so far as to deny that there is any such thing as reasonable belief, and advocates suspension of judgment, she falls victim to refutation. For she can have no basis for suspension of belief for her kind of intellectual suicide. To be justified, she must have some reasonable basis, and that is precluded by her repudiation of the notion of reasonable belief. Even a more moderate skeptic, one who rejects the idea of reasonable belief, must fall into some sort of incoherence, namely, the incoherence of acting as though something were true while denying that it is reasonable to believe that it is true. With some qualification, therefore, we may say that skepticism leads to a kind of vital incoherence, that is, an incoherence in action. In this way, acting in a certain way presupposes that certain beliefs are reasonable and, in that sense, justified.

The aforementioned articles have alleged that reliabilism falls short of meeting the skeptical challenge. Though other authors in the volume have insisted on the importance of reliability or trustworthiness, the most radical defenders of reliabilism are Goldman and Dretske. Both have maintained the importance of the connection between epistemology and cognitive science. Goldman's article contains a previously unpublished summary of his major work on reliabilism, with an update reflecting subsequent modifications of his theory. Goldman and Dretske differ fundamentally over the importance of justified belief in the theory of knowledge, however. Goldman is, in this respect, insisting on the centrality of justified belief to an analysis of knowledge. He contends that justified belief, which is a condition of knowledge, is belief permitted by a right system of rules, which he calls J-rules. What makes the system of rules right is simply the consequences to which they lead, the verific consequences of producing beliefs that are true. Hence, as in his earlier articles, justified belief is the product of a reliable belief-forming mechanism.

Does Goldman's account provide a reply to the skeptic? It has been objected that on his view, belief would turn out not to be justified under conditions of systematic and unavoidable deception occasioned by powerful demons or scientists who render our system of rules productive of error instead of truth. Goldman replies to the objection by appeal to a modified account of justification. Suppose, however, that we are not deceived. Do we then have a reply to the skeptic? We could say this much on Goldman's account. Justified belief is permitted belief. If the rules of our system do not prohibit our believing that those rules are reliable, then, assuming we are not

deceived and the rules produce true beliefs, our belief that our rules are reliable would be justified. Is this reply to the skeptic adequate? This is the question raised and answered by Alston and Stroud above. We leave it to the reader to study Goldman's theory of naturalized reliabilism articulated in his article to determine whether it contains the resources to meet the skeptical objections raised by the other authors.

Dretske has a different sort of reliabilist view that, though it shares with Goldman an emphasis on the processes that form belief to account for the acquisition of knowledge, rejects the proposal that justification is what converts true belief to knowledge. Knowledge, according to Dretske, is just true belief that originates in a special way, that is, originates from receiving information from the senses. Dretske has a special twist on reliabilism that gives a special kind of reply to the skeptic, resulting from his attempt to provide a unified reliabilist theory of both representation and knowledge. Some source supplies us with information. The way in which we receive that information accounts both for what we believe (i.e., the representation we have of the world) and for what we know. The skeptic asks how we know that our beliefs are generated in a reliable manner. Dretske asks how we know what we believe, what the content of our beliefs is. In answering the latter question, we may obtain an answer to the skeptic, Dretske claims, because we may assign just that sort of representational content to our beliefs that is consistent with the claim that the processes that generate those beliefs are reliable. In determining the representational content of our beliefs, we assume that the mechanism generating those beliefs is the outcome of an evolutionary process that would enable the organism to adapt and survive. The best explanation we could give of why organisms with such belief-forming mechanisms survive while others do not is that those mechanisms produce true beliefs. Hence the best overall account will be one in which we assign content to our beliefs in a way that is consistent with supposing the generating mechanisms of our beliefs to be reliable. The reply to the skeptic's question of how we can show that our beliefs result from a reliable mechanism is that it would be bad science to interpret the beliefs in a way inconsistent with the assumption that the mechanism is reliable.

Kyburg's account, like Dretske's, is based on strict empiricism. Unlike Dretske's empiricism, however, Kyburg's view is based on the assumption that the information we receive may be erroneous. If the empirical information we receive may, and often is, erroneous, then we confront the problem of what it is reasonable to accept based on probability instead of certainty. Even at the level of observation, error is possible. We need some convention to decide whether to attribute error to observation reports. Dretske raises the question of how to assign content to our basic beliefs, those of perception. Kyburg raises the question of how to assign error to our basic beliefs, those of observation. The convention he proposes is that we adopt an overall

system that minimizes the attribution of error and distributes the error we must attribute as evenly as possible. This treatment of error, which acknowledges the ubiquity of our fallibility, provides us with a system of rational acceptance of observation and, when combined with Kyburg's formally articulated theory of objective epistemic probability, of the acceptance of quantified statements as well. Can we extract a reply to the skeptic from Kyburg's account? How, on his account, can we meet the skeptic's challenge to show us that what we rationally accept is the result of a reliable process? Extrapolating considerably from what he says, we might answer as follows. There is no avoiding a conventional element in our system of rational acceptance. Given the convention concerning treatment of error, however, all that we rationally accept will be objectively probable. In that sense, what we rationally accept by the rules he advances will be productive of truth. To the skeptical query concerning the conventions, Kyburg would answer that he has shown that they are inescapable. Convention is inescapable, but once a convention is adopted, the skeptic is answered. Without accepting some convention, no one can be answered.

