

## Chapter 5

# Justification

**Abstract** This chapter focuses on the final component of the traditional account of knowledge: justification. Traditionally, justification has been understood as having good reasons for believing that a particular claim is true. The nature of these good reasons is examined in this chapter. In particular, practical reasons for accepting a particular claim are distinguished from epistemic reasons for accepting a particular claim. It is the epistemic reasons that are necessary for knowledge. Additionally, a major contemporary debate in epistemology concerning whether one always needs good reasons in order to be justified is explored in this chapter. Internalists say “yes”, but externalists say “no”. Some of the major moves in this debate are explained in this chapter. However, it becomes clear by the chapter’s end that whether internalists or externalists are correct in general, the sort of justification required for scientific knowledge does require good reasons, which are best understood as evidence.

We are now ready to explore the third, and final, component of the traditional account of knowledge: *justification*. As we have seen, in order to know that  $p$  you must believe that  $p$  and  $p$  must be true. Nonetheless, as we noted in chapter two, true belief is not sufficient for knowledge. After all, you might believe that there is an even number of stars in the Milky Way galaxy because of a guess, and you might be lucky and have guessed correctly. In such a case you would have a true belief, but clearly you would not *know* that there is an even number of stars in the Milky Way galaxy. What is missing? What more would you need in order to have knowledge? According to the traditional account of knowledge, you do not know that there is an even number of stars in the Milky Way galaxy because you do not have good reasons for your true belief. Since you believe what you do simply as a result of guessing, your belief lacks *justification*.

Intuitively, we recognize that some things provide good reasons to believe that  $p$  and others do not. So, we have at least some grasp on what it means to have justification for a belief. For example, your visual experience as of a tree in the yard in normal lighting conditions seems like a good reason to believe that there is a tree in the yard. Similarly, reading in a very reputable journal that a particular experiment yielded a certain result is a good reason to believe that the experiment had that result. Alternatively, your love for the Bears as your favorite football team is not a good reason, on its own, to think they will win the game. Your fear of

heights is not itself a good reason to believe that a tall bridge is unsafe. What is the difference between these two pairs of cases? Plausibly, the difference is that in the first two cases you have justification for the belief in question, but not in the second two cases. As we have already mentioned, traditionally justification is understood in terms of having good reasons. So, you have justification in the first two cases because you have good reasons for thinking that the propositions believed are true, but you lack such reasons in the second pair of cases. More generally, the traditional idea is that having justification for believing that  $p$  requires having good reasons for thinking that  $p$  is true.<sup>1</sup>

But, what sorts of things are these good reasons? This seemingly straightforward question is surprisingly difficult to answer. In part the difficulty arises from the fact that we may mean different things when asking this question. One thing we might mean, which we will set aside until chapter ten, is what does it take for some bit of evidence to provide a good reason to believe something? Another thing we might mean, which will be our focus in this chapter, is what is justification in general?

As will become clear in this chapter, there is still a lot of controversy concerning various aspects of justification despite the attention that it has garnered for hundreds of years in the field of epistemology. Although we are not likely to definitively settle any of the major debates concerning justification, this chapter will provide us with a sufficient grasp of the relevant issues to not only appreciate the traditional account of knowledge, but also, to begin to better understand scientific knowledge.

## 5.1 The Nature of Justification

Before beginning our investigation of three of the most well entrenched debates concerning the nature of justification it will be helpful to first briefly discuss several distinctions. While these distinctions will not make it obvious which side in the debates that follow is correct, they are very helpful for properly understanding those debates. Additionally, these distinctions are in many cases key to properly understanding justification.

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<sup>1</sup>It is worth noting that this is different than the idea that justification is what is required to support our claims to know. Toulmin (2003) explains that when someone claims to know that  $p$  she is implicating that she can provide a justification for her knowledge claim. That is to say, she is committing herself to being able to provide adequate grounds for satisfactorily answering the question “how do you know?” While it may be true that one is expected to be able to justify claims to knowledge, this sort of dialectical justification is different than the justification required for knowledge. In order to know that  $p$  one simply needs to have sufficiently strong reasons for believing that  $p$ ; one does not have to be able to fully and persuasively articulate those reasons to others.

### 5.1.1 *Epistemic Justification Versus Pragmatic Justification*

The first important distinction to draw is between *epistemic justification* and *pragmatic justification*. Both kinds of justification can be understood in terms of having good reasons. Nevertheless, they are very different. Epistemic justification consists of good reasons that are indicative of the truth of a proposition (McCain 2014). For example, your visual experience as of a tree in the yard provides you with epistemic justification for believing that there is a tree in the yard. This visual experience gives you epistemic justification because it is a good reason for thinking <there is a tree in the yard> is true. In other words, your visual experience in this case is indicative of the truth of the proposition <there is a tree in the yard>.<sup>2</sup>

Not all good reasons provide epistemic justification though. Seth might have a good reason to think that he will recover from an illness that has an extremely low survival rate because believing that he will recover helps him to better deal with his suffering. Now, if all of Seth's doctors tell him that it is unlikely that he will recover, all the medical studies Seth reads show that in cases like his the likelihood of recovery is extremely low, etc., then it does not seem that he has epistemic justification for believing that he will recover. Despite Seth's belief not being epistemically justified, it may still be pragmatically justified. After all, Seth has good pragmatic reasons for believing that he will recover—it is in his best interest to believe that he will recover because doing so eases his suffering. Unfortunately, it so happens that Seth's good pragmatic reasons are not indicative of the truth of the proposition <Seth will recover>. Consequently, while Seth might be pragmatically justified in believing that he will recover, he is epistemically unjustified in believing this.

It is epistemic justification that is necessary for knowledge. And, so it is epistemic justification that will be our focus throughout this chapter and the remainder of the book.<sup>3</sup>

### 5.1.2 *Justification Versus Justifying*

Another important distinction is that between *having justification* for a belief and *justifying* a belief. These are very different. Having justification for believing something, or one's belief being justified, is a particular state of a person. Ally's having a justified belief that the Bears won the game is a state of Ally—it involves her having a mental state with the appropriate representational content to be a belief, her having various other mental states that provide good reasons to believe <the Bears won the game>, and so on. Ally's justifying her belief that the Bears won

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<sup>2</sup>We will explore what it takes for a particular mental state to be indicative of the truth of a particular proposition in chapter ten when we focus on the nature of evidential/epistemic support.

<sup>3</sup>From this point on we will typically drop the qualifier “epistemic” and simply speak of justification. However, it should be understood that unless specified “justification”, “justified”, and so on are being used in the epistemic senses of these terms.

the game is an action. When we justify a belief we explain to someone (possibly ourselves) the evidence or reasons we have in support of the truth of that belief. So, justification is a matter of having certain mental states/reasons, but justifying is the act of explaining to someone your reasons for what you believe.<sup>4</sup>

Although justification and justifying are very different, it is easy to see why we sometimes confuse them.<sup>5</sup> Often we might think that we are justified in believing something, but as we try to justify the belief we realize that we are not justified in believing as we do. For example, Eric may think that he is justified in believing that a particular celebrity is very ill. Yet, when Eric tries to justify his belief to his friend, Erin, he may come to realize that he does not have very good reasons for believing this at all because his only evidence in support of this belief is that he read in a tabloid that the celebrity was ill. When we attempt to justify our beliefs, even if we are only justifying them to ourselves, we sometimes realize that our reasons for believing as we do are not very good. Of course, there are also times when the process of justifying our beliefs helps us to realize that we have very good reasons for believing what we do. Jane may think that she is justified in believing that hydrogen is the lightest chemical element. As she begins to justify this belief to her friend, Neil, she realizes that she remembers reading this in her chemistry book, she has notes from her latest lecture where the professor said that hydrogen was the lightest chemical element, and so on. In this case, Jane comes to realize that she has very good reasons for her belief.

Given that the act of justifying may sometimes help us to recognize that we have good (or bad) reasons for believing as we do, it is not surprising that we sometimes confuse justifying with being justified. That is to say, we sometimes think that one's belief that  $p$  is not justified unless she can justify that belief. This is a mistake for at least two reasons, though. First, someone can be justified in believing that  $p$  without being able to justify that belief. Think of small children. Presumably, they have a number of justified beliefs. However, it is plausible that for many of their beliefs small children simply lack the conceptual capacities to adequately justify those beliefs to others. Yet, they seem to be justified all the same. Second, someone might come to be justified in believing something she was not originally justified in believing through the very act of trying to justify the belief. It is possible that Carrie believes that  $p$  without having good reasons to do so, but while explaining to Carl why she believes that  $p$  she comes up with what are in fact very good reasons to believe that  $p$ . In such a case, it seems that the act of justifying led Carrie to recognize reasons that make her justified in believing that  $p$ , but she was not justified in so believing before she began justifying her belief. In light of these reasons, we should be careful to clearly distinguish between justification and the act of justifying. It is only the former that is required for knowledge, and so, only justification will be our focus from this point on.

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<sup>4</sup>We will discuss the nature of the mental states that are required for justification much more fully in chapter six when we discuss the nature of evidence.

<sup>5</sup>The act of justifying seems to be what Toulmin (2003) is interested in when he describes justification in terms of having an answer to the question "how do you know?"

### 5.1.3 *Justified in Believing Versus Justifiedly Believing*

Another distinction that is worth briefly mentioning here is the distinction between being justified in believing that  $p$  (propositional justification) and justifiedly believing that  $p$  (doxastic justification).<sup>6</sup> The idea behind this distinction is straightforward. As we have already noted, in order to be justified in believing that  $p$  one needs to have good reasons for thinking that  $p$  is true. However, merely having good reasons to think that  $p$  is true is not sufficient for one's belief that  $p$  to be justified.

To see the distinction between being justified in believing that  $p$  and justifiedly believing that  $p$  consider the following sort of situation:

J.D. is playing a game of chess. It is J.D.'s move, and he has excellent reasons for thinking that he should not sacrifice his queen at this point in the game. He is aware that by sacrificing his queen his opponent will have much stronger pieces on the board, his own position will be inferior to his opponent's, and so on.

