

1 Knowledge, truth, and justification

Epistemology, or the theory of knowledge, is concerned with a variety of questions about knowledge and related topics. Certainly one of the most important questions is “What is the extent of our knowledge?” Some philosophers, especially those in the “common sense” tradition, would say that we know pretty much those things that we ordinarily think we know. They would tell us, for example, that we know that there are other people, that they think and feel, that we were alive yesterday, that there are cars and dogs, and so on. They would tell us that we know a lot about our immediate physical surroundings, other people, and the past. Others would add that we know various ethical and moral truths and some would also say that they know various truths about God and God’s attitude toward mankind. Still other philosophers, influenced by various forms of skepticism, would say that we know much less than any of this, and the most extreme skeptics would say that we really know nothing at all.

Evaluating these views is no easy matter, and when we reflect on them, and the reasons advanced in favor of them, we are soon led to other questions about knowledge. Such reflection might naturally lead us to ask one of the most important and oldest epistemological questions, “What is knowledge?” Over two millennia ago, Plato wrestled with it in his dialogue, *Theaetetus*. Plato sought a definition of knowledge, but came to no clear answer and the dialogue ended inconclusively.

The primary aim of this chapter is to introduce the traditional account of propositional knowledge as epistemically justified true belief. In the first section, propositional knowledge will be distinguished from other sorts of knowledge. In the second section, the traditional account of knowledge will be introduced. Next, I shall make some general remarks about the main components of the traditional account, about belief, truth,

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and epistemic justification. Finally, I will make some general comments about justification and evidence, and introduce the concept of evidential defeat.

Three senses of “knows”

In ordinary language when we say that someone knows something, we can mean different things by “knows.” There are different senses of “knowledge” or, we may say, different kinds of knowledge. Among the three most significant are (1) propositional knowledge, (2) acquaintance knowledge, and (3) “how to” knowledge. Let us begin with propositional knowledge.

Propositional knowledge is knowledge of facts or true propositions. So, consider the following examples of propositional knowledge:

- (1) John knows that Caesar was assassinated.
- (2) John knows that the sky is blue.

In these examples, the objects of knowledge, or *what* is known, are, respectively, the true propositions that Caesar was assassinated and that the sky is blue.

It is important to distinguish between sentences and propositions. Consider two people, Paul and Pierre. Let’s suppose that each believes that the sky is blue. Paul, however, speaks only English and Pierre speaks only French. In expressing his belief, Paul would say, “The sky is blue,” and Pierre would say, “Le ciel est bleu.” Though each expresses his belief by a different sentence, each believes the same proposition. Similarly, since each knows that the sky is blue, each knows the same proposition.

We may think of belief as a relation between a subject and a proposition. If the proposition one believes is true, then one’s belief is true and if the proposition one believes is false, then one’s belief is false. We may also think of propositional knowledge as a relation between a subject and a proposition. More precisely, propositional knowledge is a relation between a subject and a *true* proposition.

Propositional knowledge is not the only sort of knowledge. Suppose, for example, someone made the following claims:

- (3) John knows the President of the United States.
- (4) John knows the Pope.

We might naturally take these claims to imply that John is acquainted with the President of the United States and that he is acquainted with the Pope. We might naturally take (3) and (4) to imply that John has met them. If we *do* take (3) and (4) in this way, then we are attributing acquaintance knowledge to John. To say that John has acquaintance knowledge of someone is to imply that he is acquainted with him or that he has met him.

Acquaintance knowledge needs to be distinguished from propositional knowledge. Obviously, one can have a great deal of propositional knowledge about someone without having acquaintance knowledge of him. I might have, for example, a great deal of propositional knowledge about the President. I might know that he was born on such and such a date and that he attended such and such a university. I might know a great many similar true propositions about him. But though I might have a great deal of propositional knowledge about the President, it would not follow that I have acquaintance knowledge of him since I am not acquainted with him and have not met him.

In ordinary language, when we say “A knows B,” we are sometimes using “know” in the propositional sense and sometimes in the acquaintance sense. Suppose, for example, a detective says grimly, “I know this killer. He’ll strike again—and soon.” Our detective need not be taken to mean that he has actually met the killer or that he is acquainted with him. He might mean simply that he knows that the killer is the sort that will soon strike again. He has a certain sort of propositional knowledge about the killer. Similarly, if I am impressed with John’s vast knowledge about Caesar, I might say, “John *really* knows Caesar.” Clearly, I am implying that John has a lot of propositional knowledge about Caesar and not that John has met him.