The conception of epistemic probability, which becomes central in any confrontation with skepticism, is the focus of Chisholm's essay. Chisholm sets out to define an essentially epistemic, as opposed to a logical or a statistical, notion of probability. This is the sense of probability in which we say that something is probable for some person. According to Chisholm, this is equivalent by definition to saying that the person is more justified in believing the thing in question than in believing the negation of it. Thus the notion of probability is epistemic in the sense that some epistemic notion, that of being more justified in believing one thing than another, is used to define probability. This comparative epistemic locution may, as Chisholm shows, be used to define other epistemic notions, most notably those of being evident and being certain. To further clarify the nature of epistemic probability, Chisholm undertakes the explication of the notion of one thing tending to make another probable, of such a tendency being defeated, and of the notion of total evidence. Though Chisholm himself in other works has made only modest claims concerning the capacity of his approach to deal with skepticism, it seems to us to provide the basis for an internalist reply. Suppose a skeptic claims that any attempt to show that anything is probable will involve reasoning in a circle, because we would first need to show that things of this kind are frequently true, or, at least, more often true than false, which would presuppose knowledge of such matters. We might, if we adopt Chisholm's account of probability, claim that probability does not depend on such frequencies, and, therefore, that our knowledge that something is probable does not require knowledge of such frequencies. Chisholm is an internalist concerning the application of epistemic notions, and, therefore, he believes that our being more justified in believing one thing than another

does not depend upon the external frequency with which such things turn out to be true. The skeptic might yet persist and inquire how we can show that we are better justified in believing one thing than another, but the answer to that question, which for an internalist would be based on substantive epistemic principles, avoids the skeptic's circularity argument that an externalist inevitably confronts.

Lehrer's essay follows Chisholm's lead in taking a comparative epistemic notion, that of one thing being more reasonable for a person to accept than another, as primitive, though he advocates a coherence theory of knowledge as opposed to Chisholm's foundationalism. The coherence theory of knowledge he presents is based on a notion of personal justification, which in turn is based on what a person accepts, which, if undefeated, converts into knowledge. Personal justification is defined as coherence with what the person accepts, her acceptance system. Coherence is defined as the beating or neutralizing of competitors on the basis of such a system. Such justification is undefeated just in case the personal justification would be sustained when error in the acceptance system was removed or replaced with the acceptance of the denial of what was erroneously accepted.

Lehrer argues, moreover, that personal justification depends on what we accept about our trustworthiness in accepting what is true and avoiding accepting what is false. If we accept that we are trustworthy, and we are right in this, knowledge may be our reward. If we are untrustworthy, on the other hand, we are also ignorant. Thus, we must, on this theory, concede to the skeptic that if we are not trustworthy in what we accept in our quest to obtain truth and avoid error, then the skeptic wins the day. The powerful demon or scientist can render us untrustworthy in spite of our best efforts. We may be epistemically faultless in our endeavors in such a situation, but we are doomed to ignorance nonetheless.

The theory contains a reply to the skeptic. Suppose we are trustworthy, as we suppose. We are personally justified in accepting that we are not deceived, and, if we are correct in this, our justification is undefeated. We have knowledge. Moreover, we can show that we are personally justified, for that is an internal matter which depends only on what we accept. Can we show that our personal justification is undefeated? We can give no argument beyond appealing to what we accept, but the demand that we go beyond what we accept in the quest for anti-skeptical premises is incoherent. So whether the skeptic is wrong, and, indeed, has been shown to be wrong by our argumentation from what we accept, will depend on whether we are trustworthy in the ways we take ourselves to be. If we are trustworthy, our argument against the skeptic succeeds; if not, we are in no position to establish anything.

Hintikka presents us with an interrogative model of inquiry. On this model, an inquirer seeking knowledge is conceived of as an ideal inquirer

trying to prove some conclusion on the basis of some initial information articulated as a premise, using as additional premises answers obtained from some source of information. Thus, the quest for knowledge is conceived of as a question-and-answer game played with some source of information. The rules of the game specify the conditions under which an answer may be obtained. Though there is some similarity between this approach and that of Dretske — both conceive of knowledge in terms of information received from a source of information — Hintikka's model differs from Dretske's in suggesting that the acquisition of information will result from a game in which the inquirer is given an active role in formulating questions to present to nature or some other source of information.

The focus of Hintikka's present essay is tacit knowledge, the sort of knowledge that is implicit within us, and potential knowledge, the sort of knowledge the boy in the *Meno* had of the Pythagorean theorem. Tacit knowledge provides us with a simple case for considering the interrogative model because here the source of information is internal. The game is to make tacit knowledge explicit. It is clear that in this game what one recovers from one's internal base of information will depend on what question one poses. If one asks whether a given statement is true or false, for example, one may obtain the answer. Thus, in this game one starts with a disjunction of the statement and its negation, a simple tautology, as a premise. This use of the tautology is equivalent to directing attention to a specific statement in the question-and-answer game.

