

# 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,

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.

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

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.<sup>1</sup>

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

<sup>1</sup> 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."<sup>2</sup> 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

<sup>2</sup> 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

generally useful and false beliefs are not. If a doctor wants to cure a patient, it is useful for the doctor to have true beliefs about what will cure the patient. If a man wants to go to Boston, true beliefs about which road to take are generally more useful than false beliefs. Noting this connection, the pragmatic theory tells us that a proposition is true if and only if believing it or acting on it is, or would be, useful (in the long run). Roughly, a belief is true if and only if it is useful or expedient. William James, the great American pragmatist, wrote, “The true is only the expedient in the way of our behaving, expedient in almost any fashion, and expedient in the long run and on the whole course.”<sup>3</sup>

Suppose that true beliefs generally provide a good basis for action, that they are generally useful and that false beliefs are generally a bad basis for action. Critics of the pragmatic theory note that even if this is so, it would not follow that we should identify true belief with useful belief. Sometimes a true belief might have very bad consequences and a false belief might have very good ones. Suppose for example the following proposition is true:

(7) Tom will die in old age from a long and painful illness.

Suppose further that if Tom were to believe this, he would be quite distraught. The joy that he now finds in life would be greatly diminished. He would be haunted by the specter of his painful death. Let us suppose that it is not useful for Tom to believe (7). Still, since (7) is true, it seems we should reject the view that a proposition is true if and only if believing it or acting on it would be useful. Similarly, there could be false propositions that *are* useful to believe or act on. Imagine, for example, that when Tom is old and suffering from his painful and fatal illness, he consoles himself with the belief that:

(8) Others in the hospital are suffering more than I am and doing so with courage.

Believing (8) helps Tom face his own suffering calmly and with courage. He thinks that since others are courageously facing suffering greater than his, then at least he can do the same. Believing (8) is very useful for Tom. But suppose (8) is false. Suppose no one in the hospital is suffering worse

<sup>3</sup> William James, *Essays in Pragmatism* (New York: Hafner Publishing Co., 1948), p. 170.

than Tom. Again, it seems that what is useful to believe is not always true, and what is true is not always useful to believe.

Another theory of truth is the *coherence theory of truth*. Not surprisingly, the concept of coherence is central to the theory. We shall say more about coherence in chapter 4. For the moment, let us consider the following example that we may take to illustrate the concept. Suppose that I believe the following propositions: (i) I have the sense experience of something white in my hand, (ii) I have the experience of something round in my hand, (iii) I have the experience of something cold in my hand. The proposition, (iv) there is a snowball in my hand, coheres with (i)–(iii). It would seem that (iv) better coheres with (i)–(iii) than some other propositions, e.g. that I have a hot lump of coal in my hand.

Some philosophers take the fact that a proposition coheres or “hangs together” with other propositions one believes to be indicative of its truth or a good reason to believe it’s true. In other words, they treat coherence as a source of justification. So, for example, if one believes (i)–(iii), then, other things being equal, it is more reasonable to believe (iv) than that one has a hot lump of coal in one’s hand because of (iv)’s greater coherence with (i)–(iii). Proponents of the coherence theory of truth, however, treat coherence not merely as a source of justification; they take coherence to be a *condition* of truth. They hold that for a proposition to be true is nothing more than a matter of its coherence with other propositions. Brand Blanshard, a defender of the coherence theory of truth, wrote “Assume coherence as the test [of truth], and you will be driven by the incoherence of your alternatives to the conclusion that it is also the nature of truth.”<sup>4</sup>

Critics of the coherence theory of truth raise a variety of objections. First, they note that the concept of “coherence” is murky. Indeed, some critics claim that the concept of coherence is at least as much in need of explanation as those of “correspondence” and “fact.” They would say that the coherence theory has no real advantage in clarity over the correspondence theory. Second, they note that we cannot say simply that a proposition is true if and only if it belongs to a coherent set of propositions. A very realistic piece of fiction might be a coherent set of false propositions. Moreover, the fact that (iv) above coheres with other propositions that I believe such as (i)–(iii) does not guarantee that (iv) is true. I might believe

<sup>4</sup> Brand Blanshard, *The Nature of Thought*, vol. 2 (New York: Macmillan, 1940), p. 269.

