

Knowledge and Mind

A Philosophical Introduction

Andrew Brook · Robert J. Stainton

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Andrew Brook and
Robert J. Stainton

A Bradford Book
The MIT Press
Cambridge, Massachusetts
London, England

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This book was set in Times New Roman by Asco Typesetters, Hong Kong, and was printed and bound in the United States of America.

First printing, 2000

Library of Congress Cataloging-in-Publication Data

Brook, Andrew.

Knowledge and mind : a philosophical introduction / Andrew Brook and Robert J. Stainton.

p. cm.

“A Bradford book.”

Includes bibliographical references and index.

ISBN 0-262-02475-6 (hc : alk. paper). — ISBN 0-262-52269-1 (pbk : alk. paper)

1. Knowledge, Theory of. 2. Philosophy of mind. I. Brook, Andrew. II. Stainton, Robert. III. Title.

BD161.B459 2000

121—dc21

99-38797

CIP

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Preface for Instructors

Whenever you read a good book, it's like the author is right there, in the room, talking to you, which is why I don't like to read good books.

Jack Handey

This text covers, at an introductory level, issues in epistemology and philosophy of mind. It is, so far as we're aware, the only contemporary text to do so. It also serves as an introduction to philosophy per se, raising issues about the nature and methods of philosophy and presenting some of the very basic logical tools of the philosophical trade (e.g., modus ponens, reductio ad absurdum, etc.)

In claiming that this text is distinctive, we don't mean to deny that there are a number of textbooks in philosophy of mind available. On the contrary, several have been published in the last few years. But the majority of these are better suited to a more advanced, more specialized, course. Most important, the recent crop of philosophy-of-mind books do not deal with epistemology.

Similarly, what epistemology texts there are also tend to be too advanced for a first-year course. And the epistemology texts do not treat of philosophy of mind.

So far as we're aware, then, despite the numerous texts on philosophy of mind available, there isn't one that adequately discusses knowledge. Still less is there a truly *introductory* text that covers both knowledge and mind. Yet in the present philosophical climate, such a book is required. We want to target the many introductory—i.e., first year, single semester—philosophy courses that focus precisely on these two areas. Moreover, in the age of cognitive science, ever more such courses will surely appear, because epistemology and philosophy of mind are, together with logic and philosophy of language, the philosophical cornerstones of cognitive science. Hence a text that introduces both is called for.

The text has three parts: one devoted to *knowledge*, another to *mind*, a third relating the two. Knowledge and mind are not, of course, unrelated: whereas epistemology addresses the nature of knowledge and what can be known, philosophy of mind deals with the nature of what does the knowing, namely, the mind. (Also, anyone wanting to *know* the nature of mind needs some idea of what knowledge is and how it's attained.) In addition, several of the issues we address clearly overlap the two areas: e.g., knowledge of language (including language acquisition and the relationship between thought and talk) and knowledge of other minds. The book ends with a discussion in the second half of part III of how work on epistemology and philosophy of mind meld together within present-day theorizing in cognitive science.

Other topics could have been chosen, but these strike us as interesting and accessible enough for beginners, while also being of singular importance for those intending to pursue further study in philosophy of mind, epistemology, and cognitive science. Still, some of these choices are non-obvious. Let us therefore explain them, albeit briefly. Discussing the metaphysics of mind and skepticism (both about the external world and about other minds) is standard in philosophical introductions to mind and epistemology, respectively. Choosing these topics needs no defense. Some might wonder, however, at our inclusion of knowledge of language and of free will.

Part of our motivation is to make this textbook connect with the antecedent concerns of readers: both students who are not otherwise philosophically disposed and those who are but have no formal training. Whereas skeptical worries about the physical world or about other people's mental states and events may strike beginners as impractical and pointless, issues like the relationship between thought and language and debates about language learning can, in our experience, capture the imagination and attention of nearly anyone. In a similar vein, whereas mind-body relations might not occur to just anyone, free will and the responsibility that comes with it are issues we all must deal with. (The same can be said, of course, of life after death, another topic we introduce.) Another advantage of including these topics is that students notice the connections between knowledge and mind on the one hand and social/moral philosophy on the other. And just as important, they come to see the relevance of empirical work to philosophy.