How is the model relevant to the demands of the skeptic? Hintikka does not deal with this question in his essay, but it provides us with the basis for an interesting reply to the skeptic. If the skeptic asks us to show that some conclusion or belief is justified, we reply by explaining how the conclusion is an answer obtained from a source of information, nature, for example, according to the rules of the game. If the skeptic persists and asks whether the source is reliable, that question is simply a question to be answered, as with any other question, by applying the interrogative model. If, on the other hand, the skeptic rejects the question-and-answer game, then no answer to any query is possible, and the skeptical game is up.

We have used skepticism and the skeptic for our own expository purposes. The philosophical importance of skepticism is not merely heuristic, of course. As the history of philosophy has taught us, however, many central features of an epistemological theory become apparent when one asks how one would reply to the challenges of the skeptic in terms of the theory. There are, nevertheless, important questions concerning the nature of knowledge, probability, justification, and reliability that go beyond the questions raised by the skeptic. These articles represent diverse attempts to answer these questions. They exhibit, we believe, the creativity of contem-

porary work in the theory of knowledge in this country. Though connected with the past, they reveal the novelty and vitality characteristic of present-day research in epistemology, resulting from confronting the traditional skeptic, on one side, and the cognitive scientist, on the other. The intersection is a crossroad of intellectual ferment and innovation.

We should like to conclude with some explanation of our choice of contributors. They were all lecturers at a Summer Institute in the Theory of Knowledge, directed by Alvin Goldman and Keith Lehrer, and funded by the National Endowment for the Humanities under the auspices of the Council for Philosophical Studies in the summer of 1986. We found a great deal of interest in what had transpired at the summer institute among those who had not been present, and a desire to receive copies of the lectures that were presented at the institute. In addition, a book, Teaching Theory of Knowledge, edited by Clay and published by the Council for Philosophical Studies, was prepared by the participants of the institute, and the interest in this book further supported the idea that presenting the results of the institute to a wider audience would be useful. To that end, we invited the lecturers from the institute to contribute to the present volume. Some did not choose to contribute, but the present collection is a good sample of the most recent research of the lecturers. This will explain why the work of other important writers on the subject is missing from the collection. To those whose work is contained herein, we should like to express our gratitude for their cooperation in the construction of this volume. Finally, we should like to express our gratitude to the National Endowment for the Humanities for providing the funding from which it all began.

> Marjorie Clay Keith Lehrer

## 1 A 'Doxastic Practice' Approach to Epistemology

William P. Alston

I

How can we determine which epistemic principles are correct, valid, or adequate? One way to motivate concern with this issue is to consider controversial principles. What does it take to be justified in perceptual beliefs about the physical environment? Can I be justified in believing that there is a tree in front of me just by virtue of that belief's stemming, in a certain way, from a certain kind of visual experience? Or do I also need reasons, in the form of what I know about my visual experience or about the circumstances of that perception? How do we tell what set of conditions is sufficient for the justification of such beliefs? Another and more usual way to motivate concern with the issue is to raise the specter of skepticism. Why suppose that any set of conditions we can realize is sufficient? No matter what experiences and beliefs I have, couldn't they have been produced directly by an omnipotent being that sees to it that there is no physical world at all and that all my perceptual beliefs are false? That being the case, why should we suppose that our sensory experience justifies us in holding any beliefs about the physical world?

As the above paragraph suggests, the epistemic principles I will be thinking of lay down conditions under which one is justified in holding beliefs of a certain kind. I shall be using the justification of perceptual beliefs as my chief example. For a more specific focus, you can take your favorite principle of justification for perceptual beliefs. Following my own injunction, I will focus on my favorite, which runs as follows.

I. — S is *prima facie* justified in perceptually believing that x is P iff S has the kind of sensory experience that would normally be taken as x appearing to S as P, and S's belief that x is P stems from that experience in the normal way.

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If we were interested in this principle for its own sake, much more would have to be done by way of clucidation. Here I will just say that the justification is only *prima facie* because it can be overridden by sufficient reason to suppose that x is not P or that the experience in this case is not sufficiently indicative of x's being P. I present this particular principle only to have something fairly definite to work with. Our concerns in this paper lie elsewhere. Nothing will hang on the specific character of I.

What it takes to be justified in accepting a principle of justification depends on what justification is. I have discussed this matter at some length elsewhere. Here I must confine myself to laying it down that epistemic justification is essentially "truth conducive." That is, to be justified in believing that p is to believe that p in such a way that it is at least quite likely that one's belief is true. One way of developing this idea is to say that S is justified in believing that p only if that belief was acquired in a reliable manner. This is not to *identify* justification with reliability; the 'only if' principle leaves room for other necessary conditions. I shall be thinking of justification as subject to a "reliability constraint." If this is distasteful to you, you can take the chapter as having to do with the epistemic status of principles of reliability, and leave justification out of the picture altogether.