In light of these reasons, J.D. is justified in believing that he should not sacrifice his queen at this point in the game. In spite of this, it could be that J.D. believes that he should not sacrifice his queen at this point in the game for some silly reason—perhaps, it is simply his favorite piece to look at, and so he never wants to give up his queen. If J.D. believes that he should not sacrifice his queen at this point in the game because of this silly reason, then his belief is not justified. In this case, believing that he should not sacrifice his queen at this point in the game is justified for J.D., but his belief that he should not sacrifice his queen at this point in the game is not a justified belief. The problem is that while J.D. believes the correct thing, he believes it for the wrong reason. In order for one's belief that  $p$  to be justified one must not only have good reasons for believing that  $p$ , she must also hold the belief on the basis of those good reasons. This distinction will play a role in our discussion of internalism and externalism in this chapter, and it will be very important in later discussions.<sup>7</sup>

### 5.1.4 *Justification and Defeat*

A further point that should be clarified before moving on is that in order to be justified in believing that  $p$  it must be that the total information that one has on balance supports thinking that  $p$  is true. It is not enough for justification that merely a part of one's evidence supports thinking that  $p$  is true. For instance, part of the evidence that Marsha has might give her very good reasons for believing that

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<sup>6</sup>This distinction can also helpfully be put in terms of having justification for believing that  $p$  versus having what Feldman and Conee (1985) term a “well-founded” belief that  $p$ .

<sup>7</sup>We will explore this distinction as well as what is required for a belief to be held on the basis of good reasons much more fully in chapter seven.

there is an elephant in front of her. Marsha could have a visual experience as of an elephant in clear lighting conditions. Along with her background knowledge of what elephants look like, that her vision typically works well, etc., this visual experience gives Marsha good reason to think that there is an elephant in front of her. Nevertheless, it may be that Marsha has additional evidence which defeats the justification her visual experience would normally provide. If in this situation Marsha also has good reason to think that there are no elephants in this area because she is sitting in the living room of her twentieth floor apartment, and she has good reason to think that she has recently taken medication which is known to cause elephant hallucinations as a side effect, then it seems that she is not justified in believing that there is an elephant in front of her. The justification that Marsha's visual experience would normally provide is defeated by the additional evidence she has about her location and the medication she has recently taken.

There are two lessons to be learned from cases like Marsha's. First, justification that is usually provided by particular reasons can be defeated by other information. Second, when determining whether a particular belief is justified we have to take into consideration the total amount of information possessed by the believer.<sup>8</sup>

An additional aspect of justification, which is related to the idea that we have to consider one's total information when assessing justification, is that justification comes in degrees. This simply means that it is possible for you to be more or less justified in believing various things. For example, say your friend, the expert mathematician, has just completed what is for her a simple proof with clearly true assumptions in support of  $p$ . Meanwhile, your other friend, the tabloid reader, has read in the latest issue of his favorite tabloid, which he knows to be fairly unreliable, that  $p$  is true. Clearly, your mathematician friend has very good reasons for believing that  $p$ . Perhaps your tabloid-reading friend has some reason to believe that  $p$  too (it depends on what he knows about how unreliable the tabloid is). Yet, it is clear that your mathematician friend is more justified in believing that  $p$  than your tabloid-reading friend. Similarly, you can be more or less justified in believing various things—you are likely more justified in believing that you know your own name than you are in believing that you know how long it takes to fly from New York to London. So, it is important to keep in mind that justification comes in degrees because you can have better or worse reasons for believing things.

Of course, it is natural at this point to wonder what degree of justification is required for knowledge. That is, you might be wondering how much justification do you need in order to satisfy the justification condition of the traditional account of knowledge. This is a very difficult question to answer. Perhaps the best way to go is with the "criminal standard" view of evidence/good reasons (Conee and Feldman 2004). According to this standard, in order to know that  $p$  you must have good reasons that make the truth of  $p$  beyond a reasonable doubt. Hence, knowledge does not require good reasons that make  $p$  absolutely certain for you, but it does seem that

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<sup>8</sup>This is enough on this point for our current purposes. However, we will return to this issue and explore it more fully in chapter ten.

knowledge requires more than merely some reason to believe. Although “beyond a reasonable doubt” is somewhat vague, it will be sufficient for a working guide for the degree of justification required for knowledge.<sup>9</sup>

### 5.1.5 *Justification and Truth*

A final point to clarify concerns the relationship between justification and truth. Although we have already noted that justification for  $p$  requires having good reasons for thinking that  $p$  is true, a bit more should be said about justification and truth. In order to be justified in believing that  $p$  you have to have good reasons for thinking that  $p$  is true, however, it is possible to have such reasons even when  $p$  is false. In other words, being justified in believing that  $p$  does not entail that  $p$  is true. It is possible to have justified false beliefs. For example, you might have excellent reasons to believe that a particular mathematical theorem is true—a math professor, who you know to be trustworthy, told you that the theorem is true, you read in a reputable journal that the theorem is true, and you have just worked through what strikes you as a sound proof of the theorem. Intuitively, your belief that the theorem is true is justified in this case. After all, you have excellent evidence in support of thinking this theorem is true. Yet, it is still possible that the theorem is false. It could be that you have all of this excellent evidence despite the falsity of the theorem because the math professor was mistaken about which theorem you were discussing, the journal made an error, and you have made a subtle mistake in your proof. This is not to say that these are all likely to have occurred; they are probably very unlikely. Nevertheless, it is possible that all of these things did occur. In such a case you still have excellent reasons to believe as you do, but your belief is false. Justification requires that you have a good indication of the truth of  $p$ , but it does not require an indication that entails the truth of  $p$ . So, just as there are unjustified true beliefs, there are justified false beliefs.

## 5.2 Justification and Normativity

With the preliminaries of the previous section out of the way we are now ready to begin our examination of the first of three major debates about justification. This first debate concerns the relationship between justification and normativity. It seems pretty clear that justification is a normative concept. After all, when we say that a belief is justified/unjustified we seem to be saying that the belief is appropriate/inappropriate or favorable/unfavorable with respect to our ends of

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<sup>9</sup>We will touch upon this issue again in chapter ten when we discuss how a body of evidence supports believing a particular proposition.

believing truths and disbelieving falsehoods, and so on. Although most philosophers agree that justification is a normative concept, there is disagreement about exactly how we should understand this normative aspect of justification.<sup>10</sup>

The debate over the normative aspect of justification typically comes down to whether one accepts a deontological view or a non-deontological view of the normativity of justification. Deontological views focus on things like duty, obligation, permissibility, and blame. Non-deontological views focus on goodness or appropriateness without reference to deontological concepts. Very roughly, a deontological view understands justification for believing that  $p$  in terms of it being obligatory for one to believe that  $p$  or it being permissible for one to believe that  $p$  or one's being blameless for believing that  $p$ . Non-deontological views understand justification in terms of a belief being good or appropriate without appealing to obligation or permissibility or blame. So, just as we might evaluate a knife as being appropriate for the purpose of cutting a pineapple, a belief might be judged appropriate (justified) for the purpose of believing truths while avoiding falsehoods. The non-deontologist will claim that duty, obligation, permissibility, blame, and so on do not enter into the picture.

Let us start by looking more closely at the deontological approach. This view of the nature of justification has a long history stemming from the works of philosophers like René Descartes (1641/1988) and John Locke (1690/1975). Many philosophers are convinced that “the whole notion of epistemic justification has its origin and home in this deontological territory of duty and permission . . . at bottom, epistemic justification *is* deontological justification” (Plantinga 1993b, p. 14).<sup>11</sup> The best way to understand the deontological conception of epistemic justification is in terms of two key ideas (Steup 1996). The first idea is that we are committed to the end of having true beliefs in virtue of the sort of intellectual/rational beings that we are. The second idea is that our having this end imposes upon us a duty to believe in accordance with the evidence that we have (Feldman 1988; Steup 1996). Simply put, according to the deontological conception of justification, a belief is justified when having that belief is what is dictated by one's epistemic duties.<sup>12</sup> Intuitively, this seems correct. When we say that Mary's belief is justified it does seem like we are claiming that she is believing as she *ought* to believe; she is following her epistemic obligations and doing her duty as a rational thinker. Likewise, when we say that Marty's belief is unjustified it seems like we are saying that he is not believing as he ought; he is violating his obligations as a rational thinker.

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<sup>10</sup>Of course, not all philosophers agree that justification is normative. Maffie (1990) and Moser (1989) both suggest that justification can be separated from the normative connotations that usually accompany it.

<sup>11</sup>Philosophers with views as varied as BonJour (1985), Chisholm (1956, 1977), Feldman (1988), Ginet (1975), Goldman (1986)—though he appears to have changed his mind in his (1999)—Lycan (1988), Pollock (1986), and Steup (1996) accept a deontological view of justification.

<sup>12</sup>We will consider what counts as violating one's epistemic duties in this sense more in chapter ten when we explore the nature of evidential support for beliefs.

Despite its intuitive plausibility and its impressive philosophical pedigree, the deontological view of justification is controversial. In fact, the deontological view of justification faces at least two serious objections. The first of these is what we might call the “isolated community” objection. According to this objection, it is possible that one grew up in an isolated community where the traditions of the community are taken to be authoritative. As a result, if it is the consensus of the community that  $p$ , then everyone in the community believes that  $p$ . Suppose a child, Iso, grows up in this community and like everyone else does not question the consensus of the community. Iso comes to believe that  $p$  because it is the consensus of the community. However, the community’s reasons for  $p$ , which Iso accepts, are really bad reasons for believing that  $p$ . According to William Alston (1985), it could be that Iso, and other people in such a situation, has done the best that she can with respect to  $p$  so that Iso is blameless for believing that  $p$ . Despite being blameless for believing that  $p$ , it seems that Iso is still “in a very poor epistemic position” with respect to  $p$  (Alston 1985, p. 34). In essence, Alston’s objection is that merely being blameless in what one believes does not seem to be enough to make one justified in so believing.