The book also contains a section on the nature and methods of philosophy. But, following the advice of nearly every reviewer, we have placed the discussion in the middle of the text, so that students will have done

some philosophy before they are asked to reflect upon what philosophy is. This section on metaphilosophy falls at the end of chapter 3. We chose that location because by that point, students have been exposed both to a quite traditional debate about knowing the external world and to a more empirically informed discussion of knowledge, thought, and language. Thus their own experience should accord with our conclusion in that section: namely, that philosophy is a very heterogeneous activity. We take up the same set of issues once more, albeit briefly, right at the end of the book.

Acknowledgments

Our first thanks go to those who read earlier drafts of the book, and provided valuable advice and suggestions. They are Andrew Botterell, Jay Drydyk, Maite Ezcurdia, Tim Kenyon, David Matheson, Jillian McIntosh, Robert Martin, Christopher Olsen and his research group at the University of Toronto, Don Ross, Ian Slater, Daniel Stoljar, Julian Wolfe, and an anonymous reviewer for the MIT Press. Prof. McIntosh deserves special thanks for her particularly thorough and searching comments and suggestions. As a result the book is better in more ways than we can say.

We also owe special thanks to the students and teaching assistants in our introductory courses on epistemology and philosophy of mind at Carleton University (where we both teach) and Bryn Mawr College (where Andrew Brook was Wexler Visiting Professor). In particular, we would like to thank Ian Slater, who kindly provided his detailed class notes. We would also like to explicitly acknowledge our debt to three books that one or the other of us has used in teaching this material: Paul Churchland's *Matter and Consciousness*, Thomas Nagel's *What Does It All Mean?* and Jay Rosenberg's *The Practice of Philosophy*. Our students' reactions to these books, both positive and negative, greatly shaped this text.

In addition, we are grateful to Marie Green for converting Stainton's hand-written lecture notes into electronic form, to Jennifer Schellinck for preparing the index, and to the excellent editorial people at MIT Press. Most of all, thanks to Richard Dickson (who proposed that we write such a text) and to our respective wives, Christine Koggel and Anita Kothari. The book is gratefully dedicated to the three of them.

Work on this project was financially supported by the Social Sciences and Humanities Research Council of Canada. We are thankful for their continuing aid.

All epigraphs but one are taken from the Saturday Night Live skit “Deep Thoughts by Jack Handey,” published as *Deep Thoughts: Inspiration for the Uninspired*, by Jack Handey (copyright 1992 by Jack Handey; published by Berkley Books); *Deeper Thoughts: All New, All Crispy*, by Jack Handey (copyright 1993 by Jack Handey; published by Hyperion); *Deepest Thoughts: So Deep They Squeak*, by Jack Handey (copyright 1994 by Jack Handey; published by Hyperion).

Knowledge and Mind

Chapter 1

Introduction to Philosophy, Knowledge, and Mind

If you hit a man over the head with a fish, he'll have a headache for a day. If you teach a man to hit himself over the head with a fish, he'll have a headache for the rest of his life.

This book treats of two subject areas within philosophy. They are EPISTEMOLOGY and PHILOSOPHY OF MIND.¹ Within these two areas this book will discuss specific issues like knowledge of the external world, knowledge of language, the relation between mind and body, free will, etc. Before turning to these, however, we should say something about the two areas.

1 Epistemology

Epistemology is the philosophical subarea that focuses on the nature, extent, and origin of human knowledge. The name is a mouthful, but it's a reasonable label nonetheless: 'episteme' is the Greek word for knowledge, and '-logy' essentially means 'study of'. Hence 'epistem-ology' is the study of knowledge. Traditionally, epistemologists address three central questions:

- (1) What is knowledge?
- (2) What can we know?
- (3) How is knowledge acquired?

At this point we don't want to try to answer these questions: even *introducing* them thoroughly will take the whole of part I of the book. But by way of illustration, allow us to introduce a sample answer for each.

A long-standard response to the first question is that a statement is known by an agent only if she believes the statement, the statement is true, and she is justified in her belief. Thus, on this account, which dates

back at least to Plato (b. ca. 428 B.C.²), no one can *know* a falsehood: for example, no one can know that two is an odd number. Nor can anyone know something that they do not believe: if someone, say Zoltan, does not *believe* that Hungary is in Europe, then he cannot *know* that Hungary is in Europe. Finally, if Zoltan believes that Hungary is in Europe, but he has no good reason for believing this, then his belief is unjustified, and he therefore does not know it.