So to determine which of the competing principles of the justification of perceptual beliefs is correct, if any, we have to determine, inter alia, which of them, if any, specify a reliable mode of belief-formation. And to show, against the skeptic, that perception is a source of justified belief (knowledge), we have to show that some mode of forming perceptual beliefs is reliable. But how to do this? Let's take a particular principle that specifies a mode of perceptual belief-formation, e.g., I., and consider what it would take to show that the mode so specified is reliable. The main difficulty is that there seems to be no otherwise effective way of showing this that does not depend on sense perception for some or most of its premises. Take the popular argument that sense perception proves its veridicality by the fact that when we trust our senses and build up systems of belief on that basis we have remarkable success in predicting and controlling the course of events. That sounds like a strong argument until we ask how we know that we have been successful at prediction and control. The answer is, obviously, that we know this only by relying on sense perception. Somebody has to take a look to see whether what we predicted did come to pass and whether our attempts at control were successful. Though I have no time to argue the point here, I suggest that any argument for the reliability of perception that is not otherwise disqualified will at some point(s) rely on perception itself. I shall assume this in what follows.3

What I have just been pointing to is a certain kind of circularity, one that consists in assuming the reliability of a source of belief in arguing for the reliability of that source. That assumption does not appear as a premise in

the argument, but it is only by making the assumption that we consider ourselves entitled to use some or all of the premises. Let's call this *epistemic circularity*. In a recent essay I argue that, contrary to what one might suppose, epistemic circularity does not render an argument useless for justifying or establishing its conclusion. Provided that I can be justified in certain perceptual beliefs without already being justified in supposing sense perception to be reliable, I can legitimately use perceptual beliefs in an argument for the reliability of sense perception.

However, this is not the end of the matter. What I take myself to have shown in "Epistemic Circularity" is that epistemic circularity does not prevent one from showing, on the basis of empirical premises that are ultimately based on sense perception, that sense perception is reliable. But whether one actually does succeed in this depends on one's being justified in those perceptual premises, and that in turn, according to our assumptions about justification, depends on sense perception being a reliable source of belief. In other words, if (and only if) sense perception is reliable, we can show it to be reliable.<sup>6</sup> But how can we cancel out that if?

Here is another way of posing the problem. If we are entitled to use beliefs from a certain source in showing that source to be reliable, then any source can be validated. If all else fails, we can simply use each belief twice over, once as testee and once as tester. Consider crystal ball gazing. Gazing into the crystal ball, the seer makes a series of pronouncements: p, q, r, s... Is this a reliable mode of belief-formation? Yes. That can be shown as follows. The gazer forms the belief that p, and, using the same procedure, ascertains that p. By running through a series of beliefs in this way, we discover that the accuracy of this mode of belief-formation is 100%! If some of the beliefs contradict others, that will reduce the accuracy somewhat, but in the absence of massive internal contradiction the percentage of verified beliefs will still be quite high. Thus, if we allow the use of mode of beliefformation M to determine whether the beliefs formed by M are true, M is sure to get a clean bill of health. But a line of argument that will validate any mode of belief-formation, no matter how irresponsible, is not what we are looking for. We want, and need, something much more discriminating. Hence the fact that the reliability of sense perception can be established by relying on sense perception does not solve our problem.7

#### П

This is where the "doxastic practice" approach of the title comes into the picture. For help on the problem of the first section, I am going to look to two philosophers separated by almost two hundred years, Thomas Reid and Ludwig Wittgenstein. Both were centrally concerned with our problem, albeit in somewhat different guises. Since within the limits of this paper I

am simply drawing inspiration from these figures, mining their work for ideas that I will develop in my own way, I will not attempt to present their views in anything like an adequate fashion.

First Wittgenstein. In On Certainty Wittgenstein is concerned with the epistemic status of propositions of the sort G. E. Moore highlighted in his "Defence of Common Sense" and "Proof of an External World" - such propositions as This is my hand, The earth has existed for many years, and There are people in this room. The gist of Wittgenstein's position is that the acceptance of such propositions is partially constitutive of participation in one or another fundamental "language-game." To doubt or question such a proposition is to question the whole language-game of which it is a keystone. There is no provision within that language-game for raising such doubts. In fact, there is no provision within the language-game for justifying such beliefs, exhibiting evidence for them, or showing that we know such matters, as Moore tried to do. Hence we cannot even say that we know or are certain of such matters. They are too fundamental for that. By accepting these and other "anchors" of the game we are thereby enabled to question, doubt, establish, refute, or justify less fundamental propositions. Nor can we step outside the language-game in which they figure as anchors and critically assess them from some other perspective. They have their meaning only within the game in which they play a foundational role; we cannot give sense to any dealings with them outside this context.

Thus, if we ask why we should suppose that some particular language-game is a reliable source of belief, Wittgenstein responds by denying the meaningfulness of the question. The concept of a trans- or inter-language-game dimension of truth or falsity is ruled out on verificationist grounds. We can address issues of truth and falsity only within a language-game, by employing its criteria and procedures to investigate issues that are within its scope. Hence there is no room for raising and answering questions about the reliability of a language-game as a whole. To be sure, language-games are not sacrosanct or fixed in cement. It is conceivable that they should be abandoned and new ones arise in their place. But even if we should have some choice in the matter, something that Wittgenstein seems to deny, the issue would be a practical, not a theoretical, one. It would be a choice as to what sort of activity to engage in, not a choice as to whether some proposition is true or false. <sup>10</sup>The foundation of the language-game is action, not intuition, belief, or reasoning.