Although Alston’s objection seems worrisome and it does illustrate that perhaps justification should not be understood in terms of praise and blame, defenders of deontological approaches can reasonably respond that the primary notion of the deontological approach is not blame. Instead, they can claim that what matters is duty, obligation, and permissibility. Hence, deontologists may respond to Alston’s objection by maintaining that his objection rests on a conflation of “conditions of epistemic *permissibility*, or *rightness*, with conditions of epistemic *blamelessness*” (Moser 1989, p. 39). In other words, deontologists about justification can allow that Iso’s belief, and the beliefs of others in similar situations, are blameless, while continuing to hold that her belief is not permissible. Essentially, deontologists can plausibly maintain that it is possible that one’s belief can be impermissible even if she is blameless for having that belief. This is similar to the ethical truth that someone might do the wrong thing, but not be blameworthy for doing so. For instance, say that it is very bad to push a particular button—doing so will cause a lot of bunnies to suffer intense pain. Jason has no reason to think that pushing the button will have this effect, plus someone he trusts has told him that pushing the button will cause a lot of bunnies to feel very happy. Jason pushes the button. Did he do something wrong? It is plausible that the answer to this question is “yes”. Jason caused unnecessary suffering, which is wrong. Should we blame Jason for what he did? It seems equally plausible that the answer to this question is “no”. After all, Jason was doing the best he could, and he did have good reasons for thinking that what he was doing was right, or at the very least not something that was wrong to do. The deontologist can plausibly claim that something similar happens with belief at times. There are times when someone believes wrongly, she violates her epistemic duties, but she is blameless for having the belief. Since the person believes wrongly, it seems that her belief is unjustified even though it is blameless.

Alston (1985, 1988) offers a second objection to the deontological conception of justification, which we might term the “involuntariness” objection. The gist of this objection is that in order to have a duty or obligation to do something it seems

that we must be able to do that thing. As it is sometimes put in ethical discourses, *ought implies can*—you are obligated to do  $X$  only if you *can* do  $X$ . For instance, if you would need superhuman strength in order to save your neighbor's cat from a burning building, it seems that you are not obligated to save the cat because you cannot do it. Similarly, Alston claims that in order to have an obligation to believe or refrain from believing that  $p$  it has to be the case that you can so believe or refrain from believing. However, Alston points out that it seems we simply do not have this sort of voluntary control over our beliefs. Beliefs come to us involuntarily—we cannot simply choose by force of will what we will believe and what we will not believe. Since our beliefs are involuntary, Alston claims that we cannot be obligated to believe or refrain from believing things. But, if we lack such obligations, then the deontological view must be mistaken because it holds that justification is a matter of meeting or failing to meet one's epistemic obligations. Thus, Alston concludes that the deontological view of justification is mistaken because we lack voluntary control over what we believe.

There are at least two promising tactics that deontologists can make use of in responding to this second objection from Alston. The first is to argue, as Richard Feldman (1988) does, that one can have an obligation to believe that  $p$  (or refrain from believing that  $p$ ) even if she lacks voluntary control over what she believes. Feldman points out that many obligations are such that they do not adhere to the "ought implies can" principle. As Feldman notes, when you take out a mortgage on a house you have a legal obligation to make your payments. This obligation does not go away if you become unable to make the payments. Many legal obligations are such that they hold even if you cannot meet them. Similarly, it seems that receiving credit for a particular course might require passing an exam with a score above a certain percentile (Steup 1996). The fact that Jeb cannot make a score above that percentile on the test does not mean that he will satisfy the course requirements because he is not obligated to do what he cannot. The obligation to score higher than the particular percentile remains; Jeb simply fails to meet his obligation in this case. Consequently, the deontologist may respond to Alston's objection by maintaining that one does not have to have voluntary control over one's beliefs in order to have obligations with respect to what one is to believe. Thus, one might maintain that the involuntariness objection is not a problem for the deontological view.

The second approach to Alston's objection involves following Matthias Steup (1996) in arguing that we do have sufficient voluntary control over our beliefs to have obligations regarding what we are to believe. According to Steup, while it is true that we cannot simply choose what to believe through force of will, we do have some voluntary control over our beliefs. In many cases it is within our voluntary control to deliberate more or less carefully over the evidence that we have. Making the decision to focus carefully on the evidence may lead to one having different beliefs even if once one has appreciated the evidence for  $p$  she cannot help but believe that  $p$ . So, one might respond to the involuntariness objection by arguing that we do have sufficient voluntary control in order to have the sort of obligations that the deontological view claims.

As we have seen the deontological view is an intuitively plausible view of the nature of justification with an impressive pedigree. Although there are serious objections to the deontological view, there are also promising responses to those objections. In light of these facts, the deontological view seems to remain very much a live option. Of course, the debate over the proper way to understand the normative aspect of justification is still raging.<sup>13</sup> Fortunately, our goal is to simply better understand justification and its role in knowledge—a goal for which it is enough to appreciate the basic features of this debate and some of the things that can be said about what seems to be the historically dominant view.

### 5.3 The Structure of Justification

The next debate concerns the structure of justification. This is the oldest of the three debates that we will consider. In fact, it is likely one of the oldest debates about justification, period, as it originates in ancient times in the work of Aristotle and Sextus Empiricus. The question of the structure of justification arises from consideration of the regress of reasons. Although there are numerous ways to express this regress, perhaps the simplest is to think of it in terms of the sort of questioning that one might receive from a child.<sup>14</sup> From a very young age children begin asking “why?” The regress of reasons can be understood as a continual series of why-questions of the sort that a child might ask you. Assume that you justifiably believe that the Bears won yesterday’s game. Now, someone might ask you, “why do you believe that the Bears won yesterday’s game?”—that is, someone might ask you what your reason(s) for believing this is. You might answer that you believe this because you read about the score of yesterday’s game in the *New York Times*. Hence, you have given your reason for believing that the Bears won; you read that they won in the *New York Times*. But, now your interlocutor might ask “why do you believe what the *New York Times* says?” Plausibly, you will respond that the *New York Times* is a reliable source for this sort of information. But, of course, your interlocutor can ask, “why do you think the *New York Times* is a reliable source of this sort of information?” By now you can see that this process can continue

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<sup>13</sup>One very prominent alternative to the deontological conception of justification that has arisen in recent years is the virtue approach. Virtue epistemologists claim that justification is normative, but not in the sense of having to do with duty or obligation. Instead, virtue epistemologists claim that justification is normative in the sense of being connected to particular excellences or cognitive virtues. Exploration of this rich area of contemporary epistemology would take us too far afield from our present purposes. The interested reader is encouraged to consult some of the recent literature on virtue epistemology, such as: Baehr (2011), Greco (2000, 2010), Kvanvig (1992), Montmarquet (1993), Pritchard (2005, 2010), Sosa (1991, 2007, 2009, 2011), and Zagzebski (1996).

<sup>14</sup>For a sampling of the many alternative presentations of the regress of reasons see BonJour (2010), DePaul (2014), Feldman (2003), Klein (2014a, b), Olsson (2014a, b), and Steup (1996).

indefinitely. You keep providing reasons, and your interlocutor keeps asking you for reasons in support of those reasons. It seems that each of your reasons in this chain must itself be reasonable for you to hold or else nothing in the chain is reasonable, including your initial belief that the Bears won yesterday's game. This is the regress of reasons.

The debate over the structure of justification concerns how we should respond to the regress of reasons. In particular, the challenge is to explain how this regress might play out in such a way that our original assumption, that you justifiably believe that the Bears won yesterday's game, is vindicated. Of course, one option is that there is no way to do this, and so, your belief is not justified. This form of skepticism is highly implausible because it would imply that none of our beliefs whatsoever are justified because this regress can apply to each of them. So, this is to be our last resort—only to be accepted if no other option is at all plausible. What are our other options for responding to the regress? We can sort the classic responses to the regress by asking a pair of questions: Do the reasons form a circle? Namely, is it the case that something like the following happens: your reason for  $p$  is  $q$ , your reason for  $q$  is  $r$ , and your reason for  $r$  is  $p$ ? If the reasons do not form a circle, do they eventually end? (Turri 2014). This gives us three possibilities: *coherentism*—the reasons form a circle (as we will see below this is a somewhat misleading characterization of coherentism), *foundationalism*—the reasons do not form a circle, and they eventually end, and *infinetism*—the reasons do not form a circle, and they do not end.

Coherentism and foundationalism have long been the primary contenders with foundationalism being the dominant choice for much of the history of thought on the regress of reasons (BonJour 2010 and Kvanvig 2014). In fact, it seems that the consensus with respect to the regress is that coherentism and foundationalism are the only real contenders. D.M. Armstrong (1973, p. 155) claims that infinitism, like the skeptical response, is “a *desperate* solution, to be considered only if all others are clearly seen to be unsatisfactory.” Laurence BonJour (2010, p. 179) goes so far as to question whether infinitism is really even logically possible. There is a strong tendency both historically and in contemporary discussions to regard infinitism as not really an option.<sup>15</sup> In light of this, we will limit our focus to the two primary approaches, coherentism and foundationalism, as well as hybrid approaches that seek to combine elements from these two leading responses. We will begin with foundationalism because as the dominant response to the regress historically it is easier to understand other responses as reactions to it.

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<sup>15</sup> Fumerton and Hasan (2010) suggest that Peter Klein seems to be the only supporter of infinitism. Whether Klein is the only supporter or not, it is clear that he is its most prominent supporter and that he has attempted to defend it on numerous occasions (1999, 2005, 2007, 2014a, b). In spite of Klein's efforts, the consensus remains that infinitism faces devastating objections which render it an option that is only worth taking seriously if both foundationalism and coherentism are first *definitively* shown to be flawed, which they have not been. For a sampling of the many objections to infinitism see Audi (1988, 1993, 2011), BonJour (2010), Dancy (1985), Ginet (2005a, b), Post (1980), and Steup (1996).