(i)–(iv) and be merely having an hallucination of a snowball or merely dreaming that I am holding a snowball. Indeed, Descartes raised the possibility of massive deception by an evil demon, deception so massive that most of our sensory experience of the world is illusory. In such a scenario, our beliefs about the world around us would be almost entirely false. Still, they might be quite coherent. In fact, our beliefs might enjoy as much coherence in such a scenario as they do right now. But again, they would be false. Finally, critics argue that we should not confuse a criterion of justification with a condition of truth and we should not assume that because we have a criterion of justification we have *ipso facto* a condition of truth. Even if coherence turns out to be a source of justification, it does not follow that it is what makes a proposition true.

## Epistemic justification

According to the traditional JTB account, knowledge that *p* requires that one be epistemically justified in believing that *p*. Much of this book will be concerned with the topic of epistemic justification. Indeed, much of recent epistemology has focused on this topic. For the moment, we may make the following general points.

First, the kind of justification knowledge requires is *epistemic* justification. We must note that there are kinds of justification that are not epistemic. For example, the batter who steps up to the plate might be more likely to get a hit if he believes that he will. Of course, he will probably not get a hit. Even for the best batters the odds of doing so are poor. Still, believing that he will succeed and having a positive attitude will help him. So, we may grant that he has a *practical* justification for his belief even if he has no epistemic justification for it. Again, consider someone facing a life threatening illness, one from which most people do not recover. Even though the evidence is against his recovery, a belief that one will recover might improve one's chances. In such a case, one might have a moral or prudential justification for believing that one will recover even if one has no epistemic justification for it. Unlike prudential or moral justification, epistemic justification seems to be tied in an important way to truth, though it is hard to say in exactly what way it is connected with truth. Perhaps we might say that epistemic justification aims at truth in a way that prudential and moral justification do not. Perhaps we might say that if one

is epistemically justified in believing a proposition then one's belief is likely to be true. As we shall see, philosophers differ about the connection between truth and epistemic justification. In any case, our focus will be on epistemic justification, so henceforth when I refer to justification, I shall be referring to epistemic justification.

Second, a proposition can be true and not justified. Consider the propositions: (i) the number of stars is even, and (ii) the number of stars is *not* even. Either (i) or (ii) is true. But clearly neither (i) nor (ii) is justified for us. We have no evidence for either. So, a proposition can be true without being justified for us. Again, the proposition that there is life on Mars might be true, but as of now, given the state of our evidence, it is not something we are justified in believing. With respect to these propositions we might say that one is not justified in believing them. Instead, one is justified in withholding belief in them.

Third, a proposition can be justified and not true. One can be justified in believing a proposition that is false. Suppose, for example, you are justified in believing that it is noon. You are justified because you have just looked at your watch around midday and it says that it is noon. But suppose that, unbeknownst to you, your watch stopped working at noon and it is now 12:30. Given your evidence, your belief is justified but false. Again, I might be justified in believing that the person I see going into the library is Lisa. I am justified because the person I see looks, dresses, and behaves just like Lisa. But suppose that, unbeknownst to me, Lisa has an identical twin and the person I see is not Lisa, but her twin. My belief that the person I saw was Lisa is false, but justified.

Fourth, we need to distinguish a proposition's being justified for a person from *justifying* it. Justifying a proposition is an activity that one engages in, often when one's belief has been challenged. Typically when justifying a proposition one attempts to adduce reasons in its support. In contrast, a proposition's being justified for a person is a state that one is in. Knowledge that *p* requires that one be justified in believing that *p*, but it does *not* require that one justify one's belief that *p*. There are a great many things that each of us knows that we have never attempted to justify.

Fifth, unlike truth, justification is relative in the sense that a proposition can be justified for one person, but not for another. This can happen if one person has evidence that another person lacks. Suppose, for example,

that Smith is a thief. The proposition that Smith is a thief might be justified for Smith, but not for anyone else. Smith could have a lot of evidence that he is a thief, though no one else has any. Indeed, many of Smith's friends, we may suppose, are justified in believing that he is not a thief. (Here again we would have an example of a belief that is justified yet false.) Furthermore, a proposition can be justified for a person at one time, but not at another time. After Smith is caught, tried, and convicted his friends who have followed the trial closely are highly justified in believing that he is a thief. They now have evidence that they did not have before. Justification, then, can vary from person to person and it can vary for one person from time to time depending upon the evidence he has.

Sixth, epistemic justification comes in degrees. It ranges from propositions that are *certain* or maximally justified for us to propositions that are just barely justified, that are just barely reasonable to accept. The propositions that  $2=2$ , that I think, that I exist, are certain for me. In contrast, the proposition that I will be alive in three months is one that it is not certain or maximally justified for me. It is not maximally justified because the proposition that I am alive now is more justified for me than it is. Still, I am justified in believing that I will be alive in three months. I am more justified in believing *that* proposition than I am in believing that there is life on Mars or that the number of stars is even.