One can have acquaintance knowledge of things other than people. One can have, for example, acquaintance knowledge of Paris or the taste of a mango. If one has such knowledge of Paris, then one has been there and if one has such knowledge of the taste of a mango, then one has tasted a mango. Again, we need to distinguish knowledge of this sort from propositional knowledge. One might have much in the way of propositional knowledge about Paris, knowing what the main boulevards are, when the city was founded, knowing where various landmarks are, without having the sort of acquaintance knowledge that implies actually having been there.

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In addition to propositional knowledge and acquaintance knowledge, let us consider “how to” knowledge. Sometimes when we say, “A knows how to X,” we mean or imply that A has the ability to X. In other cases, however, when we say that “A knows how to X” we do *not* mean or imply that A has the ability to X. There is, then, one sense of “knowing how to X” which implies that one has the ability to X and another sense that doesn’t. According to the first sense of “knowing how,”

(5) John knows how to play a piano sonata

implies

(6) John has the ability to play a piano sonata.

But, again, there is another sense of knowing how to X that does not imply that one has the ability to X. To appreciate this second sense suppose that John is a talented violinist who reads music well, but can’t play the piano at all. Imagine that he has a lot of knowledge about how to play a particular piano sonata. He might know, for example, that the right index finger should play this note and the right thumb should play that note, and so forth. Indeed, John might be able to describe precisely how to play the piece, even though he cannot play it himself. In this case, we may say that John knows how to play the sonata, even though he does not have the ability to play. In this sense of “knowing how,” (5) does *not* imply (6). There is, then, a sense of “knowing how” to do something which is simply a matter of having propositional knowledge about how to do it. John the violinist, for example, has a great deal propositional knowledge about how to play a piano sonata. But in another sense of “knowing how,” he does *not* know how to play a piano sonata because he lacks the ability to do so.

As the previous case illustrates, one can have a lot of propositional knowledge about how to do something without having the ability to do it. Conversely, one can have the ability to do something without having much propositional knowledge about it. To see this, imagine a physiologist who has a lot of propositional knowledge about how to walk. He has studied how one needs to transfer weight from one foot to another, how the knees should bend, how the foot should bend, what muscles are involved, etc. Our expert might have a great deal of propositional knowledge about walking. But now consider young Mary. Mary is ten months old and has just learned

to walk. She knows how to walk, but we can easily imagine that she lacks the propositional knowledge about how to walk enjoyed by the expert. Mary's propositional knowledge about how to walk is probably quite meager, if, indeed, she has any at all.

We have distinguished propositional knowledge from both acquaintance knowledge and knowing how to do something. Traditionally, philosophers have been most concerned with propositional knowledge. One reason for this is that philosophers are typically concerned with what is true. They want to know what is true and they want to evaluate and assess their own claims, and those of others, to know the truth. When philosophers ask, for example, about the extent of our knowledge, they are typically concerned with the extent of our propositional knowledge, with the extent of the truths that we know. When one philosopher says he knows that there are external objects and another philosopher denies this, they are disagreeing about whether there is propositional knowledge of a certain sort. They are disagreeing about whether truths of a certain kind are known. Acquaintance knowledge and "how to" knowledge are not in the same way "truth focused." So let us consider the concept of propositional knowledge more closely.

Propositional knowledge and justified true belief

We noted at the beginning of this chapter that the question, "What is knowledge?", is an ancient one. Since our focus is on propositional knowledge, we might ask, "What is it for someone to have propositional knowledge?" Alternatively we might ask, "What is it for a subject, *S*, to know that *p* (where *p* is some proposition)?"

According to one traditional view, to have propositional knowledge that *p* is to have epistemically justified true belief that *p*. Before we consider this traditional view, let us begin by considering the following clearly mistaken view:

D1 *S* knows that *p* = Df. *S* believes that *p*.

According to D1, believing something is sufficient for knowing it. If D1 were true, then someone who believed a false proposition would know it. If a child, for example, believed that $2 + 3 = 6$, then, according to D1 the

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child would *know* that $2 + 3 = 6$. But the child does not know that. So, D1 is false.

Now, admittedly, people do sometimes say that they know things that are false. For example, a football fan might be utterly convinced that his team will win the championship. After his team loses, he might say, “I just *knew* they would win. Too bad they didn’t.” But our fan did not know that his team would win. He was simply confident or convinced that they would. His claim to know is perhaps best understood as a bit of hyperbole, as when one says, “I am just *dying* of hunger” or “I’d just *kill* for a cigarette.” Such claims are, usually, not to be taken literally. Strictly speaking, what our fan says is false.

Mere belief, then, is not sufficient for knowledge. Knowledge requires that one’s belief be true. So, let us consider the following view:

D2 S knows that p = Df. (1) S believes that p and (2) p is true.