### 5.3.1 *Foundationalism*

It is an understatement to say that foundationalism is simply the more dominant of two primary contenders. As Richard Fumerton and Ali Hasan (2010) say, “it is surely fair to suggest that for literally thousands of years the foundationalist’s thesis was taken to be almost trivially true.” As we saw above, this general foundationalist thesis is that the regress of reasons stops. A helpful way to get the general picture is to think of the structure of justification as analogous to the structure of a building. Just as a building has many parts that rest on a foundation, foundationalists hold that our beliefs and the reasons for those beliefs ultimately all rest on a foundation.<sup>16</sup> The foundation of our justification consists of *basic beliefs*. Basic beliefs are beliefs that are justified but do not receive their justification from any other beliefs. These basic beliefs are thought to receive their justification from something that provides justification without itself needing to be justified, e.g. perceptual experience (on most versions of foundationalism). Since basic beliefs receive their justification from something other than a belief, and this provider of justification does not itself admit of justification, basic beliefs are held to be regress stoppers. Once you get to a basic belief, such as, perhaps, your belief that you are having a particular sensory experience, the question of “why do you believe that you are having that particular sensory experience?” is simply answered with “because I am having it”. That is to say, there is no further reason for you to point out aside from the experience itself. Foundationalists hold that it does not make sense to ask what reason you have for the experience because experiences are not the sort of thing for which one can have reasons. Despite the fact that one cannot have reasons for experiences, foundationalists hold that experiences can themselves provide reasons for basic beliefs. Consequently, the regress of reasons ends with basic beliefs. It is upon this foundation of basic beliefs that all of our other justified beliefs ultimately rest. Thus, the structure of justification is one of a foundation of basic beliefs with other justified beliefs being justified by these basic beliefs and by other beliefs which are themselves justified by basic beliefs.

Although all foundationalist views accept this general view of the structure of justification, there are various ways to spell out the foundationalist picture. Depending on what one allows as basic beliefs and how one allows justification to transmit from those basic beliefs to other beliefs, very different pictures of justification can arise. We will take a brief look at two of the major categories of foundationalist views.

A very extreme form of foundationalism, the sort that Descartes defended, limits basic beliefs to those about which we are infallible and requires that other beliefs be entailed by these basic beliefs in order to be justified. According to this classical form of foundationalism, the only basic beliefs are those that we cannot be wrong about. How many of our beliefs are like that though? It seems that there are few, if

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<sup>16</sup>See DePaul (2014), Smithies (2014), Sosa (1980), and Steup (1996) for more on the building metaphor for foundationalism.

any. Consider your belief that you are seeing this page. Is it impossible that you are wrong about this? No. After all, you could be merely dreaming that you are seeing this page, or you could be hallucinating that there is a page. It seems that the only beliefs about which we might be infallible are beliefs about the contents of our own current mental states. For example, perhaps you are infallible when you believe that it seems to you that you are seeing this page. Even if we are infallible about such beliefs, and so they can be basic beliefs on this account, we still seem to be faced with two problems.<sup>17</sup>

First of all, it does not seem that we form beliefs about the contents of our own mental states very often (Feldman 2003). When you form the belief that there is a tree in the yard you typically just have a visual experience and form the belief that there is tree in the yard. You do not tend to first form the belief that it visually appears to you that there is a tree in the yard and then deduce from this belief that there is a tree in the yard. So, it seems that we simply do not form many of the basic beliefs that classical foundationalism requires for the beliefs we actually have to be justified.

Second, it is very hard to see how the beliefs that we normally form can be justified on the classical foundationalist picture. Assuming that we do form beliefs about the contents of our mental states, it is far from clear that such beliefs logically entail the many other beliefs that we commonsensically take to be justified. For instance, it does not seem that your belief that it seems to you that you are seeing this page entails that you are seeing this page. As we noted above, it could be that it seems to you that you are seeing this page while there is no page for you to see at all. This is the primary problem for classical foundationalism—it seems to yield the result that most all of our beliefs about the world outside of our own mental states are unjustified. This thoroughgoing skepticism is unpalatable. Thus, the majority of foundationalists opt for a less demanding form of foundationalism.<sup>18</sup>

These more moderate forms of foundationalism loosen the restrictions that classical foundationalism places on justification. First, moderate foundationalists allow that basic beliefs can transmit justification to other beliefs through non-deductive connections to those beliefs. Second, the foundation of basic beliefs is much broader in moderate views than in classical foundationalism. Moderate foundationalism allows that some basic beliefs can be about the external world,

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<sup>17</sup>It is not clear that we really are infallible about such beliefs. Feldman (2003) and Williamson (2000) both offer arguments to the effect that we can be mistaken about the content of our own current mental states.

<sup>18</sup>This is not to say that there are no classical foundationalists. Bonjour (2000, 2010), Fumerton (1995, 2000), and McGrew (1995) all defend versions of classical foundationalism. It is worth noting that each of their versions of foundationalism tends to weaken Descartes' requirement that justified beliefs be entailed by basic beliefs. Instead, they require the non-basic beliefs to be supported by basic beliefs in either a deductive or non-deductive fashion. Although this mitigates the threat of skepticism somewhat, each of these classical foundationalists acknowledges that their views face skeptical challenges that may be very difficult to overcome.

not just our own minds. An example of this is that many forms of moderate foundationalism will allow that your belief that you see this page (or at least that you are seeing something with a particular shape and color) is a basic belief. By allowing a broader foundation of basic beliefs (often perceptual beliefs, memorial beliefs, and introspective beliefs are included), moderate foundationalism seems to avoid both of the problems listed above for classical foundationalism. We actually form the beliefs that moderate foundationalism claims are basic. Further, it seems that moderate foundationalism has a much better chance of adequately responding to the threat of skepticism than classical foundationalism.

Although moderate foundationalism seems superior to classical foundationalism, it is not without its challenges. The primary challenge to moderate foundationalism is to account for how it is that basic beliefs are themselves justified. What is it about a visual experience, of this page say, that justifies a particular belief? Often this sort of problem is put in the form of a dilemma.<sup>19</sup> Either the experiences that justify basic beliefs have the same sort of content as a belief or they do not. If they do have the same sort of content, then it seems that they themselves admit of being justified or unjustified; and so, they seem to require justification. This, of course, would mean that they are not fitting stopping places for the regress. If these experiences do not have the same sort of content as belief, then while it seems that they cannot be justified or unjustified themselves, it is mysterious how they can justify beliefs.

Moderate foundationalists give various responses to this challenge. Some simply argue that if the dilemma is a problem, then it is a problem for all non-skeptical responses to the regress (Steup 1996). Others argue that this challenge to foundationalism makes a levels confusion. More precisely, the challenge conflates what is required for justified beliefs about the world with what is required for justified beliefs about which of our beliefs about the world are justified (Pryor 2001). We do not need to settle the issue here. It is enough for our purposes to recognize that there is a challenge and that moderate foundationalists have ways that they may attempt to respond.<sup>20</sup>

### 5.3.2 *Coherentism*

Foundationalism is the most widely held view of the structure of justification both historically and currently. It is not without rivals, however. Chief among foundationalism's rivals is coherentism. Coherentism arises out of dissatisfaction with foundationalism (Kvanvig 2014). The sort of dilemma that we mentioned above leads some to believe that the basic beliefs posited by foundationalism are arbitrary (Kvanvig 2014). Others reject the idea that anything other than a belief

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<sup>19</sup> BonJour (1978, 1985), Sellars (1956), and Klein (1999, 2005, 2007) all put forward versions of this sort of dilemma.

<sup>20</sup>For additional responses to this sort of worry see Smithies (2014).

can justify a belief—they simply deny that it makes sense to think that there can be basic beliefs (Davidson 1986). Finally, there is the fact that it just seems intuitive that when your beliefs cohere with one another they are more justified than when they do not.

As we mentioned above, coherentism offers a unique response to the regress. The coherentist response does not require the positing of basic beliefs or infinite regresses of reasons. Instead, it seems that coherentism responds to the regress of reasons by claiming that our reasons form a circle (or more accurately, that our reasons are not a matter of linear progression). On its face, this response is highly implausible. After all, how can circular reasoning lead to justified beliefs? This is one of the reasons that many find coherentism untenable.

Coherentists are quick to point out, however, that they are not suggesting that circular reasoning yields justification. In fact, they claim that it is only because of a mistaken assumption that one might construe coherentism as responding to the regress in this fashion. The mistaken assumption is that justification is a linear affair where a single belief,  $p$ , justifies another belief,  $q$ , and  $q$  justifies  $r$ , and so on. It is this picture of justification that gives rise to the regress in the first place. Coherentists maintain that instead of this linear picture we should understand justification holistically. Beliefs are justified because of how they fit with other beliefs—our beliefs form a web, rather than a line or chain, and it is a belief's placement in this web and the number of connecting strands within this web that yields its justification.<sup>21</sup> Once we recognize that beliefs are justified in sets or systems rather than individually coherentists claim the regress does not arise.<sup>22</sup>

Coherentism avoids the regress by denying the assumption that justification proceeds in a linear fashion from one belief to the next. It avoids the challenge facing moderate foundationalism by denying that there are basic beliefs, and instead holding that beliefs are justified only by other beliefs through a relation of coherence. So far things are looking good. However, coherentism faces challenges of its own. The first major obstacle for coherentism is to spell out exactly what it means for beliefs to cohere with one another. One early attempt at making this coherence relation precise holds that coherence is a matter of two things: consistency and logical entailment (Ewing 1934). The idea is that in order for a set of beliefs to be coherent, and so for the individual beliefs that make up the set to be justified, the set must be consistent (it must be possible for all of the beliefs to be true at the same time) and each member of the set must be logically entailed by the conjunction of the other members. Schematically, the set  $\{p, q, r\}$  is coherent just in case it is possible that  $p, q$ , and  $r$  are all true and  $p \ \& \ q$  entail  $r$ ,  $p \ \& \ r$  entail  $q$ , and  $q \ \& \ r$  entail  $p$ .

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<sup>21</sup>The web metaphor comes from Quine and Ullian (1970). Another common metaphor used to describe the coherentist approach is that of a raft (Neurath 1932; Sosa 1980).

<sup>22</sup>This way of responding to the regress seems to have been first suggested by Bosanquet (1920).

Although this early account of coherence is admirably clear, it is problematic. It seems that there can be sets of beliefs that are intuitively coherent (and justified), but are such that the individual beliefs in the set are not entailed by the conjunction of the other members. For example, consider the following set of beliefs<sup>23</sup>:

- (A) “Rob was at the location of the robbery”
- (B) “Rob owns the same kind of gun as that used by the robber”
- (C) “Rob deposited a large amount of money in the bank the day after the robbery”

It seems that {A,B,C} is clearly coherent, however, this set fails to satisfy the requirement that each member be entailed by the other members. After all, A does not logically follow from B & C, B does not logically follow from A & C, and C does not logically follow from A & B.