If knowledge requires justification, then we might ask, "What degree of justification does knowledge require?" Strictly speaking, D3 does not tell us. It seems reasonable to believe that not just any level of justification will do. The proposition that I will be alive in ten years has some degree of justification for me, but it is not high enough for me to *know* it. Similarly, if I know that 60 out of 100 marbles in an urn are black, then the proposition that I will draw a black marble has some positive justification for me, but I am not sufficiently justified to know that I will. So, some levels of justification are too low for knowledge. Should we say, then, that knowledge that  $p$  requires that one be certain that  $p$ ? That knowledge requires maximal justification? I think most philosophers who have defended a JTB account would say that knowledge does *not* require certainty. They would hold, reasonably, that we do know, for example, that Washington was the first President of the United States, that Caesar was assassinated, and many similar things. But these propositions are not certain for us, they are not as justified for us as  $2=2$  or I exist. I think it is fair to say that most defenders

of the JTB account would say that while knowledge does not require certainty, it does require a high degree of justification.

Finally, a proposition can be epistemically justified for a person even if he does not believe it. Consider the confident batter who steps into the batter's box. Again, more often than not, even the best batters fail to get a hit. The proposition that he won't get a hit is epistemically justified for him. But though the proposition is justified for him, he does not believe it. Indeed, he believes its negation. Similarly, the proposition that nothing terrible will happen to him today is justified for pessimistic Malcomb, but he fails to believe it.

Some philosophers draw a distinction between a proposition's being justified for a person and a proposition's being "well-founded" for a person.<sup>5</sup> To say that a proposition, *p*, is well-founded for a person, *S*, is to say that (i) *p* is justified for *S*, and (ii) *S* believes that *p* on the basis of his evidence for *p*. If a proposition is well-founded for a person, then he believes it and he believes it on the basis of evidence that supports it. If a proposition, *p*, is well-founded for a person, then he not only has good reasons for believing it, he also believes it on the basis of good reasons. In such a case, we may also say that his belief that *p* is well-founded or that he justifiably believes that *p*.

To illustrate the distinction between a proposition's being justified and its being well-founded, suppose that Jones is suffering from a serious illness. Though the illness is quite serious, he has excellent evidence that he will fully recover. His doctor, an expert in the field, tells him there are highly effective treatments for his condition and that the recovery rate is over 99 percent. Jones also reads the same information about the effectiveness of treatments in a well-respected medical journal. Under these circumstances we may assume that the proposition that he will recover is justified for Jones. Suppose, however, that Jones does *not* believe that he will recover on the basis of this evidence. Instead, he believes that he will recover on the basis of some very bad reason. Suppose he believes that he will recover because his tea-leaf reader said he would, or he believes he will recover simply on the basis of wishful thinking. The point is that even though Jones has excellent reasons for believing that he will recover, his belief is not *based* on those reasons. Jones's belief that he will recover is not well-founded.

<sup>5</sup> Earl Conee and Richard Feldman, "Evidentialism," *Philosophical Studies*, 48, 15–44.



If Jones's belief that he will recover is not based on the evidence that he has for that proposition, but is based instead on wishful thinking or the testimony of his tea-leaf reader, then it seems plausible to think that Jones's belief is not an instance of knowledge. We might think that knowledge requires not simply that one have evidence for one's belief, but that one's belief be based on one's evidence. Given the concept of a proposition's being well-founded for a person, we might modify the account of knowledge to take account of the distinction. We might say:

D3'                     $S$  knows that  $p$  = Df. (1)  $S$  believes that  $p$ , (2)  $p$  is true, and (3)  $S$ 's belief that  $p$  is well-founded.

On this view,  $S$ 's knowing that  $p$  requires not simply that  $p$  be justified for  $S$ . It also requires that  $S$  believe that  $p$  on the basis of evidence that supports  $p$ . Such a view seems plausible.

## Justification, evidence, and defeat

Whether a belief is justified and the degree to which it is justified is often, if not always, a function of the evidence one has for it. One might think of a person's evidence at a certain time as consisting in all the information or data he has at that time. It is widely and commonly held that sense perception, memory, introspection, and reason are "sources" of evidence. We might think of these sources as providing information or data that serves as evidence for our beliefs. We might think that they provide evidence through such things as memory experiences, sense experiences, introspective experiences, and rational intuitions. Such experiences along with our justified beliefs may be thought to constitute our evidence. Thus, my evidence that there is a cup of coffee on the desk would include my sensory experiences that I see the coffee and that I smell it, that I remember making the coffee and putting the cup there on the desk, and my justified belief that I almost always have a cup of coffee on the desk at this time of day.

