

Epistemological Questions

The theory of knowledge, or epistemology, is the branch of philosophy that addresses philosophical questions about knowledge and rationality. Epistemologists are primarily interested in questions about the nature of knowledge and the principles governing rational belief. They are less focused on deciding whether there is knowledge or rational belief in specific, actual cases. Thus, for example, it is not the epistemologist's business to rule on whether it is now reasonable to believe that there is life on other planets. That is primarily the job of astronomers and cosmologists. It is the epistemologist's business to try to develop a general theory stating the conditions under which people have knowledge and rational beliefs. One can then go on to apply that more general theory to the specific case of the belief in life on other planets, but to do so is to go beyond the central epistemological issues. Although in the course of examining the philosophical questions it is customary to think about many specific examples, this is mainly to illustrate the general issues. The point of this chapter is to identify some of the central theoretical issues epistemology addresses.

A good way to begin is to look at the things we ordinarily say and think about knowledge and rationality. By systematizing and reflecting on them, we will arrive at a set of questions and puzzles. Thus, we will begin by stating in a systematic way some commonly (but not universally) held ideas about what we know and how we know these things. We will call this collection of ideas *The Standard View*. In this chapter we will identify some of the central claims of *The Standard View*. In Chapters 2 through 5, we will attempt to spell out in detail the implications of *The Standard View* and to state its answers to some of the central questions. Then, in Chapters 6 through 9, we will turn to several challenges and objections to *The Standard View*. Thus, the general aim of this book is to provide

a better understanding of our commonsense views about knowledge and rationality and to see to what extent those views can withstand criticism.

I. THE STANDARD VIEW

In the ordinary course of events, people claim to know many things and they attribute knowledge to others in a variety of cases. We will give examples below. The claims to knowledge with which we are concerned are not unreflective or outlandish. Rather, they are sensible and considered judgments. Thus, the list that follows reflects a set of thoughts about knowledge and rationality that many people are likely to arrive at if they reflect honestly and carefully about the topic. You may not agree with every detail of the view to be described, but it is fair to say that it accurately captures reflective common sense.

A. What We Know

Most of us think we know quite a lot. The following list identifies some general categories of these things and gives examples of each. The categories may overlap, and they are far from precise. Still, they give us a good idea of the sorts of things we can know.

- a. Our immediate environment:
 - "There's a chair over there."
 - "The radio is on."
- b. Our own thoughts and feelings:
 - "I'm excited about the new semester."
 - "I'm not looking forward to filling out my tax forms."
- c. Commonsense facts about the world:
 - "France is a country in Europe."
 - "Many trees drop their leaves in the fall."
- d. Scientific facts:
 - "Smoking cigarettes causes lung cancer."
 - "The earth revolves around the sun."
- e. Mental states of others:
 - "My neighbor wants to get his house painted."
 - "That person over there who is laughing hard found the joke he just heard funny."
- f. The past:
 - "George Washington was the first president of the United States."
 - "President Kennedy was assassinated."
- g. Mathematics:
 - " $2 + 2 = 4$ "
 - " $5 \cdot 3 = 15$ "
- h. Conceptual truths:
 - "All bachelors are unmarried."
 - "Red is a color."

- i. Morality:
 - "Gratuitous torturing of infants is wrong."
 - "There's nothing wrong with taking a break from work once in a while."
- j. The future:
 - "The sun will rise tomorrow."
 - "The Chicago Cubs will not win the World Series next year."¹
- k. Religion:
 - "God exists."
 - "God loves me."

There are, of course, many things in each of these categories that we do not know. Some facts about the distant past are irretrievably lost. Some facts about the future are, at least for now, beyond us. Some of the areas of knowledge on the list are controversial. You may have doubts about our knowledge in the areas of morality and religion. Still, the list provides a fair sampling of the sorts of things we typically claim to know.

Thus, the first thesis within *The Standard View* is

SV1. We know a large variety of things in categories (a)–(k).

B. Sources of Knowledge

If (SV1) is right, then there are some ways we come to know the things it says we know; there are some sources for our knowledge. For example, if we know about our immediate environment, then perception and sensation play a central role in acquiring this knowledge. Memory obviously is crucial in our knowledge of the past and also in certain aspects of our knowledge of current facts. For example, my knowledge that the tree that I see through my window is a maple relies on my perception of the tree and my memory of the way maples look. Another source of much of our knowledge is the testimony of others. Testimony is not here restricted to statements made on the witness stand under oath. It is much broader than that. It includes what other people tell you, including what they tell you on television or in books and newspapers.

Three other sources of knowledge deserve brief mention here as well. If perception is our awareness of external things through sight, hearing, and the other senses, then perception does not account for our knowledge of our own internal states. You may now know that you feel sleepy, or that you are thinking about what you will do on the weekend. But this is not by means of perception in the sense just given. It is, rather, introspection. So this is another potential source of knowledge.

Next, sometimes we know things by reasoning or inference. When we know some facts and see that those facts support some further fact, we can come to know that further fact. Scientific knowledge, for example, seems to arise from inferences from observational data.

Finally, it seems that we know some things simply because we can "see" that they are true. That is, we have the ability to think about things and to discern certain simple truths. Though this is a matter of some controversy, our knowledge

of elementary arithmetic, simple logic, and conceptual truths seems to fall into this category. For lack of a better term, we will say that we know these things by means of *rational insight*.

Our list of sources of knowledge, then, looks like this:

- a. Perception
- b. Memory
- c. Testimony
- d. Introspection
- e. Reasoning
- f. Rational insight

No doubt in many cases we rely for our knowledge on some combination of these sources.

The Standard View holds that we can gain knowledge from these sources. It does not say that these sources are perfect. No doubt they are not. Sometimes our memories are mistaken. Sometimes our senses mislead us. Sometimes we reason badly. Still, according to *The Standard View*, we can get knowledge by using these sources.