This “justified true belief” theory of knowledge may seem odd at first glance, and some philosophers reject it. Other views include the following. Some hold that knowledge is derived from recognized authority—which seems to suggest that a person could “know” something which isn’t actually true. (Many philosophers find this result astonishing.) Others insist that knowledge without justification, i.e., knowledge by faith, is possible. And so on. In this introduction, we needn’t settle on the right answer to (1). The aim, to repeat, is simply to introduce and explain the question ‘What is knowledge?’ by considering a classical sample answer.

One radical answer to (2) is that human beings cannot know anything. This kind of extreme SKEPTICISM is rare. A more common skeptical view, one which will occupy us at length in part I of this book, is that, *in certain areas of inquiry*, nothing can be known. For example, one might maintain that nothing can be known about the *external world* or that nothing can be known about *other people’s mental states*—their feelings, desires, etc.

Skeptics about a given domain often argue as follows: They assume that (something like) the justified true belief account of what knowledge is, is correct. They then contend that statements of the kind in question (e.g., statements about the external world or about other people’s minds) fail to meet one or more of these conditions. For instance, they might argue that statements about other people’s minds cannot adequately be justified. Hence, given the definition of knowledge as *justified* true belief, such statements are not known. Or again, skeptics about morality might argue that there are no moral *truths*. Hence, once more, the justified true belief account of knowledge rules out moral knowledge. However plausible or implausible they may seem, these sample answers should help to clarify question (2): what can we know?

The third traditional epistemological question is ‘How is knowledge acquired?’ There is a classic gradient here: at one extreme are those who think that true knowledge is derived from sensory experience; at the other, those who think, to the contrary, that real knowledge is not sense-based at all. Those who lean towards the former are called EMPIRICISTS, while those

who lean more towards the latter are called RATIONALISTS. Extreme empiricists think that there can be no nonsensory knowledge because, to use one famous slogan, the mind is a “blank slate” (i.e., *tabula rasa*) at birth. So, whatever ideas end up in the mind must have been put there by experience. The rationalists, on the other hand, deny that the mind is vacant at birth: they are happy to allow that human minds contain “ideas” (i.e., beliefs, concepts, etc.) at birth. (In fact, rationalists typically downplay the importance of sense-based knowledge, stressing instead knowledge arrived at by “pure thought.” Only the latter is, for them, genuine knowledge. The rest is mere “opinion”.)

Empiricists and rationalists, in addition to disputing what *contents* the mind has at birth, also typically disagree about the power of our innate cognitive *capacities*. A rough comparison: a factory has both machines, and materials that the machines work on. “Cognitive capacities” are the machines of the mind; while “ideas” are its materials. Empiricists are willing to admit that *some* capacities are there from the start, since without some innate capabilities, no learning would be possible. The ability to remember, for instance, or to associate one sensation with another, are innate mechanisms that even empiricists embrace. But they generally allow *only* these very minimal mechanisms. Rationalists, in contrast, believe that the human mind has very powerful and creative cognitive faculties at birth. It is innate ideas together with these dynamic reasoning abilities that, according to the rationalists, give human beings the kind of knowledge that cannot be obtained via sensation. (Such knowledge purportedly includes mathematical knowledge, moral knowledge, knowledge of God, and knowledge of language—none of which, say the rationalists, is adequately accounted for by empiricist theories of knowledge acquisition by sensation.)

The debate between rationalists and empiricists, notice, is not about what we know. Instead, the issue is *how* we know what we do, as well as what the ultimate foundation of “real” knowledge is: experience or reason. In part I we will consider at length some epistemological questions. For the moment, we hope that we have given you some idea of what epistemology is all about.

2 Philosophy of Mind

Philosophy of mind is the other subject area within philosophy that we will discuss in this book. Its focus, as the name suggests, is the mind. Its questions include these:

(4) What is a mind?

(5) How are minds related to bodies?

These are emphatically *not* the only questions in philosophy of mind. (For example, another key one is this: Are minds subject to scientific laws, and scientific study? And, if so, is our reasoning and acting truly free?) But these two give you the general idea. They and the question about free choice will be dealt with in part II. For now, again just to suggest what philosophy of mind is, let us sketch some answers to (4) and (5).