We may distinguish between two types of evidence, *conclusive* and *nonconclusive*. Conclusive evidence guarantees the truth of the proposition it supports. If  $e$  is conclusive evidence for a proposition,  $p$ , then it is impossible for  $p$  to be false given  $e$ . Perhaps we might illustrate the concept of conclusive evidence by considering the proposition that I think. I am introspectively aware that I think. The introspective awareness that I think

is evidence for the proposition that I think. It is also conclusive evidence. It is impossible for the proposition that I think to be false given my introspective awareness that I am thinking. Similarly, my introspective awareness that I think is conclusive evidence for the proposition that I exist. It is impossible for the proposition that I exist to be false given my introspective awareness that I think.

Often, however, our evidence for a proposition is nonconclusive. It is nonconclusive in the sense that it does not guarantee the truth of the proposition that it supports. Suppose that I know that there are 100 marbles in an urn and that 95 of them are black. My evidence supports the proposition that I will draw a black marble, but it does not guarantee it. My evidence is nonconclusive. Suppose, to recall an earlier example, I have the following evidence: I see that my watch says it is noon, I am justified in believing that it is around midday and that my watch has been highly reliable in the past. But, again, suppose that, unbeknownst to me, my watch quit working at noon and that is now 12:30. In this case, my evidence that it is noon is nonconclusive. My evidence supports the proposition that it is noon, but it does not guarantee it.

The evidence for the existence of material objects provided by our sensory experience is nonconclusive evidence. As Descartes famously pointed out, it is possible that my sensory experience is produced, not by material objects, but by a powerful evil demon intent on deceiving me. Thus, even if I am having the sensory experience of a snowball in my hand, that evidence does not guarantee that there is a snowball in my hand. It is logically possible that I have that experience and there be no snowball in my hand.

The term “nonconclusive evidence” can be misleading. To say that *e* is nonconclusive evidence for *p* is *not* to say that *e* does not make it reasonable for us to conclude that *p*. If, for example, I know that 95 of the 100 marbles are black, then it is reasonable for me to conclude, to believe or accept, that I will draw a black one. To say that evidence is nonconclusive is not, therefore, to imply that it does not support a particular conclusion, it is rather to note that it does not guarantee that conclusion. Furthermore, as Matthias Steup notes, we should not confuse nonconclusive evidence with “inconclusive” evidence.<sup>6</sup> To say that a body of evidence, *e*, is nonconclusive

<sup>6</sup> Matthias Steup, *An Introduction to Contemporary Epistemology* (Upper Saddle River, NJ: Prentice-Hall, 1996), pp. 11–12.

with respect to a proposition,  $p$ , is to say that  $e$  supports  $p$  but does not guarantee it. In contrast, to say that a body of evidence,  $e$ , is inconclusive with respect to  $p$  is to say that  $e$  does not support believing  $p$ . In our previous examples, my evidence *does* support my beliefs that it is noon and that I will draw a black marble. My evidence for those propositions is not, therefore, inconclusive.

Given that there is some connection between evidence and justified belief, can we say simply that if someone has evidence for a proposition, then he is justified in believing it? No. Suppose that someone has evidence for believing  $p$  and equally good evidence for believing that *not*- $p$ . If this is all the evidence one has, then one is epistemically justified in withholding belief that  $p$ . Whether one is justified in believing that  $p$  depends on one's *total* evidence. A more plausible view, then, is that if one's total evidence on balance supports  $p$ , then he is justified in believing that  $p$ .

As we noted above, one's justification for believing various propositions can change over time as one acquires additional information. Sometimes our evidence for a proposition can be "defeated" or "overridden." We can lose our justification for believing a proposition when our evidence for it is defeated or overridden. Let us define the concept of "evidential defeat" as follows:

D4  $d$  defeats  $e$  as evidence for  $p$  = Df.  $e$  is evidence for believing that  $p$ , but  $e$  and  $d$  is not evidence for believing that  $p$ .