Whether the list of sources of knowledge ought to be expanded is a matter of some controversy. Perhaps some people would add religious or mystical insight to the list. Perhaps others think that there are forms of extrasensory perception that we should add. However, these are issues about which there is greater disagreement. To add them to the list, then, might make the list look less like something deserving the name "*The Standard View*." Thus, we will not add them here. Others might want to add science to the list of sources of knowledge. Although it may be unobjectionable to do so, science is probably best seen as a combination of perception, memory, testimony, and reasoning. Thus, it may not be necessary to add it to the list.

Thus, the second thesis in *The Standard View* is

SV2. Our primary sources of knowledge are (a)–(f).

The Standard View, then, is the conjunction of (SV1) and (SV2).

II. DEVELOPING THE STANDARD VIEW

Numerous questions arise once we reflect on *The Standard View*. These questions constitute the primary subject matter of epistemology. This section identifies some of those questions.

If some cases fall into the category of knowledge and others are excluded from that category, then there must be something that differentiates these two groups of things. What is it that distinguishes knowledge from the lack of knowledge? What does it take to know something? This leads to the first question:

Q1. Under what conditions does a person know something to be true?

One might think that it is a matter of how sure a person feels about something or whether there is general agreement about the matter. As we will see, these are not good answers to (Q1). Something else distinguishes knowledge from its opposite. (Q1), it turns out, is surprisingly hard, controversial, and interesting. Working out an answer to it involves thinking through some difficult issues. This will be the focus of Chapters 2 and 3.

According to many philosophers, an important condition on knowledge is rational or justified belief. To know something requires something along the lines of having a good reason to believe it, or coming to believe it in the right sort of way, or something like that. You do not know something if you are just guessing, for example. This leads us to a second question, one that has been central to epistemology for many years:

Q2. Under what conditions is a belief justified (or reasonable or rational)?

And this will lead us to further questions about the alleged sources of knowledge. How do these faculties enable us to satisfy the conditions of knowledge? How could they yield epistemic justification? This will be the focus of Chapters 4 and 5, as well as parts of Chapters 7–9.

Our beliefs obviously play a central role in determining our behavior. You will behave very differently toward your neighbor if you believe that she is a trustworthy friend rather than a dishonest enemy. Given the ability of beliefs to affect our behavior, it seems clear that your beliefs can affect your life and the lives of others. Depending upon your career and the extent to which others depend upon you, you may have obligations to know about certain things. For example, a medical doctor ought to know about the latest developments in her specialty. Sometimes, however, knowledge can be a bad thing, as when one learns of an apparent friend's disloyalty. These considerations suggest that practical and moral issues interact with epistemological issues in ways that merit examination. Thus,

Q3. In what ways, if any, do epistemological, practical, and moral matters affect one another?

We will address this question in Chapter 4.

III. CHALLENGES TO THE STANDARD VIEW

Careful philosophical reflection on the questions listed so far, to be carried out in Chapters 2–5, will result in a detailed statement of just what *The Standard View* amounts to. However, as will be evident as we proceed, there are reasons to wonder whether this commonsense view really is correct. We will give these reasons, and the alternative views about knowledge and rationality associated with them, a full hearing in Chapters 6–9. The central ideas behind these doubts are the basis for the remaining questions about *The Standard View*.

A. The Skeptical View

Advocates of *The Skeptical View* contend that we know far less than *The Standard View* says we know. Skepticism constitutes a traditional and powerful philosophical challenge to *The Standard View*. Skeptics think that *The Standard View* is far too charitable and self-indulgent. They think that our confident assertion that we know a lot results from a rather smug self-confidence that is entirely unjustified. As we shall see, some skeptical arguments rely on seemingly bizarre possibilities: Maybe you are just dreaming that you are seeing and hearing the things you think you are seeing and hearing; maybe your life is some sort of computer-generated artificial reality. Other skeptical arguments do not rely on odd hypotheses like these. But all of them challenge our comfortable common-sense view. These considerations prompt the next set of epistemological questions:

- Q4. Do we really have any knowledge at all? Is there any good response to the arguments of the skeptics?

(Q4) asks, in effect, whether the conditions spelled out in response to (Q1) are actually satisfied. Advocates of *The Skeptical View* hold that the answer to each of the questions in (Q4) is "No." They are inclined to deny both (SV1) and (SV2).

B. The Naturalistic View

The methodology traditionally used by epistemologists is primarily conceptual or philosophical analysis: thinking hard about what knowledge and rationality are like, often using hypothetical examples to illustrate the points. However, one might wonder whether we could better study some of these questions scientifically. Many recent philosophers have said that we can. We will call their view *The Naturalistic View* because it emphasizes the role of natural (or empirical or experimental) science. Thus, one way *The Naturalistic View* challenges *The Standard View* has to do with the methodology used to support theses (SV1) and (SV2) of *The Standard View*.

The Naturalistic View also leads to a second kind of challenge to *The Standard View*. There is a body of research about the ways people think and reason that is troubling. It shows, or at least seems to show, systematic and widespread errors and confusions in how we think and reason. When confronted with the results of this research, some people wonder whether anything like *The Standard View* can be right.

These considerations lead to our next set of questions:

- Q5. In what ways, if at all, do results in natural science, especially cognitive psychology, bear on epistemological questions? Do recent empirical results undermine *The Standard View*?

C. The Relativistic View

Another challenge to *The Standard View* emerges from considerations of relativism and cognitive diversity. To see the issues here, notice that people's beliefs and their policies for forming beliefs differ widely. For example, some people are willing to believe on the basis of rather little evidence. Some seem to demand a lot of evidence. People also differ in their attitudes toward science. Some people are strong believers in the power of science. They think that the methods of science provide the only reasonable way to learn about the world around us. They sometimes regard others as irrational for believing in such things as astrology, reincarnation, ESP, and other occult phenomena. Defenders of these beliefs sometimes charge their critics with a blind and irrational faith in science. People also differ widely over political, moral, and religious matters. Seemingly intelligent people can find themselves seriously at odds with one another over these issues. There is, then, no doubt that people disagree, often vehemently, about a great many things.