Here's a first pass at an answer to (4): a mind is a thing that *thinks*. It is, to revert to a classical Greek view, the *rational part of the soul*. Of course, if this definition is to capture every kind of mentality, 'thinking' must include a lot of things, e.g., perceiving, believing, reasoning, having sensations, and being conscious. All of these are *mental states and events*.

One problem that immediately arises is, What is the relationship between such mental states and events and *bodies*? This, of course, is question (5). There's clearly some sort of relationship between mind and body: when you drink a lot of alcohol (a physical event), you become confused (a mental state), and when, being completely drunk, you eventually fall down (a physical event), it can hurt (a mental state). *Precisely* what the mind is and how mind and body relate will occupy much of chapters 5 and 6. For the moment, it may be enough to note two radically different answers.

René Descartes (b. 1596), who might reasonably be called the founder of modern philosophy of mind, maintained that mind and body were two wholly different kinds of things. Two radically distinct realms, if you will, about as different from each other as numbers and rocks. (How different are rocks and numbers? Well, have you ever tried throwing a *number* through a window? Or again, how would you go about taking the square root of a *rock*?) This is DUALISM about the mind. Thomas Hobbes (b. 1588), in stark contrast to Descartes, believed that mind and body were essentially the same. Hobbes was a MATERIALIST who maintained that all there really is, is matter in motion. Hence "mind" can be nothing more than this. Descartes had his work cut out in explaining how mind and body can be related. After all, according to him they are *radically* different. Hobbes, on the other hand, had no great problem here. But he was stuck with another concern: mind *seems* so different from body. Our minds think, feel pain, dream, get confused, and so on, but planets and snowflakes do none of these things. So how can our minds be nothing

more than matter in motion? The burden of materialism is to give a satisfactory answer to this question. (There is also a third broad position: IDEALISM. This is the view that everything in existence is mindlike. We will consider it along with the other two when we discuss the mind/body problem as a whole in chapter 4.)

Another question that will occupy us is (6):

(6) Can a person ever really know the mind of another?

This question is interesting in part because it involves both philosophy of mind and epistemology and thus highlights the overlap between the two. It is epistemological because it's about knowledge, but it's also about the mind. And how one answers (6) will depend quite a lot on what one takes a mind to be like.

Time to sum up. We began by noting six traditional questions about knowledge and mind. These were the following:

Epistemology

1. What is knowledge?
2. What can we know?
3. How is knowledge acquired?

Philosophy of Mind

4. What is a mind?
5. How are minds related to bodies?
6. Can a person ever really know the mind of another?

These are not, we want to stress, the only questions in these subfields of philosophy. Indeed, you will encounter others as the book progresses. But keep these questions in mind as you read. They will help you keep the big picture in front of you as you work through more specific issues in the chapters to come.

3 Epilogue: Arguments, Philosophical and Otherwise

To me, truth is not some vague, foggy notion. Truth is real. And, at the same time, unreal. Fiction and fact and everything in between, plus some things I can't remember, all rolled into one big "thing." This is truth, to me.

Jack Handey

As the "deep thought" just quoted demonstrates, there is a lot of confusion about truth! Happily, there is a basic technique for getting at the truth: argument. In this section we want to ask: what is an argument? At bottom, it is a *series of statements*, but with a special characteristic: the various

statements are intended to stand in supporting relationships, so that, if the earlier statements in the argument are true, the final statements are true, or are more likely to be true. What is supported is called the *conclusion* (or conclusions); what does the supporting is one or more *premises* and some *reasoning* that demonstrates that the premise(s) support the conclusion.

Given this, suppose that someone gives an argument whose conclusion you dislike. What do you do? In legal debates, politics, science, and everyday disputes, it's not enough simply to disagree: you have to *argue* against the conclusion. The same holds true in philosophy. But how does one argue, in philosophy and elsewhere? Well, given that conclusions are supported by two things, premises and reasoning, what you have to do is to criticize your opponent's premises or criticize her reasoning or both. These are your only options for showing that the argument is wrong.

Let's take these in turn, beginning with challenging premises. One way to refute someone's premises is just to gather facts about the sensible world: do experiments, calculations, literature searches, and so on, and show that the opponent's "information" is just wrong. But philosophers don't typically do this, or at least this isn't the only thing they do. Philosophers most often offer *internal* criticism, which means showing that the premise they want to deny conflicts with other presuppositions of the person they are arguing with. If the philosopher can show this effectively, then the person she is arguing against (sometimes called her interlocutor) must give up something, and the philosopher can suggest that her interlocutor reject the premise in question.