D2 tells us that one knows that p if and only if one has a true belief that p . D2 says that having a true belief that p is *sufficient* for one’s knowing that p . But this, too, is clearly mistaken. One might have a true belief that is not knowledge. True beliefs that are mere lucky guesses or mere hunches or based on wild superstitions are not instances of knowledge. Suppose, for example, Bonnie reads her horoscope in the newspaper. It says that she will soon come into money. Bonnie has no evidence to believe that this is true, still she believes what her horoscope says. Later that day she finds fifty dollars in the pocket of her old coat. Bonnie’s belief that she would come into money was true, but it was not knowledge. It was a true belief based on no evidence. Consider also Malcomb, an extreme pessimist. Every morning he forms the belief that something *really* bad will happen to him today. Every morning he forms this belief, though he has no reasons or evidence for it and the belief is almost always false. One afternoon he is hit by a bus and killed. On that morning, Malcomb’s belief that something really bad would happen to him turned out to be true. But it is false that Malcomb *knew* that something really bad was going to happen to him. His belief, though true, was not an instance of knowledge. Since D2 takes mere true belief to be sufficient for knowledge, it implies incorrectly that Bonnie and Malcomb have knowledge.

If mere true belief is not sufficient for knowledge, then what else is needed? One traditional answer is that S knows that p only if p is *epistemically*

justified for *S* or *p* is *reasonable* for *S* to believe. We may formulate this traditional account this way:

D3 *S* knows that *p* = Df. (1) *S* believes that *p*, (2) *p* is true, and (3) *p* is epistemically justified for *S*.

According to D3, knowledge requires epistemically justified true belief. So, let's say that D3 represents a JTB account of knowledge.¹

As we have seen, D2 implies incorrectly that Bonnie knows that she will come into money and Malcomb knows that something really bad will happen to him today. But D3 need not be taken to have that flaw. To see why consider Bonnie again. She believes that she will come into money. She believes this because she read it in the newspaper's horoscope and she has no other evidence for believing it. Under these circumstances, the proposition that she will come into money is not one that is justified or reasonable for her. Bonnie's belief does not meet the justification condition in D3. So, D3 does not imply that Bonnie knows. Similar considerations apply to Malcomb's case. The proposition that something really bad will happen to him today is not justified or reasonable for him. He simply accepts it on the basis of an exaggerated pessimism. So, D3 does not imply that Malcomb knows. D3 seems in this respect to be an advance over D2.

D3 seems to be on the right track. In the next chapter, however, we shall consider some serious objections to D3 and the need to add yet further conditions. Still, while almost all philosophers agree that D3 is not adequate as it stands, many agree that knowledge does require epistemically justified true belief. For the moment then, let us turn to consider briefly these components of propositional knowledge. I shall make some general comments about each in the hope that we might get a better understanding of the traditional view about knowledge.

Belief

Whenever we consider a proposition, there are three different attitudes we can take toward it. First, we can believe it or accept it as true. Second, we can

¹ Versions of a JTB account of knowledge were held at one time by Roderick M. Chisholm and A. J. Ayer. See Roderick Chisholm, *Perceiving: A Philosophical Study* (Ithaca: Cornell University Press, 1957), p. 16 and A. J. Ayer, *The Problem of Knowledge* (New York: St. Martin's Press, Inc., 1955), pp. 31–35.

disbelieve it, i.e. believe that it is false or believe its negation. Third, we can withhold belief in it or suspend judgment. We may illustrate these attitudes by reflecting on the attitudes of the theist, the atheist, and the agnostic toward the proposition that God exists. The theist accepts the proposition, the atheist disbelieves it, and the agnostic withholds belief in it.

As we noted earlier, we may think of belief as a *propositional attitude*, as a relation between a subject and a proposition. There are, of course, many propositional attitudes in addition to belief. Hope, fear, doubt, and desire are just some ways in which one may be related to a proposition. Consider the proposition that it will rain. In addition to believing that it will rain, one can hope, fear, doubt, or desire that it will rain.

Believing a proposition needs to be distinguished from other propositional attitudes such as entertaining and considering a proposition. To entertain a proposition is merely to “hold it before the mind.” To consider a proposition is to entertain it and to study or examine it. One can entertain or consider a proposition without believing it. I can now, for example, entertain and consider the proposition that the earth is a cube without believing it. One can also believe something without entertaining or considering it. This morning, for example, I believed that the earth was round, but I did not entertain or consider that proposition.