The account of coherence developed by C.I. Lewis (1946) improves upon the one just described. Lewis’ account requires consistency, but instead of logical entailment it only requires that each belief be probabilistically supported by the other beliefs in the set. So, on this account of coherence A does not have to be entailed by B & C, instead it simply must be the case that A is more probable given the truth of B & C (similar considerations apply to B and C). This seems to avoid the problem just described for the entailment view of coherence. In spite of this, there is an additional problem that remains for both accounts of coherence.

It seems that requiring consistency is too strong. It seems that your beliefs can be coherent, and justified, despite the fact that there is some inconsistency lurking among the members of the set. This seems particularly true in cases where you cannot see the inconsistency. An excellent example of this was present in the actual thinking of the great philosopher and mathematician, Gottlob Frege. After much careful study and reflection, Frege posed basic laws of arithmetic. He was justified in believing each of these proposed laws and presumably his beliefs were coherent. However, he did not realize that the laws were inconsistent until Bertrand Russell wrote him a letter explaining the inconsistency.<sup>24</sup> It is quite plausible that among the vast number of beliefs that we have some members of the set are inconsistent. Does this mean that all of our beliefs fail to be coherent? And, so on coherentism they fail to be justified? It seems not. Thus, it seems that consistency is too strong of a requirement for coherence.<sup>25</sup>

A final attempt to spell out the coherence relation that we will consider is in terms of explanatory relations. The idea here is that beliefs cohere with one another by explaining or being explained by one another.<sup>26</sup> This approach seems to avoid the problems of the previous two, and it does seem initially plausible. But, it faces its own difficulty. If coherence, and hence justification, is increased by the quality

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<sup>23</sup>This example is borrowed from Olsson (2014a).

<sup>24</sup>For more on this example see Kornblith (1989) and Steup (1996).

<sup>25</sup>For more on this see Kvanvig (2012).

<sup>26</sup>This sort of view has been suggested as at least a component of coherence by Bonjour (1985), Harman (1973), Lehrer (2000), Lycan (1988), Poston (2014), and Thagard (2000).

of the explanatory picture, this approach needs to be supplemented with an account of what makes one explanation better than another (Steup 1996). While this is not a trivial task by any means, it is one that can be accomplished. In fact, it is one that we will take steps toward accomplishing in chapters nine and ten.

It seems that coherentism has some hope of overcoming its first major obstacle by spelling out what coherence is. It faces additional problems though. Primary among these are what are known as the “alternative systems” and “isolation” objections. Although these objections are different in important ways, they expose the same general problem for coherentism—it seems that coherentism does not require enough of a connection to the world around you for justification. Let us take a closer look at these objections beginning with the alternative systems objections.

The alternative systems objection challenges whether coherence is related to truth. Essentially, the idea is that for any set of beliefs that someone has she could have a completely different set of beliefs that exhibits just as much coherence as the first set. It seems that there are indefinitely many sets like this. What is especially worrisome is that the coherence of these sets of beliefs has nothing to do with how the world around the person is. This objection makes it seem that coherence is not connected to the truth. After all, an indefinite number of vastly different sets of beliefs can each be equally coherent, and so given coherentism, equally justified. However, it is implausible that all of these vastly different sets of beliefs are equally likely to be true especially since their coherence has nothing to do with the world around the believer. Justification is supposed to help us to achieve our aim of believing the truth, but it is not clear that coherence of this sort is connected with truth in a way that helps with this aim. This objection challenges whether coherence can really be the correct way to understand justification.

The isolation objection again presses the issue of coherence not being sufficient for justification. According to this objection, it is possible that you have a very coherent, and so given coherentism well justified, set of beliefs even though your beliefs do not take account of the information your experiences provide about the world around you. Richard Feldman (2003, p. 68) offers an excellent example to illustrate this objection:

Professor Feldman is a rather short philosophy professor with a keen interest in basketball. Magic Johnson (MJ) was an outstanding professional basketball player. While playing a game, we may suppose, MJ had a fully coherent system of beliefs. Magic Feldman (MF) is a possible, though unusual, character, who is a combination of the professor and the basketball player. MF has a remarkable imagination, so remarkable that while actually teaching a philosophy class, he thinks he is playing basketball. Indeed, he has *exactly* the beliefs MJ has. Because MJ’s belief system was coherent, MF’s belief system is also coherent.

The problem is that according to coherentism, it seems that Magic Feldman’s beliefs are justified because they are coherent, but intuitively this is mistaken. The problem is that Magic Feldman’s beliefs are isolated from the world around him—they are not at all responsive to the experiences that he is having while teaching class. In light of this, the isolation objection is a serious challenge to the idea that coherence is the correct way to understand justification.

Coherentists often try to resolve these problems by assigning a special role to beliefs that are close to experiences. The idea is that beliefs caused directly by experiences are special in some way or, alternatively, some beliefs have some initial credibility all on their own.<sup>27</sup> While this may avoid these problems by giving experience a more central role to play in coherentism, it becomes unclear whether these theories are really coherentist (Olsson 2014b). After all, this seems to be granting at least some beliefs something very similar to the status of the foundationalists' basic beliefs. For now, we will simply note that there seems to be serious problems for coherentism that can be avoided, but only at the price of giving up some of the "purity" of the coherence theory. As we will soon see, this is not necessarily a bad thing though.<sup>28</sup>

The final major obstacle to coherentism comes from recent formal work in probabilistic measures of coherence. The problem for coherentism is that two distinct impossibility theorems have been proven, and they seem to imply that no measure of coherence is truth conducive (Bovens and Hartmann 2003; Olsson 2005). Basically, these theorems state that it does not matter how we try to probabilistically measure coherence it will not be the case that more coherence amounts to a higher probability of truth. This seems to pose a very serious threat to the hope of coherence being sufficiently connected with the truth to provide an account of justification.

Thus far, coherentists have taken one of two approaches when responding to the proofs for these impossibility theorems (Olsson 2014b). The first approach is to argue that the proofs for these theorems are not successful because they rely on dubious premises or even that the entire project of expressing coherence in a probabilistic framework is a mistake.<sup>29</sup> The second approach is to accept that these impossibility results have been proven, but argue that this does not show that coherence is not a valuable epistemic property. Philosophers who take this approach argue that even if coherence is not truth conducive, it is still linked indirectly to confirmation (Dietrich and Moretti 2005), or it can be useful in inference to the best explanation by helping us to make comparative evaluations of explanations (Glass 2007), or it may still be that higher coherence entails a higher probability that the sources of information providing the elements in the coherent set are reliable (Olsson and Schubert 2007), or coherence is connected to the truth in a weaker, but still important sense (Angere 2007, 2008). Fortunately, we do not need to settle these issues; it is enough to recognize that coherentism faces a challenge from these impossibility theorems and that there are live options for responding to this challenge.

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<sup>27</sup> BonJour (1985), Lewis (1946), Lycan (1988, 2012), Poston (2014), Rescher (1973), and Thagard (2000) take this sort of approach.

<sup>28</sup> Olsson (2014b) and Steup (1996) have both noted that various paradigm coherentist theories such as BonJour's (1985) and Lehrer's (1974, 2000) may be compatible with foundationalism.

<sup>29</sup> See Douven and Meijs (2007), Huemer (2007, 2011), and Schupbach (2008) for responses claiming that the theorems rely on dubious premises. See Thagard (2000, 2005) for arguments for thinking that expressing coherence in a probabilistic framework is simply a mistake.

### 5.3.3 *Hybrid Responses*

At this point we have seen that both foundationalism and coherentism have some intuitive plausibility. Nonetheless, we have also seen that both responses to the regress face challenges. Interestingly, we have seen that what has become the standard coherentist response to two of the classic objections to the theory, the alternative systems objection and the isolation objection, is to make the theory more similar to foundationalism (so similar, in fact, that some claim it makes the view really a kind of moderate foundationalism). It is worth noting that it is common for foundationalists to embrace coherentist elements in their theories too. Many foundationalists accept that coherence can increase the level of justification had by one's beliefs.<sup>30</sup> Some foundationalists even allow that coherence can increase the justification of basic beliefs (DePaul 2014). Perhaps by embracing some coherentist elements foundationalists can offer an explanation for how experiences provide justification for basic beliefs.

In light of these considerations it seems clear that “foundationalists and coherentists can mutually benefit from the respective virtues their theories have to offer” (Steup 1996, pp. 158). In fact, many philosophers have realized that not only can they benefit from this sort of cross-pollination; the best theory of justification is a combination of coherentism and foundationalism. At first this may seem to be impossible because foundationalism requires basic beliefs, and coherentism denies there are such a thing. Yet, if we understand the core claims of these views as Earl Conee (1988) suggests, the two are compatible. According to Conee, there are three core foundationalist claims:

1. Epistemic justification must be grounded in experience.
2. Sensory experiences can act as a constraint on justification without themselves having to be justified by beliefs.
3. Coherence among beliefs is insufficient for justification in the face of conflicting experiences.

Conee's take on foundationalism is slightly different than the standard presentation, however, it seems to capture the heart of moderate foundationalism. Experiences form a foundation that allows for the regress of reasons to be stopped.

Conee construes coherentism as consisting of two primary claims:

1. A sufficient level of explanatory coherence yields justification.
2. A system of beliefs can be justified by their coherence alone without the need for any of the beliefs in the system to be justified independently of its role in the system.

Again, it seems that Conee captures the heart of coherentism. Furthermore, there is no conflict between the core claims of foundationalism and coherentism.

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<sup>30</sup> Chisholm (1966, 1977, 1989) in the various incarnations of his *Theory of Knowledge* accepts that coherence enhances justification; Audi (1988), Russell (1912a, b), and Steup (1996) agree.

These considerations suggest that perhaps the best theory of justification incorporates the core claims of both views. Such a view would hold that the regress of reasons is stopped by justifying experiences, but that in order for a belief to be justified it must be part of a coherent set of both beliefs and experiences. There are various ways that such a view could be spelled out.<sup>31</sup> As we will see in chapter ten, one of the most promising ways to spell out such a theory of justification is in terms of explanatory considerations that take both beliefs and experiences to be part of the explanatory set.