The fact that there is this much disagreement leads some people to wonder whether in each case (at least) one party to the dispute must be unreasonable. A comforting thought to many is that there is room for reasonable disagreement, at least on certain topics. That is, two people can have different points of view, yet each can be reasonable in maintaining his or her own view. Defenders of *The Relativistic View* are inclined to find room for a great deal of reasonable disagreement, whereas defenders of *The Standard View* seemed to be more inclined to think that one side (at least) must be wrong in every dispute.

These considerations about cognitive diversity and the possibility of reasonable disagreements provoke the following questions having to do with epistemological relativism:

- Q6. What are the epistemological implications of cognitive diversity? Are there universal standards of rationality, applicable to all people (or all thinkers) at all times? Under what circumstances can rational people disagree with one another?

The questions raised in (Q1) through (Q6) are among the central problems in epistemology. The chapters that follow will address them.

ENDNOTE

1. Cubs fans may not like this example. But those who follow baseball know that, no matter what happens, the Cubs never win. Neither do the Boston Red Sox.

The Traditional Analysis of Knowledge

The goal of the next few chapters is to try to get clearer about just what *The Standard View* says and what implications it has. While doing this we will not call into question the truth of *The Standard View*. We will assume that it is basically correct, reserving discussion of challenges to our commonsense view until later.

I. KINDS OF KNOWLEDGE

The Standard View says that we have a good deal of knowledge and it says something about the sources of that knowledge. One central aspect of getting clearer about just what *The Standard View* amounts to is getting clearer on just what it takes knowledge to be. *The Standard View* says that we do have knowledge, but what is knowledge?

A. Some Main Kinds of Knowledge

We use the words “knows” and “knew” in a variety of importantly different kinds of sentences. Here are some examples:¹

- a. Knowing an individual: S knows x.
“The professor knows J. D. Salinger.”
- b. Knowing who: S knows who x is.
“The student knows who J. D. Salinger is.”
- c. Knowing whether: S knows whether p.
“The librarian knows whether there is a book by J. D. Salinger in the library.”

- d. Knowing when: S knows when A will (or did) happen.
“The editor knew when J. D. Salinger’s book would be published.”
- e. Knowing how: S knows how to A.
“J. D. Salinger knows how to write.”
- f. Knowing facts: S knows p.
“The student knows that J. D. Salinger wrote *The Catcher in the Rye*.”

This list is far from complete. We could add sentences using phrases such as “knows which,” “knows why,” and so on. But the list we have already will be enough to bring out the main points to be made here.

B. Is All Knowledge Propositional Knowledge?

“Knows that” sentences report that a person knows a certain fact or proposition. These sentences are said to express *propositional knowledge*.² One initially plausible idea about the connection between these various ways in which the word “knows” is used is that “knows that” is fundamental and that the others can be defined in terms of it. To see why *propositional knowledge is more fundamental than the others*, consider how some of the other kinds might be explained in terms of it.

Consider (c), “knowing whether.” Suppose it is true that

1. The librarian knows whether there is a book by J. D. Salinger in the library.

If (1) is true, then if there is a book by J. D. Salinger in the library, the librarian knows that there is. If, on the other hand, there is no book by him in the library, then the librarian knows that there is not. Whichever proposition is actually true—the proposition that there is a book or the proposition that there is not—the librarian knows it. So, saying (1) is a short way of saying

2. Either the librarian knows that there is a book by J. D. Salinger in the library or the librarian knows that there is no book by J. D. Salinger in the library.³

In this respect, the librarian differs from a patron who does not know whether there is a book by Salinger there. The patron does not know that there is a book there and does not know that there is no book there.

The point just made about (1) can be generalized. For any person and any proposition, the person knows whether the proposition is true just in case either the person knows that it is true or the person knows that it is not true. A person who does not know whether it is true neither knows that it is true nor knows that it is not.

We can express the point about the connection between (1) and (2) in terms of a general definition, using the letter "S" to stand for a potential knower and "p" to stand for a proposition:

D1. S knows whether p = df. Either S knows p or S knows \sim p.⁴

Definition (D1) illustrates an important methodological tool: definitions. A definition is correct only if the two sides are equivalent. To check whether the two sides are equivalent, you consider the results of filling in the variables or placeholders with specific instances. In the case of (D1), you fill in the name of a person for S and you replace p by a sentence expressing some proposition. If the definition is correct, in all such cases the two sides will agree: If the left side is true—if the person does know whether the proposition is true—then the right side will also be true—either the person knows that it is true or the person knows that it is not true; if, on the other hand, the left side is not true—if the person does not know whether the proposition is true—then the right side will not be true either. (D1) seems to pass this test: The two sides of the definition do coincide. Thus, we can explain "knowing whether" in terms of "knowing that."

It is also possible to define some of the other kinds of knowledge in terms of propositional knowledge. The definitions are more complicated, but the ideas are still fairly straightforward. Consider "knows when." If you know when something happened (or will happen), then there is some proposition stating the time at which it happened (or will happen) such that you know that proposition to be true. Thus, to say

3. The editor knew when J. D. Salinger's book would be published.

is to say that the editor knew, with respect to some particular time, that Salinger's book would be published at that time, e.g., she knew that it would be published in 1950 or that it would be published in 1951, etc. Those who were less knowledgeable than the editor were not in this position. For them, there was no time such that they knew the proposition that the book would be published at that time.

Again, we can generalize the idea and express it as a definition:

D2. S knows when x happens = df. There is some proposition saying that x happens at some particular time and S knows that proposition. (There is some proposition, p, where p is of the form "x happens at t" and S knows p.)

Once again, we have a way to explain one kind of knowledge—knowing when—in terms of propositional knowledge. It is likely that similar approaches will work for knowing which, knowing why, and numerous other sentences about knowledge. The case for propositional knowledge being fundamental looks fairly strong.

However, it is unlikely that all the things we say using the word *knows* can be expressed in terms of propositional knowledge. Consider the first item on our list: "S knows x." You might think that to know someone or something is to have propositional knowledge of some facts about that person or thing. Thus, we might propose

D3. S knows x = df. S has propositional knowledge of some facts about x (i.e., for some proposition p, p is about x, and S knows p).