We all believe a great many things that we are not entertaining or considering. These beliefs are said to be *dispositional* beliefs. My belief this morning that the earth is round was a dispositional belief. When we believe some proposition that we are entertaining, then our belief is said to be an *occurrent* belief. Since I am now entertaining the proposition that the earth is round, my belief that the earth is round is an occurrent belief.

Having a dispositional belief needs to be distinguished from a disposition to believe something. There are many propositions that we do not now believe, but are such that we *would* believe them *if* we considered them. Someone might never have considered the proposition that no elephant is a neurosurgeon and might not believe that proposition. Still, he might be such that he would believe that proposition if he considered it. He would have a disposition to believe that proposition, even if he did not have a dispositional belief in it.

Let’s conclude this brief discussion by making two points. First, according to the traditional JTB account of knowledge, knowledge that *p* requires that one believe that *p*. We may say that knowledge requires either occurrent or

dispositional belief. Thus, we can say I knew this morning that the earth was round even though my belief in that proposition was dispositional. Second, belief ranges in intensity or strength from complete and firm conviction to tentative and cautious acceptance. Thus, one might be firmly and strongly convinced that God exists or one might accept it with some weaker degree of conviction. Now, if knowledge requires belief and belief comes in varying degrees of intensity, is there some degree of intensity of belief that is required for knowledge? According to the traditional view, knowledge simply requires justified true belief. As long as one believes that p and the other conditions are met, then one knows that p whatever the intensity of one's belief.

Truth

There are many theories about the nature of truth and about what makes a proposition or a belief true or false. One of the oldest and perhaps most widely held is the *correspondence theory of truth*. The correspondence theory makes two main claims. First, a proposition is true if and only if it corresponds to the facts. Second, a proposition is false if and only if it fails to correspond to the facts. Advocates of the correspondence theory often add a third claim, that the truth of a proposition or belief is *dependent* on the facts or upon the way the world is. Such a view is suggested by Aristotle, who wrote, "It is not because we think truly that you are pale, that you *are* pale; but because you are pale we who say this have the truth."² The proposition that you are pale is true because you *are* pale. The proposition that you are pale is true because of, or in virtue of the fact that you are pale.

According to the correspondence theory of truth, a proposition is not true because of what we believe about it. The truth of the proposition that someone is pale, for example, does not depend on our believing it or on what we believe about it. The proposition is true if and only if someone is pale. It is true, as Aristotle notes, because of the fact that someone is pale.

Moreover, according to the correspondence theory, one and the same proposition cannot be both true and false. The proposition that you are pale cannot be both true and false. Neither can the proposition be

² Aristotle, *Metaphysics*, bk. IX, ch. 9, 1051b, trans. W. D. Ross, in *The Basic Works of Aristotle*, ed. Richard McKeon (New York: Random House, 1941), p. 833.

“true for you and false for me.” The truth is not “relative” in this way. Of course, you might *believe* some proposition that I reject. We might thus disagree about the truth of some proposition. Still, the truth of the proposition is determined by the facts and not by whether you or I believe it. Again, suppose that some ancient culture believed that the earth was a disk floating in an endless sea. Should we say that this proposition was true “for them”? According to the correspondence theory, the answer is “no.” They accepted the proposition. They believed it was true. But the proposition they believed was false. It did not correspond to the facts.

Still, let us consider the following objection. “Suppose that Jim is in London talking to his brother, Tom, in New York. Jim looks out his window, sees the rain falling and says, ‘It is raining.’ Tom looks out his window, sees the sun shining and says, ‘It is not raining.’ Couldn’t they both be right? Isn’t this a case where a proposition is both true and false?” Of course, they could both be right. In fact, given our description of the case, each of them is right. But this does not show that one and the same proposition is both true and false. We should say that the proposition that Jim accepts is that it is raining in London, and the proposition that Tom accepts is that it is not raining in New York. Each of them accepts a true proposition. But they do not accept *the same* proposition.

The correspondence theory of truth is old and widely held. There are, however, objections to theory. Some object that unless we have some explanation of what it is for a proposition to correspond with the facts, the theory is not very informative. Others object that the theory is uninformative because the notion of a fact is obscure. Yet others would say that one cannot explain what a fact is without making use of the concepts of truth and falsity, and, therefore, the correspondence theory is circular and ultimately unenlightening.

These are important criticisms. Unfortunately, to assess these objections adequately would simply take us too far afield. Still, the basic intuition that the truth of a proposition depends upon the facts has proved stubbornly resistant to criticism. I shall be assuming throughout this book that some version of the correspondence theory of truth is correct. It is worth noting, though, that there are other theories of truth. Let us consider briefly two of them.

One alternative to the correspondence theory is *the pragmatic theory of truth*. A central insight of the pragmatic theory is that true beliefs are