Let's consider two examples that illustrate the concept of defeat. Suppose that a certain table looks red to you. Let's call this bit of evidence,  $a$ . Now consider the proposition that the table is red. Let's call this proposition,  $b$ . We may say that  $a$  is evidence for  $b$ . We may say that the fact that the table looks red to you offers some support for the proposition that the table is red. Now, suppose that you get some additional information. Suppose that you learn that there is a red light shining on the table. Let's call this additional bit of information,  $c$ . Note that  $a$  and  $c$  is *not* evidence for  $b$ . In this case,  $c$  defeats or overrides  $a$  as evidence for  $b$ . Speaking somewhat loosely, if your only information about the color of the table were  $a$  and  $c$ , then you would no longer be justified in believing  $b$ . Again, we cannot say simply that if one has some evidence for a proposition, then one is justified in believing it. The evidence that one has might be defeated by one's other information.

Let us consider a second example of defeat.<sup>7</sup> Suppose you go to a party and you learn that (*h*): Most of the people in the room are Democrats and John is in the room. We may say that *h* is evidence for (*i*) John is a Democrat. But now suppose you learn that (*j*): Most of the people on the right side of the room are not Democrats and John is on the right side of the room. Even though *h* is evidence for *i*, *h* and *j* is not evidence for *i*. *j* defeats *h* as evidence for *i*.

It is worth noting that defeaters can themselves be defeated. Again, consider the previous example. Suppose that along with your previous evidence, *h* and *j*, you also come to learn (*k*) 49 of the 50 people in the room who voted for the trade bill are Democrats and John voted for the trade bill. Even though *h* and *j* is not evidence for believing *i*, *h* and *j* and *k* is evidence for believing *i*. So, along with the concept of evidential defeat, we may add:

D5  $x$  defeats  $d$  as a defeater of evidence  $e$  for  $p = \text{Df.}$  (i)  $e$  is evidence for believing that  $p$ , (ii)  $e$  and  $d$  is not evidence for believing that  $p$ , and (iii)  $e$  and  $d$  and  $x$  is evidence for believing that  $p$ .

Again, since one can have some evidence for believing a proposition that is defeated by one's other information, it is important to bear in mind that whether one is justified in believing some proposition depends on one's total evidence. A more promising view would be that, if one has evidence for a proposition,  $p$ , and nothing in his total evidence defeats his evidence for  $p$ , then  $p$  is justified for him.

The fact that evidence can be defeated or overridden has an analogy in ethics. Sometimes one feature of a situation ethically requires that one perform an act and certain other features of the situation require that one *not* perform that act. For example, suppose that Jones has promised to meet his friend Smith for lunch at noon. The fact that Jones promised to meet Smith at noon requires that he meet Smith at noon. Suppose we let  $p$  = Jones's promising to meet Smith at noon and let  $q$  = Jones's meeting Smith at noon. We may then say that  $p$  requires  $q$ . Suppose, however, that on his way to meet Smith, Jones comes across Brown, who has been severely injured in an automobile accident. Jones is the only person present who can

<sup>7</sup> Cf. Roderick Chisholm's *Theory of Knowledge* 2nd edn. (Englewood Cliffs, NJ: Prentice-Hall, Inc., 1977), pp. 71–73.

help the severely injured Brown. Relative to these wider, more inclusive, circumstances, Jones is *not* ethically required to meet Smith at noon. Suppose we let  $r$  = Jones's being the only one who can help the severely injured Brown. We might then say that while  $p$  requires  $q$ ,  $p$  and  $r$  does not require  $q$ . The ethical requirement for  $q$  imposed by  $p$  has been overridden or defeated by  $r$ .<sup>8</sup> In the epistemological case, what one is justified in believing depends on one's total evidence. So too, it would seem that in the ethical case, the right action depends on one's total circumstances. Just as one's reasons for performing certain actions can be defeated by further considerations, so too one's reasons for believing various things can be defeated by further evidence.

In this chapter, we have distinguished propositional knowledge from acquaintance knowledge and "how to" knowledge. We also introduced the view that propositional knowledge is justified true belief and looked very briefly at some views about belief, truth, and epistemic justification. In later chapters, we shall examine in more detail some important views about the nature of justification. In the next chapter, however, we will look at some objections to the view that knowledge is justified true belief. These objections are important, for they show that the simple view of knowledge introduced here is not quite right. In considering these objections, and the responses to them, we shall be pursuing an answer to the ancient question, "What is knowledge?"

<sup>8</sup> Of course, it might be that yet further circumstances restore the requirement that Jones meet Smith at noon. Suppose for example that Brown's injuries, though severe, are not life threatening, and that Jones has promised to meet Smith at noon in order to pay a ransom that will save the lives of several hostages. Thus, if  $r$  defeats the requirement for  $q$  imposed by  $p$ , there might be further features that defeat  $r$  as a defeater for the requirement for  $q$ .