It is likely that anyone you know is someone you know some facts about. But knowing some facts about a person is not sufficient for knowing the person. J. D. Salinger is a reclusive, but well-known, author. Many people do know some facts about him: they know that he wrote *The Catcher in the Rye*. They may know that he does not interact with a great many people. So they know facts about him, but they do not know him. Thus, knowing a person is not the same as knowing some facts about a person.

This shows that definition (D3) is not correct. It also illustrates another important methodological point. The example shows that (D3) is not correct because it is a counterexample to (D3): an example showing that the sides of the definition do not always agree—one side can be true when the other is false. A clear-cut counterexample refutes a proposed definition. By revising a definition in response to counterexamples, it is possible to get a better understanding of the concepts under discussion.⁵

The counterexample to (D3) shows not only that (D3) is false but that it is not even on the right track. We cannot make some minor change in order to fix things up. It would not help to add that S knows lots of facts about x, or that S knows important facts about x. You can have that sort of propositional knowledge and still not know the person. Knowing x isn't a matter of knowing facts about x. Instead, it is a matter of being acquainted with x—having met x and perhaps remembering that meeting. No matter how many facts you know about a person, it does not follow that you know that person. Knowing a person or a thing is being acquainted with that person or thing, not having propositional knowledge about the person or thing. So not all knowing is propositional knowing.

Consider next "knowing how." Suppose that there is a former expert skier who, after a serious accident leaves him unable to ski, becomes a successful ski coach. His success as a coach is largely the result of the fact that he is unusually good at explaining skiing techniques to students. Does the coach know how to ski? The answer seems to be "Yes." A plausible explanation of this appeals to the following definition:

D4a. S knows how to A = df. If a is an important step in A-ing, then S knows that a is an important step in A-ing.⁶

This seems to show that "knowing how" can be defined in terms of propositional knowledge.

However, other examples suggest a different idea. Consider a young child who begins skiing and does it successfully, without any training or intellectual understanding of what she is doing. She also knows how to ski, but she seems to lack the relevant propositional knowledge. She does not have any explicit conscious understanding of the various steps. She is just able to do it. This example suggests that there is a second meaning to the phrase “knows how.” The following definition captures this second meaning:

D4b. S knows how to A = df. S is able to A.

The ex-skier knows how to ski in the (D4a) sense, but not in the (D4b) sense. Just the reverse is true of the young prodigy. So one kind of knowhow is propositional knowledge, but another kind is not.

C. Conclusion

The attempt to explain all the different kinds of knowledge in terms of propositional knowledge is unsuccessful. The most reasonable conclusion seems to be that there are (at least) three basic kinds of knowledge: (1) propositional knowledge, (2) acquaintance knowledge or familiarity, and (3) ability knowledge (or procedural knowledge).

Even though we cannot explain all knowledge in terms of propositional knowledge, propositional knowledge does have a special status. We can explain several other kinds of knowledge in terms of it. Furthermore, many of the most intriguing questions about knowledge turn out to be questions about propositional knowledge. It will be the focus of this book. And the point of this section is mainly to get clear about the sort of knowledge that is the topic of our study. It is propositional knowledge, or knowledge of facts.

II. KNOWLEDGE AND TRUE BELIEF

What does it take to know a fact? What is propositional knowledge? These are the questions raised by (Q1) in Chapter I. We will begin our examination of this with a simple, and inadequate, answer. Then we will attempt to build upon this answer.

A. Two Conditions on Knowledge

It is easy to come up with two conditions for knowledge: truth and belief. It is clear that knowledge requires truth. That is, you cannot know something unless it is true. It can never be right to say, “He knows it but it’s false.” You cannot know that Thomas Jefferson was the first president of the United States. The reason that you cannot know this is that he was not the first president.

People can feel very sure of things that are not true. You might feel sure that Jefferson was the first president. You might think that you remember being taught this in school. But you are mistaken about this. (Or your teacher made a big mistake.) You might even *claim* to know that Jefferson was the first president. But he was not the first president, and you do not know that he was. This is because knowledge requires truth. You know a proposition only if it is true.

There is a possible objection to the claim that knowledge requires truth. It is illustrated by the following example:

Example 2.1: The Mystery Story

You are reading a mystery story. All the clues presented right up to the last chapter indicated that the butler was guilty. You felt sure the butler did it and were surprised when it was revealed in the final scene that the accountant was guilty. After you finish the book you say:

4. I knew all along that the butler did it, but then it turned out that he didn’t.

If you are right when you say (4), then it is possible to know things that are not true. You knew that the butler did it, but it was not true that the butler did it. However, even though people sometimes say things such as (4), it is clear that these things are not literally true. You did not *know* all along that the butler did it. What was true all along was that you felt sure that the butler did it, or something like that. By saying (4) you convey, in a slightly colorful way, that you were surprised by the ending. But (4) is not true, and it does not show that there can be knowledge without truth.

A second condition for knowledge is belief. If you know something, then you must believe it or accept it. If you do not even think that something is true, then you do not know it. We are using “belief” in a broad sense here: anytime you take something to be true, you believe it. Believing thus includes hesitant acceptance as well as fully confident acceptance. A good way to think about this is to notice that when you consider a statement, you can adopt any of three attitudes toward it: belief, disbelief, or suspension of judgment. As an analogy, imagine yourself forced to say one of three things about a statement: “yes,” “no,” or “no opinion.” You will say “yes” over a range of cases, including the ones in which you are entirely confident of a statement and the ones in which you merely think the statement is probably true. You will say “no” when you think that the statement is definitely or probably false. And you will say “no opinion” in the remaining cases. Similarly, as we are using the term here, “belief” applies to a range of attitudes. It is contrasted with disbelief, which involves a similar range, and suspension of judgment.