## 5.4 Internalism Versus Externalism

The final debate that we will explore in this chapter is the internalism versus externalism debate.<sup>32</sup> This debate concerns what sort of information can provide one with the good reasons required for justification. Very roughly, internalists hold that justification depends upon facts that can be known from a first-person perspective via reflection alone. Externalists deny this. Before delving into the details of this debate it is worth briefly mentioning how it relates to the previous two major debates we have discussed. Concerning the normativity debate, some philosophers claim that the deontological conception of justification provides strong support for internalism, but others deny this connection.<sup>33</sup> Concerning the debate over the structure of justification, there is a less controversial connection. All major coherentist theories are internalist while foundationalist theories come in both internalist and externalist varieties (the same can be said of hybrid theories). So, as is clear, there are some connections between this debate and the previous two, but for simplicity we can treat it as a fully autonomous debate here.

The first step in understanding this debate is to get clear about the range of internalist and externalist views. Before doing so, it is very important to recall the distinction drawn above between propositional justification and well-founded belief/doxastic justification. Internalist theories tend to be theories of propositional justification—most internalists agree that something beyond internal facts are required in order for a belief to be appropriately based on one's reasons.

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<sup>31</sup>In addition to Conee (1988), see Haack (1993), McCain (2014), and Sosa (1980, 1991).

<sup>32</sup>As we noted in chapter four it is often an unfortunate fact that different philosophical debates are given the same name. There are at least two major internalism/externalism debates. The first, which we will be focusing on, concerns epistemic justification. The second concerns the nature of the content of our mental states. Roughly, this second debate centers on the question of whether one's external environment determines the content of her internal mental states. For more on the internalism/externalism debate about mental content see Burge (1986), Gertler (2012), Goldberg (2007), Kripke (1972), Lau and Deutsch (2014), and Putnam (1975).

<sup>33</sup>For discussion of this purported connection see Bergmann (2006), BonJour (1985), Ginet (1975), Goldman (1999), Kvanvig (2014), Poston (2008), and Vahid (2014).

Essentially, internalists think that propositional justification is an internal matter (we will see more about this very soon) and that propositional justification is only one necessary component of doxastic justification. Mistakenly taking internalism to be about well-founded belief/doxastic justification can lead to confusion, which at times leads to internalists and externalists talking past one another.<sup>34</sup>

Following James Pryor (2001) we can sort internalist and externalist views by first distinguishing between various forms of internalism. All internalist theories accept:

Mentalism: Whether one is justified in believing  $p$  supervenes on facts which one is in a position to know about by reflection alone. (Pryor 2001, p. 104)<sup>35</sup>

To say that some set of facts, X, supervenes on some other set of facts, Y, is just to say that no two things can be different with respect to the X facts without being different with respect to the Y facts. So, Mentalism is the view that no two subjects can differ with respect to what is justified for them without differing with respect to what facts they are in a position to know by reflection alone. Alternatively, this may be expressed as “If any two possible individuals are exactly alike mentally, then they are alike justificationaly, e.g., the same beliefs are justified for them to the same extent” (Feldman and Conee 2001, p.2).<sup>36</sup>

Some internalists add further requirements in addition to Mentalism. For example, some internalists are “access internalists” because they accept the following<sup>37</sup>:

Access Internalism: One always has ‘special access’ to one’s justificatory status. (Pryor 2001, p. 105)

It is important to be clear that Mentalism does not entail the stronger Access Internalism. Mentalism says that accessible facts, our mental states, form a supervenience basis for our justification. Access Internalism goes further by claiming that whether or not we are justified in believing a particular proposition is itself a fact that is accessible to us via reflection alone.

One additional requirement that is sometimes added to Mentalism is a weaker form of Access Internalism. This weaker, *Inferential Internalism*, only concerns inferential justification (justification that one belief receives via inference from other beliefs). According to Inferential Internalism, in order to be justified in believing that  $p$  on the basis of your belief that  $q$  you must have special access to the fact that  $q$

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<sup>34</sup>This mistake apparently occurs in Greco (2005).

<sup>35</sup> Pryor refers to this internalist thesis as “Simple Internalism”, but we will follow Feldman and Conee (2001) in referring to this as “Mentalism” for two reasons. First, this makes it a bit easier to keep the thesis clear from other internalist theses. Second, “Mentalism” has become the much more common name in the philosophical literature.

<sup>36</sup>This is made somewhat more complicated by views that hold that knowledge is itself a mental state (Williamson 2000). For our purposes here we can set this complication aside.

<sup>37</sup> BonJour (1985) and Chisholm (1977) both seem to accept this stronger form of internalism.

is a good reason to believe that  $p$ .<sup>38</sup> Notice this is weaker than Access Internalism on the assumption that you can have justification for believing that  $p$  without inferring it from other beliefs, i.e. on the assumption of foundationalism.

With these various internalist theses in hand we can see that there is a spectrum of internalist views:

	Internalist views
Most extreme	1. Mentalism + access internalism
	2. Mentalism + inferential internalism
Least extreme	3. Mentalism <sup>a</sup>

<sup>a</sup>Of course, there are more fine-grained distinctions to be made here. For example, different versions of Inferential Internalism will require different kinds of access. One might require something very strong such as direct acquaintance with the fact that  $q$  makes  $p$  probable in order for  $q$  to justify believing that  $p$  (Fumerton1995), or one might require something much weaker such as a disposition for it to seem to oneself that  $p$  is part of the best explanation of one's evidence (McCain2014). We will set aside these finer grained distinctions for now

For the sake of simplicity, we can understand externalism as simply the denial of Mentalism and focus our discussion accordingly.

In what follows we will focus on a particular version of Mentalism, *Evidentialism*, and a particular version of externalism, *Reliabilism*, in order to make our discussion more concrete. The points we raise about these particular versions of internalism and externalism are generalizable to other versions.<sup>39</sup> We will begin with Evidentialism.

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<sup>38</sup> Fumerton (1995) seems to accept a sophisticated version of this view.

<sup>39</sup>The externalist objections to Evidentialism may be leveled at any form of Mentalism. Since the other forms of internalism arise by adding additional constraints onto Mentalism, objections to Mentalism will generally apply to these other forms of internalism as well. The internalist objections to Reliabilism are generalizable to other forms of externalism. In particular this is because most of the prominent externalist theories that are not explicitly forms of Reliabilism contain reliabilist commitments. For example, proper functionalist theories like Plantinga (1993a) and Bergmann (2006), virtue epistemologies like Sosa (1991, 2007, 2009, 2011) and Greco (2000, 2010), and theories that include a safety condition (S's belief that  $p$  would not have easily been false) such as Sosa's view and Williamson (2000) or a sensitivity condition (if  $p$  were not true,  $s$  would not believe that  $p$ ) such as Nozick (1981) and Roush (2005) all incorporate reliabilist elements. Objections to reliabilism constitute objections to the reliabilist components of these externalist theories.

### 5.4.1 Evidentialism

Although Evidentialism is more specific than Mentalism, it is in reality a family of mentalist views. Evidentialist theories share a commitment to Mentalism and to the idea that justification is a matter of the evidence that one has. More precisely, we may understand evidentialist theories as those which accept that:

S is justified in believing that  $p$  at a particular time,  $t$  if and only if believing that  $p$  fits the evidence that S has at  $t$ <sup>40</sup>

On its face, Evidentialism seems exceedingly plausible. After all, it says that you are justified in believing things that fit the evidence you have. If your evidence supports believing that  $p$ , then you are justified in believing that  $p$ . If your evidence does not support believing that  $p$ , then you are not justified in believing that  $p$ . Evidentialism seems to be well suited to the traditional project of epistemology—determining for oneself what she ought to believe.<sup>41</sup> In light of its intuitive plausibility, it is not surprising that internalist views like Evidentialism were until fairly recently “assumed without question by virtually all philosophers who paid any serious attention to epistemological issues” (BonJour 2010, p. 203).<sup>42</sup> Rather than focus on the details of the positive case that can be made for Evidentialism we will explore some of the major objections that have been raised against this sort of view and what may be said in response.<sup>43</sup>

The first objection that is commonly raised against Evidentialism is that it over-intellectualizes justification. It seems clear that various unsophisticated thinkers, such as children, non-human animals, and generally unreflective adults, have a large number of justified beliefs. However, externalists claim that it does not seem that these unsophisticated thinkers have the sort of evidence that is required by Evidentialism. As a result, externalists maintain that Evidentialism cannot appropriately account for the justification had by unsophisticated thinkers.

This objection does seem to be a serious problem for views that accept Access Internalism. After all, it is very likely that unsophisticated thinkers will not have a concept of justification, and so they will fail to meet Access Internalism’s requirement that they be in a position to know through reflection alone the justificatory status of their beliefs. Nonetheless, this objection does not seem to pose much of a problem for Evidentialism. The key to seeing this is to get clear on what Evidentialists mean by “evidence”. While we will put off our in-depth discussion of this topic until the next chapter, it is worth noting now that typically evidence is

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<sup>40</sup>This formulation of the basic evidentialist commitment is a slight modification of Feldman and Conee’s (1985). Many of the variations among evidentialist theories come down to how they spell out this schema—there are different views on what evidence is, what it takes to have evidence, and what it means for a belief to fit one’s evidence.

<sup>41</sup>See Poston (2008).

<sup>42</sup>Externalist theories of justification did not gain much prominence until roughly the 1970s.

<sup>43</sup>For positive support for Evidentialism see in particular Feldman and Conee (1985, 2001).

understood in terms of mental states, or the contents of mental states, that a subject has. So, saying that your pet Fido the dog has evidence that you are home consists of saying that Fido has mental states that give him good reason to think that you are home. What sort of mental states? Presumably, things like his mental state of having a visual experience of you, his olfactory experience of your particular scent, and so on. Insofar as it is reasonable to think that Fido is justified in believing that you are home, it is reasonable to think that he has this sort of evidence. Hence, it does not seem that Evidentialism faces much of a problem here.