An example may help to clarify this question-the-premise strategy. Suppose Chris wants to establish that capital punishment is wrong. He argues like this:

Premise 1 All killing is wrong.

Premise 2 Capital punishment is killing.

Conclusion 1 Therefore, capital punishment is wrong.

A philosopher, we said, can reply to an argument (i.e., a series of statements in a "supporting" relationship) by showing that one of its premises is inconsistent with something that the argument's proponent believes. Here's a case in point. Agnes might say to Chris, "Look here Chris, your premise 1 is inconsistent with something else you believe, namely, that killing in self-defense is okay." If Chris does truly believe that killing in self-defense is acceptable, then there is a conflict between one of his background beliefs and the premise, P1, that he is putting forward. (Throughout the text, 'P' will be used for premises, and 'C' for conclusions.) He must somehow overcome the conflict: believing obvious inconsistencies is

not a viable option. Agnes, kind soul that she is, makes a suggestion: what Chris ought to do is to give up P1. Of course, if he does give up P1, he now needs another argument for his conclusion.

But suppose Chris rejects Agnes's suggestion and says instead that to remedy the inconsistency in his purported beliefs, he is going to give up the idea that killing in self-defense is okay. Indeed, whatever case Agnes puts forward—killing in war, killing to save others, mercy killing—Chris sticks by P1: *all* killing is wrong. Then what happens? Here, unfortunately, debate ends. But of course Chris cannot claim *victory*, for he is now relying on a premise that his interlocutor surely rejects. After all, Agnes doesn't believe that killing in self-defense is wrong, so she doesn't accept P1. And Chris can't *convincingly* argue from premises that aren't agreed upon by both sides: his and his interlocutor's. What Chris needs to do if he is to establish his conclusion in the mind of his opponent is to find premises that are accepted by her and then show that *if these premises are true, then the conclusion must be true*. Once the premises are accepted and it's accepted that they lead directly to the conclusion, the opponent can't help but accept the conclusion, on the assumption that she's rational and consistent. (There's no point arguing with someone who's really and truly irrational.)

Let's sum up. There are at least two ways of responding to a philosophical argument: you can question some or all of its supporting *premises*, or you can question the *reasoning* from the premises to the conclusion. Until now, we have been discussing how to go about criticizing premises. Specifically, we said that philosophers often do this by highlighting tensions between the arguer's background beliefs and the premise in question.

We now turn to the other means of response: challenging the reasoning. Jay Rosenberg puts the general point nicely: "Whereas a criticism of content addresses one or some of the premisses individually with the challenge 'That isn't true,' this criticism focuses on the *relation* between the conclusion and all the premisses, and its challenge is 'That doesn't follow'" (1984, 14).

Let us start with a definition. An argument—which, remember, is a series of statements—is *VALID* whenever the following holds: *if* the premises of the argument are true, *then* its conclusion must be true.

Here we need say a word about terminology. (Terminological issues will arise in a number of places in this book because what philosophers mean by a term is sometimes quite different from what the term means in everyday life. Beware!) We are using the word 'valid' in a special, technical sense. You mustn't suppose that 'valid', as used in philosophy, neatly

matches its use in everyday talk. In everyday talk, the word ‘valid’ often means ‘fair’ or ‘justified’ or even ‘true’. In philosophy, it simply means that an argument is alright *internally*. In particular, as *philosophers* use the term ‘valid’, someone’s point of view isn’t “valid” or “invalid”: only arguments are valid or invalid. In this sense, an argument can be ‘no good’ even if it is valid. For valid arguments, in this technical sense, are allowed to have false premises as long as the premises, *were they true*, would guarantee the truth of the conclusion.

Here is a valid argument with a false premise:

Premise 1 Whales are fish.

Premise 2 If whales are fish, then there are building-size fish.

Conclusion 1 Therefore, there are building-size fish.

Clearly the conclusion would have to be true if the premises were true. So the argument is valid, according to the definition. And yet the conclusion is false. How can this be? Because the first premise is false: whales *aren’t* fish. They’re mammals.