It is clear, then, that knowledge requires belief. If you do not even think that a statement is true, then you do not know that it is true. There is, however, an objection to this claim that deserves consideration. We sometimes talk in ways

that contrast knowledge and belief, suggesting that when you know something, you do not believe it. To see this, consider the following example:

Example 2.2: Knowing Your Name

You have a friend named "John" and you ask him, "Do you believe that your name is 'John'?" He replies:

5. I do not *believe* that my name is "John"; I *know* that it is.

In saying (5), John seems to be saying that this is a case of knowledge and not a case of belief. The suggestion is that if it is belief, then it is not knowledge. If he is right, then belief is not a condition for knowledge.

However, again, this appearance is misleading. John surely does accept the statement that his name is "John." He does not reject that statement or have no opinion about it. When he says (5), his point is that he does not *merely* believe that his name is "John"; he can say something stronger—that he knows it. And one of the ways we typically proceed in conversations is to avoid saying the weaker or more modest thing when the stronger one is true as well. If your friend were to say to you, "I believe that my name is 'John,'" this would suggest, but not literally say, that he does not know it. There are many other examples of the same phenomenon. Suppose that you are extremely tired, having worked very hard for a long time. Someone asks if you are tired. You might respond by saying something like:

6. I'm not tired; I'm exhausted.

Taken literally, what you say is false. You *are* tired. The point of your utterance is to emphasize that you are not *merely* tired; you are exhausted. The same thing goes on in (5). By saying (5), John is not really saying that he does not believe the statement. So this example is not a counterexample to the thesis that knowledge requires belief.

We have now found two conditions for knowledge: To know something, you must believe it and it must be true.

B. Knowledge as True Belief

The ideas just presented may suggest that knowledge is true belief; that is,

TB. S knows p = df. (i) S believes p , and (ii) p is true.

A little reflection should make it clear that (TB) is mistaken. There are lots of times that a person has a true belief but does not have knowledge. Here is a simple counterexample to (TB):

Example 2.3: Correct Predictions

New York is playing Denver in an upcoming Superbowl. The experts are divided about who will win, and the teams are rated as even. You have a

hunch that Denver will win. When the game is finally played, your hunch turns out to have been correct. So you believed that Denver would win, and your belief was true.

In Example 2.3 you believe that Denver will win, and this is true. But you did not know that Denver would win. You just had a guess that turned out to be correct.

Some will say that the fact the belief in Example 2.3 is about the future ruins the example. But we can easily eliminate that feature without undermining the point. Suppose you do not watch the game, but instead go to a long movie. When you get out of the movie, you know that the game is over. You now have a belief about the past, namely that Denver won. And you are right. You still do not know that they won. You are still right as a result of a lucky guess. But now there are no complications having to do with beliefs about the future.

The objections to (TB) are not limited to cases of lucky guesses. Another sort of example will illustrate the heart of the problem with (TB).

Example 2.4: The Pessimistic Picnic Planner

You have a picnic scheduled for Saturday and you hear a weather forecast that says at the chances that it will rain on Saturday are slightly more than 50%. You are a pessimist, and on the basis of this report you believe confidently that it will rain. And then it does rain. So you had a true belief that it would rain.

You did have a true belief that it would rain, but you lacked knowledge. (When the rain starts, you might say, "I knew it would rain," but you did not really know it.) The reason you did not know in this case is not that you were guessing. Your belief is based on some evidence—the weather report—so it is not simply a guess. But this basis is not good enough for knowledge. What you need for knowledge is something along the lines of very good reasons or a more reliable basis, not just a potentially inaccurate weather report.

Philosophers often say that what is needed for knowledge, in addition to true belief, is *justification* for the belief. Exactly what justification amounts to is a matter of considerable controversy. We will spend a good deal of time later in this book examining this idea. But for now it will suffice to notice that in the examples of knowledge that we put forth in Chapter 1, the believers had extremely good reasons for their beliefs. In contrast, in the counterexamples to (TB), you did not have very good reasons and you could easily have been wrong. What is missing, then, in the counterexamples to (TB) and is present in the examples of knowledge we have described is justification. This leads us to *The Traditional Analysis of Knowledge*.

III. THE TRADITIONAL ANALYSIS OF KNOWLEDGE

The Traditional Analysis of Knowledge (the TAK) is formulated in the following definition:

TAK. S knows p = df. (i) S believes p , (ii) p is true, (iii) S is justified in believing p .

Something along these lines can be found in various sources, perhaps going back as far as Socrates. In Plato's dialogue *Meno*, Socrates says:

For true opinions, as long as they remain, are a fine thing and all they do is good, but they are not willing to remain long; and they escape from man's mind, so that they are not worth much until one ties them down by (giving) an account of the reason why. . . . After they are tied down, in the first place they become knowledge, and then they remain in place.⁷

According to one possible interpretation of this passage, to be able to give "an account" of an opinion is to have a reason or justification for that opinion. And one idea in the passage is that this is needed in order to have knowledge.⁸ We will ignore the additional claim, that knowledge is less likely to "escape" from one's mind than other beliefs.

Similar ideas can be found in the work of many more contemporary philosophers. For example, Roderick Chisholm once proposed that one knows a proposition just in case one believes the proposition, it is true, and the proposition is "evident" for one. And this last condition is understood in terms of how reasonable it is for the person to believe the proposition.⁹

We turn now to a more thorough examination of the three elements of the TAK.

A. Belief

To believe something is to accept it as true. When you consider any statement, you are faced with a set of *alternatives*: You can believe it, you can disbelieve it, or you can suspend judgment about it. Recall that we are taking belief to include a range of more specific attitudes, including hesitant acceptance and complete conviction. Disbelief includes a corresponding range of negative attitudes toward a proposition. At any given time, if you consider a proposition, you will end up adopting one of these three attitudes.¹⁰

For present purposes, think of disbelieving a proposition as being the same thing as believing the negation (or denial) of that proposition. So disbelieving that George Washington was the first president is the same as believing that it is not the case that George Washington was the first president. Suspending judgment about the proposition is to neither believe it nor disbelieve it.¹¹

One additional point about belief deserves mention here. Suppose a French child is taught that George Washington was the first president of the United States. Thus, it becomes true that

7. Pierre believes that George Washington was the first president of the United States.

The noteworthy thing here is that (7) can be true even if Pierre does not speak a word of English. He does not have to understand the English sentence "George Washington was the first president of the United States." Presumably,

he would express his belief using a French equivalent of this sentence. Pierre's American counterpart, Peter, might believe what Pierre does. Thus,

8. Peter believes that George Washington was the first president of the United States.

Peter, we may assume, does not speak a word of French. So Peter and Pierre believe the same thing, even though there is no sentence that they both accept. How can this be?