Applying this to the problem raised in section I, Wittgenstein's view is that no sensible question can be raised concerning the reliability of the language-game that involves forming beliefs on the basis of sense-perception. There is no perspective from which the question can be intelligibly raised. This is a sphere of activity in which we are deeply involved; "this language-game is played." We could try to opt out, but even if, per

impossible, we could do so, that would have been a practical decision; and what possible reason could we have for such a decision? If, as is in fact the case, we continue to be a whole-hearted participant, we are simply engaged in (perhaps unconscious) duplicity in pretending to question, doubt, or justify the practice.

Now I do not accept for a moment Wittgenstein's verificationist restrictions on what assertions, questions, and doubts are intelligible. There is no time here for an attack on verificationism. I will simply testify that I can perfectly well understand the propositions that sense perception is (is not) reliable, that physical objects do (do not) exist, and that the earth has (has not) been in existence for more than a year, whether or not I or anyone else has any idea of how to go about determining whether one of these propositions is true. This confidence reflects a realistic concept of truth, on which a proposition's being true is *not* a matter of anyone's actual or possible epistemic position vis-à-vis the proposition. Hence I cannot accept Wittgenstein's solution to skepticism about perception and his answer to the question of the epistemic status of epistemic principles, the solution that seeks to dissolve the problem by undercutting the supposition that it can be meaningfully posed.

But then how can I look to Wittgenstein for inspiration? I shall explain. First a terminological note. Because I am concentrating on ways of forming and critically evaluating beliefs, I shall use the term 'doxastic practice,' instead of 'language-game.' The term 'practice' will be misleading if it is taken to be restricted to voluntary activity; for I do not take belief-formation to be voluntary. I am using 'practice' in such a way that it stretches over, e.g., psychological processes such as perception, thought, fantasy, and belief-formation, as well as voluntary action. A doxastic practice can be thought of as a system or constellation of dispositions or habits, or, to use a currently fashionable term, mechanisms, each of which yields a belief as output that is related in a certain way to an "input." The sense perceptual doxastic practice (hereinafter SPP) is a constellation of habits of forming beliefs in a certain way on the basis of inputs that consist of sense experiences.

Let me now set out the basic features of the view of doxastic practices I have arrived at, partly inspired by Wittgenstein. Some of these features are not stressed by Wittgenstein and some are only hinted at. But I believe that all of them are in the spirit of his approach.

1. We engage in a plurality of doxastic practices, each with its own sources of belief, its own conditions of justification, its own fundamental beliefs, and, in some cases, its own subject matter, its own conceptual framework, and its own repertoire of possible "overriders." There is no one unique source of justification or knowledge, such as Descartes and many others have dreamed of. However, this point needs to be handled carefully. What it is natural to count as distinct doxastic practices are by no means

wholly independent. We have to rely on the output of memory and reasoning for the overriders of perceptual beliefs. Apart from what is stored in memory, and used in reasoning, concerning the physical world and our perceptual interactions therewith, we would have nothing to go on in determining when sensory deliverances are and are not to be trusted. Reasoning is beholden to other belief-forming practices for its premises. We can, of course, reason from the output of previous reasoning, but somewhere back along the line we must have reasoned from beliefs otherwise obtained. Thus we must avoid any suggestion that these practices can be engaged in separately.

We need to distinguish between what we may call "generational" and "transformational" practices. Generational practices produce beliefs from non-doxastic inputs; transformational practices transform belief inputs into belief outputs. Generational practices could be used without reliance on other practices, as in forming perceptual beliefs without any provision for a second, "censor" stage that filters out some beliefs as incompatible with what we already firmly believe. This would be a more primitive kind of practice than we actually have in mature human beings, but it is possible, and may well be actual in very young children and lower animals. Moreover, our mature "introspective" practice is of this independent sort if, as seems likely, beliefs about one's current conscious states do not regularly pass any test of compatibility with what we believe otherwise. Transformational practices, on the other hand, cannot be carried on in any form without dependence on other practices. We have to acquire beliefs from some other source in order to get reasoning started.

Each of the generational practices has its own distinctive subject matter and conceptual scheme. SPP is a practice of forming beliefs about the current physical environment of the subject, using the common sense "physical object" conceptual scheme. Introspective practice is a practice of forming beliefs about the subject's own current conscious states, using the "conscious state" conceptual scheme, whereas beliefs formed by reasoning and by memory can be about anything whatever and can use any concepts whatever.

Then is there anything common to all doxastic practices, other than the fact that each is a regular systematic way of forming beliefs? Yes. In the initial statement I said that each practice has its own "sources of belief" and its own "conditions of justification." These are two sides of the same coin. We may take the former as our fundamental criterion for distinctness of doxastic practices. The practices we have distinguished differ in the kind of belief-forming "mechanism" involved. Such a mechanism consists of a "function" that yields a certain belief as output, given a certain input. This means that belief-forming mechanisms differ as to the sorts of inputs involved and as to the way in which inputs map onto belief outputs. There

will be as many (possible) deductive inference belief-forming mechanisms as there are forms of deductive inference.<sup>14</sup> And perceptual belief-forming mechanisms will differ as to the type of sensory experience inputs, and as to the way in which beliefs about environmental states of affairs are extracted from a certain kind of sensory experience. The conditions of justification for each practice simply amount to an epistemic version of the psychological notion of a belief-forming mechanism.<sup>15</sup> Thus the criteria of justification built into SPP have to do with the way a perceptual belief is standardly based on sense experience. The criteria of justification built into an inferential practice have to do with the way a belief is based on the kind of inference that constitutes the basic source for that practice.<sup>16</sup>

Thus we can translate our basic issue concerning the reliability of belief sources, or modes of belief-formation, into an issue concerning the reliability of doxastic practices. A practice is reliable *iff* its distinctive belief-forming mechanisms (modes of belief-formation) are reliable. And we can similarly restate the "reliability constraint" on principles of justification in these terms. A (general enough) principle of justification, e.g., I., will be true (valid, acceptable. . .) only if the doxastic practice in which we form beliefs in the way specified in that principle is reliable. From now on we will be thinking of reliability as attaching to doxastic practices.