The second common objection to Evidentialism is what we may call the “problem of forgotten evidence”. Here is a recent expression of this objection:

Years ago Ichabod formed a belief in proposition  $q$  by acquiring it in an entirely justified fashion. He had excellent evidence for believing it at that time (whether it was inferential or non-inferential evidence). After ten years pass, however, Ichabod has forgotten all of this evidence and not acquired any new evidence, either favorable or unfavorable. However, he continues to believe  $q$  strongly. Whenever he thinks about  $q$ , he (mentally) affirms its truth without hesitation. At noon today Ichabod’s belief in  $q$  is still present, stored in his mind, although he is not actively thinking about it. I stipulate that none of his other beliefs confers adequate evidence for either believing  $q$  or for disbelieving it. (Goldman 2011b, p. 260)<sup>44</sup>

So, at noon today Ichabod believes that  $q$ , but he no longer has any evidence for (or against) it. Goldman (2011b, p. 260) adds, “Since Ichabod remembers  $q$ ’s being the case, and since he originally had excellent evidence for  $q$ , which was never subsequently undermined, Ichabod’s belief in  $q$  at noon today is justified”.

At first glance this case might seem to pose a serious problem for Evidentialism. In fact, one might be tempted to agree with Goldman that if we deny Ichabod’s belief is justified in this case, “there will be serious skeptical ramifications: people will fail to know a great many things that common sense credits them with knowing” (2011b, p. 260). The reason for this is that one might think that we cannot now recall our original evidence for a large number of our beliefs, and yet it seems that we are justified in believing those things. For instance, you may not be able to recall your original evidence for thinking that Columbus sailed in 1492, but it still seems that you are justified in believing that this is the year he sailed. Thus, one might be tempted to think that the problem of forgotten evidence is a serious threat to Evidentialism.

There are, however, plausible responses that Evidentialists can make to this objection. First, Earl Conee and Richard Feldman (2011) have recently responded to this objection by appealing to a particular kind of disposition. They argue that in the purported cases of forgotten evidence where it is clear that the person’s belief that  $p$  remains justified it is plausible that she has a “disposition to recollect” that  $p$ . That is to say, in these cases the person is disposed to recall  $p$  as something she knows to be true. They argue that this disposition is evidence she has in support of  $p$ , so these cases pose no problem for evidentialist theories.<sup>45</sup>

<sup>44</sup>Also see Goldman (1999, 2009), Greco (2005, 2010, 2011), and Moon (2012a) for versions of this objection.

<sup>45</sup>For similar responses see Feldman (2005) as well as Feldman and Conee (2001). Also, see McCain (2015c) for further elaboration and defense of this sort of response.

A second way to respond to such cases is to question whether the subject really is justified. The idea here is that if we grant that these subjects have no evidence concerning the proposition in question, then it is far from clear that their beliefs are really like our stored beliefs. Consider a typical memory belief for which you have forgotten your original evidence, your belief that Columbus sailed in 1492 for instance. Quite plausibly you currently have a lot of evidence in support of this belief. You likely have some evidence that things you recall in the way you do the claim that Columbus sailed in 1492 are things you actually learned in the past, not things that you merely dreamed up. Additionally, it is likely that you have evidence which supports thinking that you are often right when it comes to basic historical facts. Finally, it is likely that you have meta-memories concerning your belief that Columbus sailed in 1492. That is to say, if someone asks you whether you know when Columbus sailed, it is likely that you would immediately answer affirmatively—even before you actually recall the particular date from memory. This sort of meta-memory is something that we commonly have for beliefs we have stored in our memory, and studies show that we tend to be reliable when we make judgments based on meta-memory.<sup>46</sup> So, even in cases where you cannot recall your original evidence for a particular belief you often have a large amount of evidence in support of that belief. In Goldman's case (and other cases used to press the problem of forgotten evidence), however, Ichabod lacks all of this evidence by stipulation. He has no evidence about how his memory works, no evidence about his track record when it comes to things like *q*, and no meta-memories concerning *q*. Ichabod's belief is clearly very different from the typical case where you have a belief for which you have forgotten your original evidence. It is so different that it seems reasonable to doubt the belief is justified at all. Thus, Evidentialists have at least two good ways of responding to this objection.<sup>47</sup>

The final objection to Evidentialism that we will consider here is that it cannot adequately respond to the threat of external world skepticism. Many externalists object to Evidentialism because they think that the sort of requirements Evidentialism places on justification makes it so that skeptical arguments, which claim we lack justification for a vast number of our beliefs, cannot be rebutted.<sup>48</sup> Fully responding to this objection would require sketching an Evidentialist response to skepticism, which would take us too far afield here. So, for present purposes we will simply note two important points. First, it is quite plausible that Evidentialism has the resources to rebut these skeptical arguments. In fact, we will explore in some detail how Evidentialism can be used to respond to both external world skepticism and skepticism about our inductive reasoning in chapters eleven and twelve, respectively. Second, it is worth pointing out that internalists often reply to this objection that responding to skepticism should not be overly easy, so

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<sup>46</sup>See Cohen (1996) for further discussion of meta-memory and studies showing its reliability.

<sup>47</sup>For further arguments in support of this response to the problem of forgotten evidence and detailed discussion of the problem in general see McCain (2015b).

<sup>48</sup>This objection has been forcefully made by Greco (2000, 2005, 2010).

Evidentialism treats skepticism as it should be treated, as a legitimate philosophical issue. They often go on to charge externalists with taking the threat of skepticism too lightly. That is to say, internalists often respond to this sort of objection by arguing that externalist views do not treat skepticism as a legitimate philosophical problem, and thus, externalist views make justification and knowledge implausibly easy to get.<sup>49</sup>

We have seen that Evidentialism is intuitively plausible, and it is not adversely affected by the major objections that have been leveled against it. While our exploration is far from exhaustive, it is sufficient to establish that Evidentialism is a serious contender for the correct theory of justification and should be taken seriously. Also, by extension it shows that internalism is very much a live option when it comes to theories of justification. Now, let us take a look at the most prominent externalist theory on offer, Reliabilism.<sup>50</sup>

### 5.4.2 *Reliabilism*

Like Evidentialism, Reliabilism is more a family of theories than a particular theory. This is because there are a number of ways of spelling out the basic tenets of Reliabilism. However, rather than explore these particular incarnations individually we will look at the common core of Reliabilism and the problems it faces. The simplest way of understanding Reliabilism is in terms of what has been named “process reliabilism” (we will be referring to this as “Reliabilism” unless otherwise noted):

S’s belief that  $p$  is justified if and only if that belief is produced by a reliable cognitive process.<sup>51</sup>

Two points are worth mentioning immediately. First, Reliabilism, like many versions of externalism, is expressed in terms of justified belief (doxastic justification) instead of what is justified for one (propositional justification). This is different than Evidentialism, which is expressed in terms of propositional justification. But, this will not hinder our efforts here because the objections we will consider cannot be avoided by formulating Reliabilism in terms of propositional justification. Second, we should get clear about what is meant by a “reliable cognitive process”. A cognitive process is a mental faculty of the believer. Basically, cognitive processes are information processing mechanisms within one’s brain that take various mental

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<sup>49</sup>For more on this charge see BonJour (2010), Cohen (2002), Fumerton (1995), Poston (2008), Vahid (2014), and Vogel (2000).

<sup>50</sup> Kvanvig (2014) even goes so far as claiming that Reliabilism is not only the most prominent externalist theory, but that it is currently the most popular of all theories of justification.

<sup>51</sup>This formulation is simplifying a great deal, but it is sufficient for our purposes. For more intricate versions of reliabilism see in particular Goldman (1979, 1986, 1988, 1992, 2008), Henderson and Horgan (2011), and Lyons (2009).

states of the believer—experiences, beliefs, desires, and so on—and maps those states to beliefs. For example, your visual experience of a red patch might be mapped via a cognitive process in your brain to the belief <there is something red in front of me>. So, you have the visual experience of a red patch, and this cognitive process results in your believing that there is something red in front of you. Although what it takes to be reliable is a bit vague, Reliabilists make it clear that while it does not require perfect accuracy, reliability does require more than mere chance. For our purposes we can understand a cognitive process to be reliable when it produces true beliefs the majority of the time.

Before considering a few of the major objections to Reliabilism it is worth noting its motivations. Reliabilism is motivated in large part by three considerations. The first is simply dissatisfaction with internalism because of some of the objections we explored above. The second is the desire to make the connection between justification and truth a close one.<sup>52</sup> The third is to provide a solution to the infamous Gettier problem for the traditional account of knowledge (a problem that will be the focus of our discussion in chapter eight). It is largely because of these motivations that Reliabilism has become a popular view in epistemology. Despite its popularity it is susceptible to some serious objections.

The first major objection to Reliabilism stems from the fact that it does not seem that reliability is necessary for justification. That is, it seems there can be cases in which your belief is justified even though it was not produced by a reliable cognitive process. To see this consider the fact that, there is a possible world in which “you have exactly the same experiences, apparent memories, and intuitions . . . go through exactly the same processes of reasoning, and form exactly the same beliefs” as you do in the actual world, but in that other possible world, your experiences are caused by the manipulations of a demon who is deceiving you (Wedgwood 2002, p. 349). This possibility is problematic for Reliabilism because intuitively you and your demon-world counterpart are equally justified in the beliefs you form; yet, only your beliefs are formed by reliable cognitive processes. Your beliefs are formed in the normal way, and so plausibly they are reliable. Your counterpart’s beliefs, though, are formed by the tampering of a demon who is trying to deceive her—clearly an unreliable cognitive process. This “New Evil Demon Problem” demonstrates that, *contra* Reliabilism, reliability is not necessary for justification.<sup>53</sup>

Reliabilists have offered a number of responses to this objection. Some simply “bite the bullet” and claim that your counterpart’s beliefs in the demon world are not justified, but yours are (Brewer 1997; Engel 1992). More plausible approaches which Reliabilists have taken seek to modify Reliabilism so that it yields the

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<sup>52</sup>In fact, sometimes externalists object to internalism because it does not make the connection between justification and truth close enough. For discussion of this issue as well as internalist responses to the challenge see Cohen (1984), Lehrer and Cohen (1983), and Poston (2008).