One way to understand these matters is as follows. Sentences are used to express certain thoughts or ideas. Philosophers use the word *proposition* to refer to these items. The English sentence Peter uses and the French sentence Pierre uses express the same proposition. Belief is fundamentally a relation to a proposition. So (7) can be true because Pierre believes the relevant proposition about George Washington; (8) is true because Peter believes that same proposition. But they would use different sentences to express that proposition.

There are, then, two important points to extract from this: Sentences differ from the propositions they are used to express, and belief is fundamentally an attitude one takes toward propositions.¹²

B. Truth

The second element of the TAK is truth. People say many complicated and murky things about truth, but the fundamental idea is very simple. The issue here is not about which things are in fact true. Rather, the question for now is about what it is for something to be true. One simple and widely accepted answer to this is contained in the *correspondence theory of truth*.

The central point of the correspondence theory is expressed in the following principle:

- CT. A proposition is true if and only if it corresponds to the facts (iff the world is the way the proposition says it is). A proposition is false iff it fails to correspond to the facts.¹³

The idea here is extraordinarily simple. It applies to our example about George Washington in the following way. The proposition that George Washington was the first president is true just in case it corresponds to the facts as they actually are. In other words, it is true just in case George Washington was the first president. The proposition is false if he was not the first president. This should come as no surprise. The principle applies in analogous ways to other propositions.

It will be helpful to spell out a few consequences of (CT) and to mention a few things that are not consequences of (CT).

- 1) Whether a proposition is true or false does not depend in any way upon what anyone believes about it. For example, our beliefs about George

Washington have no bearing on the truth value (i.e., truth or falsity) of the proposition that George Washington was the first president. The actual facts of the case determine its truth value.

2) Truth is not "relative." No single proposition can be "true for me but not true for you." I might believe a proposition that you disbelieve. In fact, this is almost surely the case. Any two people will almost surely disagree about something. However, if there is a proposition they disagree about, then the truth value of that proposition is determined by the facts.

3) (CT) does not legitimize any kind of dogmatism or intolerant attitude toward people who disagree with you. Some people dismiss without consideration anyone who disagrees with them. That is a nasty and unreasonable way to treat others. However, if we disagree about something, then, trivially, I think that I am right and that you are wrong. If, for example, you think that Thomas Jefferson was the first president and I think that it was George Washington instead, then I think that you are wrong about this and you think that I am wrong about this. It would be rash for me to generalize from this case and draw any conclusions about your other beliefs. But when you disagree with me, I do think you are wrong. If you are not dogmatic, you recognize your own fallibility. You are open to changing your mind if new information comes along. There are circumstances in which it might be rude to tell others that you think they are wrong. And possibly the mere fact that others disagree provides you with some reason to reconsider your views.¹⁴

4) (CT) does not imply that things cannot change. Consider the proposition that George Washington *is* the president of the United States. That proposition is false. But, it seems, it used to be true. What does (CT) say about this?

There are a few ways to think about this, and a full examination of them would get into technicalities that are not important for present purposes. One good approach says that a sentence such as "George Washington is the president of the United States" expresses a different proposition at different times. The proposition it expressed back in 1789 is true. The proposition it expresses in 2003—the proposition that George Washington is president of the United States in 2003—is false. We can say that the sentence can be used to express a series of propositions about specific times. You can think of a proposition saying that a certain thing has a certain property at one time as a predecessor of a proposition saying that that same thing has that same property at a slightly later time. So, when things change, for example, when we get a new president, one dated proposition is true and its successor proposition is false. There is no problem for (CT) here, provided we are careful about the propositions in question.

5) Something similar applies to considerations about location. Suppose someone in Maine is talking on the telephone to someone in Florida. The person in Maine says:

9. It is snowing.

The person in Florida says:

10. It is not snowing.

These speakers do not disagree about anything. But what, then, should we say about the truth value of the proposition that it is snowing? Is it true or is it false?

Once again, there are a variety of ways to think about this. For present purposes, a good approach will be to say that by a sentence like (9) the person expresses a proposition that might more clearly be displayed by the sentence

9a. It is snowing here (in Maine).

Similarly, the person in Florida who says (10) says something that is most clearly displayed in

10a. It is not snowing here (in Florida).

We may assume both of these propositions are true. Their truth is objective, in that it depends upon the weather conditions in the two places.

6) There are puzzles about sentences such as

11. Yogurt tastes good.

Exactly what (CT) says about them depends largely on what these sentences mean. One possibility is that each speaker uses (11) to say, "I like the taste of yogurt." If that is the case, then different people use (11) to express different propositions, each proposition being about what that speaker likes. If a person who does like the taste of yogurt says (11), then the proposition the person expresses is true. If the person does not like yogurt, then the person expresses a proposition that is not true.

It is not obvious that (11) says something about individual preferences. Maybe it means something like "Most people like the taste of yogurt." If that is what it means, then it does not express different propositions when said by different people. It expresses one proposition about majority tastes, and that proposition is true if most people like yogurt and not true if they do not.

According to another interpretation, (11) says that yogurt satisfies some standard of taste that is independent of people's likes and dislikes. This assumes some sort of "objectivity" about taste. On this view, (11) could be true even if hardly anyone actually likes the taste of yogurt. You might find this view strange; it is hard to understand what objective good taste amounts to.