We have also spoken of each practice as possessing its own distinctive set of foundational presuppositions. This is an idea that bulks large in On Certainty. I feel that Wittgenstein is much too generous in according this status to beliefs. It seems clear to me that This is my hand and The earth has existed for more than a year are propositions for the truth of which I have a great deal of empirical evidence within SPP (or rather within some combination of that with memory and reasoning of various sorts), rather than a basic presupposition of the practice. However, I do recognize this latter category. The existence of physical objects and the general reliability of sense perception are basic presuppositions of SPP; we couldn't engage in it wholeheartedly without at least tacitly accepting those propositions. Similarly, the reality of the past and the reliability of memory are basic presuppositions of the practice of forming memory beliefs.

2. These practices are acquired and engaged in well before one is explicitly aware of them and critically reflects on them. When one arrives at the age of reflection, one finds oneself ineluctably involved in their exercise. Here especially, the owl of Minerva flies only at the gathering of the dusk. Philosophical reflection and criticism build on the *practical* mastery of doxastic practices. Practice precedes theory; and the latter would be impossible without the former. This is a recurrent theme in *On Certainty*. If we hadn't learned to *engage* in inference, we could never develop a system of logic; we would have nothing either to reflect on or to reflect with. If we had not learned to form perceptual beliefs, we would have no resources

for formulating the philosophical problems of the existence of the external world and of the epistemic status of perceptual beliefs.

3. Practices of belief-formation, on which we have been concentrating, are set in the context of wider spheres of practice. We learn to form perceptual beliefs along with, and as a part of, learning to deal with perceived objects in the pursuit of our ends. Our practice of forming beliefs about other persons is intimately connected with interpersonal behavior, treating persons as persons and forming typically interpersonal relations with them.

4. These practices are thoroughly *social*: socially established by socially monitored learning, and socially shared. We learn to form perceptual beliefs about the environment in terms of the conceptual scheme we acquire from our society. This is not to deny that innate mechanisms and tendencies play a role here. We still have much to learn about the relative contributions of innate structures and social learning in the development of doxastic practices. Reid places more stress on the former, Wittgenstein on the latter. But whatever the details, both have a role to play; and the final outcome is socially organized, reinforced, monitored, and shared.

At the beginning of this section I said that I was going to develop an approach to epistemology that was inspired by Reid and Wittgenstein. So far nothing has been said about the former. But only the name has been absent. The conception of doxastic practices just outlined is, in its essentials, the view of Reid, even though the terminology is different. 17 Where I speak of various doxastic practices Reid speaks of various kinds of "evidence": "the evidence of sense, the evidence of memory, the evidence of consciousness, the evidence of testimony, the evidence of axioms, the evidence of reasoning."18 "We give the name of evidence to whatever is a ground of belief."19 Alternatively, he speaks of "general principles of the human mind" by which we form beliefs of certain sorts under certain conditions.20 Reid stresses the plurality of these principles or sorts of evidence, and the impossibility of reducing them to a single supreme principle. "... I am not able to find any common nature to which they may all be reduced. They seem to me to agree only in this, that they are all fitted by nature to produce belief in the human mind. . ."21 Again, Reid often stresses the point that we utilize these principles in practice long before we are explicitly aware of them as such. As mentioned above, he stresses the contribution of innate structure, whereas Wittgenstein stresses social learning, but in both cases there is emphasis on the point that we have them and use them before we reflect on them. Reid, much more than Wittgenstein, goes into the way in which belief-forming dispositions, once established, can be modified by experience. 22 On the other hand, Reid does not stress the way in which cognitive practices are set in the context of practices of overt dealings with the environment. Reid's perspective is that of a purely cognitive, mentalistic psychology. Finally, I should mention the point that one reason my account is closer to Reid's is that Reid had the advantage of philosophizing before the advent of verificationist and other anti-realist philosophies. Reid never suggests that there is anything unintelligible about the idea that, e.g., sense perception is or is not reliable, or that we cannot meaningfully raise the question of whether this is so, however difficult it may be to find a way to answer the question. As we shall see, this leaves Reid, and me, free to look for ways of evaluating basic doxastic practices.<sup>23</sup>

#### Ш

But how does my Reidian view of doxastic practices provide us with a solution of our central problem, viz., how we can determine, with respect to a particular practice such as SPP, whether it is reliable? Thus far I have presented my view as what we might call "cognitive social psychology," an account of how it is in fact with our activities of belief-formation. I believe that there can be no doubt that this account is correct, at least in its general outlines. But so far this is just psychology. What bearing does it have on our central epistemological question? How does it help us to determine which practices are reliable ones?