Another bit of philosophical jargon, which will come up again later. A valid argument *that also has true premises* is *SOUND*. Notice a consequence of this definition: every sound argument must, by definition, have a true conclusion. It’s clear why: given what ‘sound’ means, in this technical usage, every sound argument has true premises, and every sound argument is also, by definition, valid, and given the meaning of ‘valid’, a valid argument with true premises must also have a true conclusion. (Every valid argument deserves a star. But *sound* arguments are even better than valid ones. They are very hard to come by and deserve at least three stars.)

To simplify for the sake of exposition, you might think about it this way: when challenging someone’s reasoning, you are essentially questioning the *validity* of her argument, rather than the truth of her premises. (In fact, the logic of arguments, philosophical or otherwise, is more complex than the valid-invalid dichotomy suggests, but for present purposes, think of attacks on reasoning as questioning validity. We will introduce one of the complexities shortly.) Typically, one questions validity by showing that the *argument pattern* the opponent is using is faulty. Here’s how:

- Find a parallel argument, with the same pattern.
- Show that this parallel argument has true premises (or anyway, premises accepted by all sides), but a false conclusion (or anyway, one denied by all sides).

That is, you *model* the reasoning pattern and thereby establish that this sort of argument doesn't guarantee the truth of the conclusion, despite the truth of the premises.

Here's an example. Suppose you want to know whether the skeptical argument in (7) is valid:

(7) *The target argument*

Premise 1 I am *sometimes* mistaken.

Conclusion It is possible that I am *always* mistaken.

One way of showing that the target argument is *not* valid is to find a closely parallel argument—an analogy, if you will—whose premise is true and yet whose conclusion is false. And there is such an argument:

(8) *The analogous "modeling argument"*

Premise 1 Dollar bills are *sometimes* counterfeit.

Conclusion It is possible that dollar bills are *always* counterfeit.

The conclusion of the modeling argument is false: there wouldn't be such a thing as a *counterfeit* dollar bill if there weren't also *genuine* dollar bills, so it's not possible that all dollar bills are counterfeit. The lesson of the modeling argument is this: you cannot always infer from 'xs are sometimes y' to '*It is possible that* xs are always y'. That is to say, this ARGUMENT FORM is not valid. But the target argument in (7) shares this form. So it's not valid either.

Some valid argument forms are highly familiar. So much so that they have special names. For instance, there is MODUS PONENS:

(9) *Modus ponens*

If p , then q

p

Therefore, q

Every instance of the *modus ponens* argument form is a valid argument. For instance, the arguments below both have this "shape," and the truth of their premises guarantees the truth of their respective conclusions.

(10) *Premise 1* If [Stuart's parents smoke] then [Stuart will die a horrible death].

Premise 2 Stuart's parents smoke.

Conclusion Therefore, Stuart will die a horrible death.

p = Stuart's parents smoke; q = Stuart will die a horrible death

(11) *Premise 1* If [it's raining or it's snowing] then [Pat and Jeff will stay inside].

Premise 2 It's raining or it's snowing.

Conclusion Therefore, Pat and Jeff will stay inside.

p = It's raining or it's snowing; q = Pat and Jeff will stay inside

Other such familiar valid forms include *modus tollens*, and *hypothetical syllogism*, which have the following shapes:

(12) *Modus tollens*

If p , then q

It's not the case that q

Therefore, it's not the case that p

(13) *Hypothetical syllogism*

If p , then q

If q , then r

Therefore, if p then r

Now we need to introduce the complexity we mentioned above. We defined validity this way: if the premises are true, the conclusion must be true. In fact, that holds, strictly speaking, of only one kind of important argument, DEDUCTIVE ARGUMENTS. In another important kind of argument, the relationship between premises and conclusion is less binding: the premises are *evidence* for the conclusion. What 'evidence' means here is this: if the premises are true, the conclusion is *more likely* to be true but is not guaranteed to be true. Arguments of this type are called INDUCTIVE ARGUMENTS. Here is an example:

Premise 1 There are heavy black clouds in the sky.

Premise 2 The humidity is very high.

Conclusion It will soon rain.

Note that the conclusion does not *follow from* the premises, in the sense that if the premises are true, the conclusion *must be* true. Nevertheless, if the premises are true, *it is more likely* that the conclusion is true than if the premises are false. (If it is really bright and sunny out, it is less likely that it will soon rain than if it is humid and there are heavy black clouds in the sky.)