What is crucial for present purposes is to notice that whichever interpretation of (11) is right, there is no trouble for (CT). The proposition expressed by (11) will vary from one speaker to another if the first option is right, but not in the other cases. In all cases, however, the truth value that the proposition(s) (11) expresses depends upon the relevant facts. In this case, the rele-

vant facts are either the likes and dislikes of the speaker, the likes and dislikes of the majority of people, or the objective facts about good taste.

There is no need for us to settle disputes about the right interpretation of sentences such as (11). That complicated matter can be left to those who study aesthetics. The crucial point for present purposes is that whichever interpretation is correct, there is no good objection here to (CT).

7) (CT) does not imply that we cannot know what is “really” true. Some people react to (CT) by saying something like this:

According to (CT), truth is “absolute” and what’s true depends upon how things are in the objective world. Because this world is external to us, we can never really know what’s true. At most, we can know what is “subjectively” true. This subjective truth depends upon our own views about the world. Absolute truth must always be beyond our grasp.

We will discuss skepticism at length in Chapters 6 and 7. Much of epistemology is an effort to respond to it. For now it is enough to note two points. First, from the mere fact that what is true is dependent upon an objective world that exists independent of us, it does not follow that we cannot know what that world is like. Thus, if there is any strong argument for skepticism, it relies on a premise beyond anything stated in the preceding paragraph. We will consider how such an argument might be formulated later.

Second, throughout the next several chapters we will assume, as *The Standard View* does, that we do know things. This is not a matter of prejudging the issues associated with skepticism. Rather, we are examining what the nature and consequences of *The Standard View* are. *The Skeptical View* will get a fair hearing in Chapters 6 and 7.

8) There is one very puzzling issue associated with the correspondence theory of truth. Consider a sentence such as

12. Michael is tall.

Suppose that someone asserts (12) in a normal conversational context such as the following: You are about to pick up Michael at the airport. You know that he is an adult male, but you do not know what he looks like. You are given a description, of which (12) is a part. Under these circumstances, if Michael is actually 6’4”, then (12) expresses a truth. If Michael is 4’10”, then (12) says something false. If Michael is about 5’10”, then it is difficult to say whether (12) expresses a truth or a falsehood. That height seems to be a borderline case of being tall (for an adult male).

According to one widely held view about these matters, the word “tall” just does not have a precise meaning. The problem we have in the final situation, when Michael is 5’10”, is *not* that we do not know enough about the situation. We can know everything there is to know about Michael’s height, average heights for adult men, and anything else that is relevant. On this view, (12) just

is a borderline case. There simply are not exact boundaries to the heights to which the word “tall” applies. In other words, “tall” is a *vague* word.

Many other words are vague, including, “healthy”, “wealthy”, and “wise”. Vagueness causes numerous problems in understanding exactly how language works. Fortunately, we can largely ignore those issues while pursuing the epistemological questions that are our focus. However, issues concerning vagueness will arise from time to time, so it is important to have a grasp of the idea.

Furthermore, the existence of vague sentences *may* have some bearing on the adequacy of (CT). Recall the distinction between sentences and the propositions they express. As just noted, vagueness is a feature of sentences. Sentence (12), it seems, is vague. But now consider the proposition (12) expresses on a particular occasion, such as the one just described. If that proposition is vague, or indefinite in truth value, then (CT) needs revision. (CT) says that every proposition is either true or false, depending upon whether it corresponds to the way the world is. But if there are vague propositions, then there are propositions that partially correspond to the way the world is. One might say that there is a third truth value—indeterminate—in addition to the original two—true and false. One might even say that there is a whole range of truth values, that truth comes in degrees. These are complex matters that cannot easily be resolved. We will not attempt to resolve them here. It is enough to realize that (CT) may require modification in order to deal with vagueness.

C. Justification

The third, and final element of the *TAK* is justification. Justification (or rationality or reasonableness) will be the focus of a large part of this book. This section will introduce some preliminary ideas.

Justification is something that comes in degrees—you can have more or less of it. Consider again Example 2.4, in which you pessimistically believed that it would rain on the day of your picnic on the basis of a forecast saying that the odds of its raining were slightly greater than half. Here you have some justification for thinking that it will rain. It is not as if you simply made it up, with no reason at all. But your reasons were far from good enough to give you knowledge. So what clause (iii) of the *TAK* requires is very strong justification. In the circumstances described, you do not have it for the belief that it will rain. If the day of the picnic comes and you look out the window and see rain, then you do have strong enough justification for the belief that it will rain. Under those circumstances you would satisfy clause (iii) of the *TAK*. So clause (iii) should be read to require strong justification, or adequate justification. This may be a bit imprecise, but it will do for now.

You can be justified in believing something without actually believing it. Clause (iii) of the *TAK* does not imply (i). To see how this works, consider the following example:

Example 2.5: Mr. Insecure’s Exam

Mr. Insecure has just taken an exam. The teacher quickly looked over his answers and said that they look good and that the grades will be available

the next day. Mr. Insecure has studied hard, taken and done well on the practice exams, found the questions on the actual exam similar to the ones he had studied, and so on. He has excellent reasons to think that he passed the exam. But Mr. Insecure is insecure. He never believes that he has done well and does not believe that he has done well on this exam.

Even though Mr. Insecure does not believe that he has passed the exam, he is justified in believing that he passed the exam. So condition (iii) of the *TAK* is satisfied, but condition (i) is not. To be justified in believing a proposition is, roughly, to have what is required to be highly reasonable in believing it, whether one actually believes it or not.

What is justified for one person may not be justified for another. You have many justified beliefs about your private life. Your friends and acquaintances may have little or no justification for beliefs about those matters. And what is justified for an individual changes over time. A modification of Example 2.4 illustrates this. A week before the picnic, you may not have had justification for believing the proposition that it would rain on Saturday. But by Saturday morning, you might acquire ample justification for that proposition.

It is important not to confuse being justified in believing something from being able to *show* that one is justified in believing that proposition. In many cases we can explain why a belief is justified; we can formulate our reasons. However, there are exceptions to this. For example, a child might have many justified beliefs but be unable to articulate a justification for them.