I am not going to tackle this question head on. Instead I am going to shift ground in this section and the next, and consider what resources our approach gives us for determining whether a given practice is *rationally* accepted (engaged in). Having completed that task, I shall turn, in section V, to the question of what bearing all this has on our central issues of the reliability of practices and the assessment of principles of justification.

Our two role models seek to make epistemological hay out of their psychology in different fashions. In a word, Wittgenstein draws linguistic conclusions from the psychology (while not admitting for a moment that it is psychology) and then applies these linguistic points to epistemology, while Reid tries to move more directly from the psychology to the epistemological position, if indeed he does clearly distinguish the two. Wittgenstein's linguistic solution, as already pointed out, is that no meaning can be given to a question as to the truth or justifiability of beliefs that are constitutive of a practice. We can't address such questions in the practice itself, nor can we address them in any other practice. The only meaningful questions are those for the investigation of which a practice makes provision; and no such provision is made for questions as to the fundamental presuppositions of a practice or as to its own reliability. I have already made clear that I do not accept the verificationist assumptions that underlie Wittgenstein's restrictions on meaningfulness, and hence I cannot avail myself of his solution. Reid's response is hazier and more difficult to summarize neatly, at least insofar as it goes beyond reminding the skeptic

that he is deeply involved in practices the presuppositions and outputs of which he is questioning; and despite the popular picture of Reid, it is clear that his response does go beyond this, however difficult it may be to say in exactly what way. <sup>24</sup> Since my aims in this paper are not historical, I shall state in my own way what I take to be essentially a Reidian response.

Consider a typical reaction of a contemporary American epistemologist to my suggestion that a study of social cognitive psychology can throw light on our epistemic question about the rationality of a practice. "What does all this have to do with epistemology? The fact that a given practice is socially established cuts no ice whatever epistemologically. The function of the epistemologist is to subject any such practice to critical standards, bring it before the bar of reason, playing no favorites on grounds of familiarity, general acceptance, practical indispensability, irresistibility, innateness, or commonsense plausibility."<sup>25</sup>

Let's term this position "Autonomism." It holds that epistemology is autonomous vis-à-vis psychology and other sciences dealing with cognition. It holds that epistemology is essentially a normative or evaluative enterprise, and that here as elsewhere values are not determined by fact.

But this non-naturalist philippic inevitably provokes a naturalist rejoinder. "You say that the province of epistemology, so far as it is concerned with doxastic practices, is to carry out a rational assessment of such practices. Well and good. But where is the epistemologist to obtain the standards by which that evaluation will be carried out? I doubt that there is any such special epistemological procedure for setting standards. Certainly there is none that is utilized by all or most epistemologists; or if there is, its employment does not yield general agreement. I suggest that when an epistemologist propounds principles of justification, these utterances, no matter how solemn the intonation, are rooted in one or another of the established practices we have been discussing. Does the epistemologist claim to be proceeding on the basis of self-evident principles of evaluation? Well then, he is participating in the well-established practice of forming beliefs on the basis of their appearing to be obviously true just on consideration. Even if this enables him to pass judgment on other practices, these judgments are worth only as much as the credentials of the practice within which they were pronounced. And if his epistemological judgments are made on some other basis, e.g., coherence or argument to the best explanation, he is still presupposing the acceptability of that mode of forming beliefs, in passing judgment on other practices. And he can't critically evaluate that mode in the same way without falling into epistemic circularity. Thus the autonomist, however lordly his pretensions, cannot, in the end, avoid reliance on one or more of the doxastic practices from which he was seeking to distance himself. He avoids a wholesale commitment to established doxastic practices only by taking one or more uncritically so as to have a platform from which to judge others. We cannot avoid dependence on the doxastic practices in which we find ourselves engaged when we begin to reflect. At most, we can restrict ourselves to one or two as the only ones we will accept without rational warrant, subjecting the others to the standards of these chosen few. Thus, on closer scrutiny, the autonomist turns out to be a selective heteronomist. And this is arbitrary partiality. It can have no rational justification. What justification can there be for accepting the pretensions of, e.g., rational intuition or introspection without critical scrutiny, while refusing the same privilege to sense perception?<sup>26</sup> If the epistemologist is to escape such arbitrariness, he must content himself with delineating the contours of established doxastic practices, perhaps neating them up a bit and rendering them more internally coherent and more consonant with each other. He must give up pretensions to an Archimedean point from which he can carry out an impartial rational evaluation of all practices."

Let's call the position suggested by the last two sentences of this retort, "Heteronomism." We may think of Autonomism and Heteronomism as constituting an antinomy. Our present task is to resolve this antinomy.