In a deductively valid argument, the relationship between premises and conclusion is called ENTAILMENT: the premises *entail* the conclusion, which just means that if the premises are true, the conclusion *must be* true. In an inductively valid argument, the relationship between premises and conclusion is called EVIDENTIAL SUPPORT: the premises are *evidence* for the conclusion, which just means that if the premises are true, the conclusion

is *more likely* to be true. Philosophers use deductive arguments more than inductive ones, but we will both use and discuss inductive arguments from time to time, too (see chapter 3, section 2, for one example).

In sum, philosophers generally criticize arguments in two ways: first, by showing that some premise is in tension with the facts or with what interlocutors are prepared to grant (attacking the premises); second, by showing that the argument pattern used is not generally reliable (attacking the reasoning). The latter is often done by modeling the argument, and thereby showing that the form of the argument is questionable.³

Study Questions

Note: Many of the questions in the study-question sections do not admit of simple answers. They are, rather, designed to provoke reflection and/or discussion. So if you don't "know the answer," this does not necessarily mean that you "haven't understood the text." On the other hand, if you can think of absolutely nothing to say about a question, then you should reread the appropriate sections.

1. What are rationalism and empiricism? Is it possible to mix a little of each? How?
2. Can questions (2) and (3)—about what we can know and about how knowledge is acquired—be answered independently of one another? Can either of them be answered independently of (1): what is knowledge?
3. For an agent to know that p is said to require at least three things: p must be true, the agent must believe that p , and she must be justified in her belief. To illustrate the necessity of each of these, give three examples of not knowing.
4. What are materialism and dualism? In what sense is it impossible to mix them?
5. Define each of the following: 'argument', 'valid argument', 'sound argument'. Give an example of a valid argument that is not sound. What in particular makes it unsound? Can there be good arguments that aren't valid? Specifically, can there be arguments that support a conclusion even though it's not the case that the truth of the premises guarantees the truth of the conclusion?
6. Define 'premise', 'statement', and 'conclusion'. How are they related? Can a statement be a conclusion in one context and a premise in another? Give an example. How might one challenge a premise? A conclusion?

Suggested Further Readings

There are many textbooks that discuss the three key questions of epistemology: What is knowledge? What can we know? How is knowledge acquired? A good starting place is Chisholm's (1989) classic introduction or Bertrand Russell's very readable *Problems of Philosophy* (1912). The readings in the collection by Nagel and Brandt (1965) cover many topics in epistemology—e.g., nonempirical knowledge, skepticism, knowledge of the material world, knowing other minds—and it includes both traditional and contemporary sources. For more advanced and more contemporary readings, see Bonjour 1985, Dancy 1985, Dancy and

Sosa 1992, Goodman and Snyder 1993, Lehrer 1990, or Lucey 1996. A nice general introduction to philosophy can be found in Solomon 1998: it discusses the nature of philosophy, philosophical arguments, rationalism and empiricism, argument forms, and other relevant topics.

Solomon 1998 also contains a guide to writing philosophy papers. Other books on this important topic include Rosenberg 1984, 1996, and Graybosch, Scott, and Garrison 1998. See also Weston 1987.

The roots of rationalism lie in Plato and Descartes, while John Locke and John Stuart Mill are key historical sources on empiricism. See especially Plato's *Theaetetus* (1973 [ca. 399 B.C.]) for a very early statement of rationalism, and John Locke 1965 [1685], for an influential Empiricist critique. As for secondary sources, on the rationalists we recommend Copleston 1946, part 3, and 1960 as an overview, and Kenny 1968 on Descartes in particular. Jonathan Bennett 1971 is a useful, though sometimes controversial, commentary on empiricism.

Our discussion of the nature of argument follows Rosenberg 1984, especially the chapters "The Form of an Argument" and "The Content of an Argument." As for dualism and materialism, they will be discussed at length in chapters 4 and 5, so specific source material may be found at the end of those chapters. For general overviews, see Churchland 1984, Jacquette 1994 and Kim 1996.

Also, for just about any topic in this book, a good starting place is one of the encyclopedias of philosophy. Examples include Edwards 1967 and Craig 1998; the former was the first, the latter is the newest and most comprehensive.

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