IV. REAL KNOWLEDGE AND APPARENT KNOWLEDGE

One additional point about *The Standard View* deserves special attention. The things that people regard as knowledge differ in a variety of ways. To take some simple examples, perhaps people in ancient times would have said that among the things they know is the fact that the earth is flat. Perhaps they would have said that they knew the earth to be at the center of the universe (with everything in orbit around it). There may have been widespread agreement in ancient times that they did have knowledge in these cases.

We can grant for the sake of argument that the ancients *thought* they knew that the earth was at the center of the universe. (If you do not like this particular example, substitute another one that illustrates the same idea.) We can even grant that they were quite well justified in believing that they had knowledge of this fact. We might say that they had *apparent knowledge*. Nevertheless, they lacked *real knowledge*. Even though the propositions in question might have quite reasonably appeared in the list of things known in the first chapter of a distant ancestor of this book, the propositions were false. The earth is not, and never was, flat. It is not, and never was, at the center of the universe. They thought, perhaps even with justification, that they had knowledge, but they were mistaken.¹⁵

Another point deserves mention here. It may be that the claims of those who are most outspoken, most charismatic, or most powerful will often be

widely regarded as items of knowledge. This can be distressing to those out of power, especially when they have better justification for competing views. However, questions about what determines what gets counted as knowledge, and how the powerful manage to impose their views on others, are not the focus of this book. Our topic is real knowledge, not apparent knowledge.¹⁶

V. CONCLUSION

(Q1) from Chapter 1 asked what it took to have knowledge. This chapter has introduced an answer to that question based on *The Traditional Analysis of Knowledge*, according to which knowledge is justified true belief. This analysis has a long history. It seems to fit very well with *The Standard View*. The examples of knowledge endorsed by *The Standard View* seem to be cases of justified true belief. And cases in which we lack knowledge seem to be cases in which we lack at least one of these three factors.

There is, however, a significant objection to the *TAK*. We turn next to it.

ENDNOTES

1. The following examples show general patterns of various kinds of statements, with an example showing how each pattern could be filled out. The patterns make use of variables that can be replaced by specific terms. Following standard practices, "S" is used as a variable to be replaced by a name or description of a person, "x" is used as a variable to be replaced by a name or description of any object (including people), "p" is to be replaced by a full sentence expressing a fact or purported fact (a proposition), and "A" by a description of an action.
2. For discussion of just what is meant by the word "proposition," see Section III, Part A1 of this chapter.
3. It is important to understand the difference between (2) and
 - 2a. The librarian knows either that there is a book by Salinger in the library or that there is not a book by Salinger in the library.
 (2a) is true; (2a) reports knowledge of a disjunction (an "or" statement) and everyone can have this knowledge. But the librarian must possess special knowledge if (2) is true. She must know which of the disjuncts (the parts of the "or" statement) is true.
4. "~p" means "not-p", or the negation of p. The negation of "There is a book by Salinger in the library" is "It is not the case that there is a book by Salinger in the library."
5. The methodology used here will be important in what follows. One important test of a proposed definition is that there are no counterexamples to it.
6. This definition may need some refinement, but it does capture at least the basic idea under discussion.
7. From *Meno*, translated by G. M. A. Grube. Reprinted in *Plato: Complete Works*, edited by John M. Cooper (Indianapolis, IN: Hackett Publishing Co., 1997), p. 895.
8. A similar idea is presented in another dialogue, *Theatetus*, translated by M. J. Levett, revised by Myles Burnyeat. Reprinted in *Plato: Complete Works*. See p. 223.
9. Roderick Chisholm, *Theory of Knowledge* (Englewood Cliffs, NJ: Prentice Hall, 1966), p. 23.

10. There is an alternative way to think about these matters. Instead of saying that there are three options, you can say that you can believe a proposition to a greater or lesser degree. You can think of these degrees of belief as arranged along a scale. When you accept a proposition with absolute conviction, you believe it to the fullest degree. When you completely and totally reject a proposition, you have the lowest possible degree of belief in it. And in the usual cases, your degree of belief falls somewhere in between. Suspension of judgment is right in the middle.
11. If you have never even considered a proposition, then you neither believe it nor disbelieve it, but you do not suspend judgment either. Perhaps suspending judgment is best characterized as considering a proposition but neither believing it nor disbelieving it.
12. There are hard questions about exactly what kinds of objects propositions are. We can safely ignore those questions here.
13. The term "iff" abbreviates "if and only if." Sentences of the form "p iff q" are true just in case the truth values of p and q agree, that is, just in case both are true or both are false.
14. This topic will be discussed in detail in Chapter 9.
15. At this point you might observe that we might be in a situation like the ancients, in which our claims to knowledge are mistaken. We will take up this issue when we consider *The Skeptical View*.
16. It is possible that some of the attractiveness of *The Relativistic View*, mentioned in Chapter 1, results from confusing apparent knowledge and real knowledge.

Modifying The Traditional Analysis of Knowledge

I. AN OBJECTION TO THE TRADITIONAL ANALYSIS

Recall that *The Traditional Analysis of Knowledge*, the TAK, says that knowledge is justified true belief.

This analysis is correct just in case in all possible examples, if a person knows some proposition, then the person has a justified true belief in that proposition, and if a person has a justified true belief, then the person has knowledge. Unfortunately for the TAK, there are compelling counterexamples of the second sort—cases of justified true belief that clearly are not cases of knowledge.

The first philosopher to argue explicitly against the TAK in the manner to be discussed here was Edmund Gettier. His brief essay, "Is Justified True Belief Knowledge?," may be the most widely discussed and often cited epistemology paper in many years.¹ Gettier presented two examples, each showing that one could have a justified true belief that is not knowledge. Other philosophers have described additional cases establishing the same point.

A. The Counterexamples

In this section we will examine three examples all designed to illustrate a problem in the TAK. The point behind all the objections is the same, but the different examples help to make the issue clearer. The first example is a modified version of one Gettier originally presented.

Example 3.1: The Ten Coins Case

Smith is justified in believing:

1. Jones is the man who will get the job and Jones has ten coins in his pocket.