The first step in that resolution is to point out that neither side of the antinomy does full justice to the epistemological enterprise. As for the autonomist, his opponent has already made explicit where he falls short. The autonomist, since he eschews implicit trust in established doxastic practices, needs some other source and warrant of his critical standards, and what could that be? But this criticism can be pushed further by pointing out that the practice of epistemology reveals, at several points, an uncritical reliance on the practices we acquired with our mothers' milk. If we look at attempts to formulate and establish principles of justification, we will find the protagonists engaged in two sorts of activities. First, they put forward various principles as plausible, reasonable, sensible, or evident. Second, they test these principles by confronting them with various examples of justified and unjustified beliefs. Now where do they get these principles, and what is the source of their plausibility? Why is it that I, and its many near relatives seem so reasonable? A plausible answer is that such principles formulate, or come close to formulating, the principles of belief-formation and assessment built into our familiar practice of forming perceptual beliefs. Why else should these principles make a strong claim on our assent? Is it that we have some special access to a realm of being known as "epistemic justification"? That seems unlikely. Nous n'avons pas besoin de cette hypothese. When we encounter a formulation of some deeply embedded practice of ours, it naturally makes a strong appeal. As for examples of justified and of unjustified beliefs, why do they evoke such widespread

concurrence? Again, the most reasonable hypothesis is that the judgments are being made from within widely shared doxastic practices. Thus Chisholm *et al.* are, much of the time, doing just what the heteronomist says they should do, viz., making explicit the structure of one or another common doxastic practice.

But the heteronomist doesn't have the whole story either. In seeking to make the delineation and refinement of established practices the whole task of epistemology, she neglects the fact that making judgments on absolutely general questions, and deciding between opposing positions on such questions, is constitutive of the philosophical enterprise, in epistemology as elsewhere. How can the epistemologist fail to ask about the rationality of forming beliefs in one or another way, without violating her Socratic oath? The unexamined practice is not worth engaging in, at least not once it has been dragged into the light and made a possible subject of philosophical criticism. It is absolutely fundamental to the philosophical enterprise to subject all the basic features of our life to rational criticism, and not the least of these is the set of belief-forming tendencies with which we are endowed, or saddled as the case may be. Any "naturalism" that spurns this task is unworthy of the name of philosophy.

So where does this leave us? If epistemology is confined to the delineation of existing doxastic practices, it will thereby renounce its most sacred charge — to carry out a rational criticism of all claims to knowledge and justification. And yet how can it assess any particular doxastic practice without making use of some other in order to do so? And in that case, how can it subject all epistemic claims to rational scrutiny? Even if epistemology had a distinctive epistemic practice all its own, what would give this practice a licence to set itself up in judgment over its fellows? Don't the Reidian charges of arbitrary partiality come back to haunt us?

I think we can find a way out of this thicket by attending to the distinction between a more or less tightly structured *practice* with more or less fixed rules, criteria, and standards on the one hand, and a relatively free, unstructured "improvisational" activity on the other. When we engage in an organized practice, whether it is a doxastic practice, a game, a traditional craft such as carpentry, or speaking a language, our activity is more or less narrowly confined by antecedent rules and procedures, which themselves constitute the substance of the practice. This is not to say that all the details are laid down in advance. There will be room for free variation, and the degree of this will vary. When a carpenter puts together a wall of a room from plans and blueprints, his activity is fairly well predetermined in its gross outlines, though no set of plans specifies exactly how many hammer strokes are to be given to each nail. The rules of a language determine what combinations are acceptable and what ways there are to express a given

meaning, but they do not dictate just what one is to say at a given stage of an extended conversation.

In contrast to these highly circumscribed forms of activity, there are others that call for the exercise of "judgment," where no established rules or criteria put tight constraints on what judgment is to be made in a particular situation. Familiar examples are found in aesthetics, religion, and science. When it is a question of the comparative worth of two works of art, or of what makes a particular work of art so striking, there are no formulable canons that the critic can consult to determine what the verdict should be. The critic must use her sensitivity, experience, familiarity with the field, and "intuition" to arrive at a considered judgment. And that judgment can in turn be validated or challenged only by the use of similar resources. From the sphere of religion a similar story is to be told concerning, e.g., the spirituality of a particular person. No generally accepted checklist of observable features will settle the matter. What is required is trained judgment and sensitivity. Finally, in science, although many things are to be done by following definite rules, e.g., the preparation of chemical solutions, competing high-level theories are to be evaluated in terms of their relative fecundity, explanatory power, simplicity, and the like; and for the determination of these matters there is no calculus. Again trained judgment is called for.27

Where philosophy is concerned with ultimate questions it falls, I suggest, on the latter side of our contrast. It is distinctive of philosophy, in epistemology and elsewhere, to be operating at a level deeper than those spheres of intellectual activity for which there are established rules. In philosophy everything is up for grabs. If anyone suggests a set of rules, methods, or procedures for philosophy, that itself immediately becomes a matter of controversy. Just think of the historically prominent attempts to provide effective decision procedures for philosophical problems, from Descartes' Rules for the Direction of Mind, through Locke's Essay, Kant's Critique of Pure Reason, Russell's Our Knowledge of the External World as a Field for Scientific Method in Philosophy, and the Vienna Circle. Each proposed methodology, instead of setting philosophy onto the secure path of science, simply becomes an additional disputed claim. So far from being susceptible of regularization, philosophy is, rather, inter alia, the activity of subjecting proposed methodologies to reflective examination. The philosopher must search for the best way of answering questions, as well as search for the answers. The philosopher must arrive at whatever judgment best recommends itself after careful reflection, rather than proceed according to rules that are constitutive of the enterprise. That is what makes philosophy so uncomfortable, so unsettling, and at the same time so exciting and challenging. One can never rest secure in the realization that one has a