<sup>53</sup>This problem is called the New Evil Demon problem in order to differentiate it from the older problem of external world skepticism, which is often put forward by appealing to the activity of a deceptive demon. See Cohen (1984) and Lehrer and Cohen (1983) for canonical discussions of this problem for Reliabilism.

intuitively correct result that both your beliefs and your counterpart's are justified. These various approaches seek to modify what is meant by "reliable" in various ways. For example, one early approach sought to relativize reliability to "normal worlds" (Goldman 1986). On this approach, whether a cognitive process counts as reliable depends on whether it is a process that is reliable in normal worlds. Normal worlds on this approach are worlds in which our general beliefs about the actual world are true. For example, normal worlds are worlds in which our perceptual experiences are good things to use when forming beliefs about the world around us. This approach was quickly abandoned, and many others were proposed.<sup>54</sup> These various approaches share the idea that reliability needs to be relativized in some sense in order to account for the New Evil Demon problem. It remains to be seen if any of these approaches can solve the problem.<sup>55</sup> It is enough for our purposes to note that Reliabilism faces a genuine problem here and that Reliabilists are attempting to find a solution.<sup>56</sup>

The second major objection to Reliabilism comes in the form of cases that intuitively show reliability is not sufficient for justification. In other words, these cases seem to show one's belief that *p* can be the result of a reliable cognitive process, and yet fail to be justified. Although several of these cases have been put forward, the most famous is the case of Norman the clairvoyant.<sup>57</sup> Here is Norman's story:

Norman, under certain conditions that usually obtain, is a completely reliable clairvoyant with respect to certain kinds of subject matter. He possesses no evidence or reasons of any kind for or against the general possibility of such a cognitive power, or for or against the thesis that he possesses it. One day Norman comes to believe that the President is in New York City, though he has no evidence either for or against his belief. In fact the belief is true and results from his clairvoyant power, under circumstances in which it is completely reliable. (BonJour 1980, p. 62)

Intuitively, Norman's belief about the President's whereabouts is unjustified. This is a problem for Reliabilism because it is stipulated in the example that the cognitive process that produces this belief in Norman is very reliable. Thus, it seems that reliability is not sufficient for justification.

Like the previous objection there are a number of ways that Reliabilists can respond to cases like Norman the clairvoyant. Of course, one way to respond is to simply "bite the bullet" and maintain that Norman's belief about the President really is justified, but this is not very plausible. A better way of responding is to introduce

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<sup>54</sup> Goldman (1988) himself argued that the normal worlds approach is flawed.

<sup>55</sup>For nice overviews of some of the various approaches to the New Evil Demon Problem and their merits see Goldman (2011a) and Littlejohn (2009).

<sup>56</sup>It is worth noting that Moon (2012b) attempts to show that internalist theories face their own version of the New Evil Demon problem. See McCain (2015a) for decisive reasons to think that Moon's attempt fails.

<sup>57</sup>Other influential versions of this sort of case can be found in Lehrer (2000) and Plantinga (1993b).

the sort of relativizing move that we mentioned above.<sup>58</sup> Perhaps the most promising response is to supplement Reliabilism with a “no-defeater” condition. This sort of condition would need to be something to the effect that one’s justification is defeated when she has sufficiently strong evidence to the contrary of her belief or when she has an absence of supporting evidence altogether (Steup 1996). Adding such a “no-defeater” condition seems to allow Reliabilists to avoid the problematic consequences of cases like Norman the clairvoyant. Nevertheless, some internalists argue that this way of handling the problem really just sneaks in Evidentialism (Steup 1996). Once some such Evidentialist requirements are allowed it is not clear why the rest should not be adopted (BonJour 2006). This might be exactly what some Reliabilists want though. Recently, there has been a move by some Reliabilists to combine Evidentialism and Reliabilism into a single theory.<sup>59</sup> Perhaps such a synthesis is the best bet for resolving these sorts of problems for Reliabilism.

The final major objection to Reliabilism that we will consider is perhaps the most devastating, the Generality Problem. This problem threatens to undermine Reliabilism’s claim to being a genuine theory of epistemic justification.<sup>60</sup> In order to understand this problem it is important to first draw a general distinction between *types* and *tokens*. Types are general kinds of things, and tokens are particular instances of those kinds. For example, your copy of this book is a token of a particular type. Your copy is an individual thing—it only exists right where you have the book. Alternatively, the type of this book exists wherever there are token copies of the book. Hence, all of the printed copies of this book are tokens of a single type. A similar thing is true of cognitive processes. There are token cognitive processes and types of cognitive processes. Recognizing this is the first step to appreciating the Generality Problem.

Recall from above that Reliabilism tells us that a belief is justified if and only if it is produced by a reliable cognitive process. The Generality Problem for Reliabilism is the problem of specifying what the relevant cognitive process is. Take Matt’s belief that there is a tree in his yard, which he forms after taking a look outside. This belief is the product of a cognitive process that is a token of indefinitely many types. For example, the cognitive process that produces Matt’s belief is a token of all of the following types: vision, vision in sunlight, forming beliefs about trees, forming beliefs about plants, forming beliefs on such and such day of the week, forming beliefs quickly, and so on. Some of these types are reliable, and some are not. In order for Reliabilism to give a genuine answer to the question of whether Matt’s belief is justified it must have a principled way of identifying the relevant cognitive

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<sup>58</sup>Bergmann (2006), Goldman (1992), and Sosa (1991) offer this sort of response.

<sup>59</sup>See Comesaña (2010) and Goldman (2011b).

<sup>60</sup>The Generality Problem for Reliabilism has been noted by several philosophers, including Alvin I. Goldman (1979) when he first formulated the version of Reliabilism that we have been discussing. The Generality Problem has been most carefully and forcefully put forward by Feldman (1985) and Conee and Feldman (1998). Other philosophers who recognized this problem early in the development of Reliabilism include Chisholm (1982) and Pollock (1984).

process type. It is only after the relevant cognitive process type has been identified that it can be determined whether that cognitive process is reliable or not. So, before Reliabilism can tell us anything about whether a particular belief is justified it must first provide a principled way of determining the relevant cognitive process type for evaluation. According to Laurence Bonjour (2010, p. 215), “without some way of answering this question [what the relevant process type for evaluation is] in a specific and nonarbitrary way, the reliabilist has not succeeded in offering a definite position at all.” Answering this question, providing a principled way of selecting the relevant cognitive process type, is the Generality Problem, and it is an extremely difficult problem.<sup>61</sup>

In fact, the Generality Problem is so difficult that “though reliabilists have struggled with this problem, no solution has yet been found that even a majority of reliabilists find acceptable” (Bonjour 2010, p. 215). Even the most prominent defender of Reliabilism, Alvin I. Goldman, admits that the Generality Problem remains unsolved (2011a). The difficulty presented by this problem has led some Reliabilists to attempt to establish that this problem is shared by all theories of justification.<sup>62</sup> Establishing that every theory faces the Generality Problem would not solve the problem, but it would make it so that the Generality Problem does not provide a reason to abandon Reliabilism for some other theory of justification. Unfortunately for Reliabilists, it does not seem that this is a problem shared by Evidentialism.<sup>63</sup> As a result, it seems that Reliabilists may be sole proprietors in the business of needing to find a solution to the Generality Problem. Currently, the problem seems to be without a solution.

## 5.5 Conclusion

In this chapter we have explored the nature of justification. As we have seen there are a number of important distinctions to keep in mind when thinking about this component of knowledge. Additionally, we have seen that there are a number of live debates concerning various aspects of justification—fortunately, we do not need to settle these debates for our purposes. This being said, it will be helpful to adopt a particular epistemic framework for our discussions in the rest of this book. Given the results of our discussion of Evidentialism and Reliabilism, particularly Reliabilism’s major unsolved problem, the most promising approach to justification seems to be Evidentialism. So, we will adopt this sort of approach throughout

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<sup>61</sup>See Conee and Feldman (1998) for discussion of some of the more promising responses to this problem that have been given and why each is inadequate.

<sup>62</sup>See Comesaña (2006) and Bishop (2010).

<sup>63</sup>See Conee (2013) and Matheson (2015) for responses to Reliabilist arguments that all theories face the Generality Problem. Both Conee and Matheson convincingly argue that Evidentialism does not face this problem.

the remainder of our discussions. Our adoption of an Evidentialist framework is supported by three very good reasons. First, it will simply be helpful to work with a particular epistemic theory as a guide in our later discussions. Doing so will help us to orient on the relevant points of the discussions more easily. Second, as already noted it seems that Evidentialism is better suited to respond to the objections pressed against it than Reliabilism is for its objections. Third, even if one remains unconvinced that Evidentialism is the superior epistemic theory, most everyone agrees (Reliabilists included!) that when we are discussing the acceptance of scientific theories and our scientific knowledge we are concerned with the evidence that we have. We are not concerned so much with the reliability of the cognitive processes of the theorists who come up with a scientific theory. Instead, we are concerned with the evidence that the theorists have and the evidence that can be provided in support of their theories. So, even if one does not approve of Evidentialism as a general picture of the nature of justification, the sort of picture of justification that Evidentialism provides does seem to clearly be what we are concerned with when discussing scientific knowledge. In the next chapter we turn toward discussing two key components of Evidentialism that are especially relevant to our discussion of scientific knowledge: the nature of evidence and what it takes to be in possession of evidence.

## References

- Alston, W. P. (1985). Concepts of epistemic justification. *The Monist*, 68, 57–89.
- Alston, W. P. (1988). The deontological conception of epistemic justification. *Philosophical Perspectives*, 2, 257–299.
- Angere, S. (2007). The defeasible nature of coherentist justification. *Synthese*, 157, 321–335.
- Angere, S. (2008). Coherence as a heuristic. *Mind*, 117, 1–26.
- Armstrong, D. M. (1973). *Belief, truth and knowledge*. London: Cambridge University Press.
- Audi, R. (1988). *Belief, justification, and knowledge*. Belmont: Wadsworth.
- Audi, R. (1993). Contemporary foundationalism. In L. Pojman (Ed.), *The theory of knowledge: Classic and contemporary readings* (pp. 206–213). Belmont: Wadsworth.
- Audi, R. (2011). *Epistemology: A contemporary introduction to the theory of knowledge* (3rd ed.). New York: Routledge.
- Baehr, J. (2011). *The inquiring mind: On intellectual virtues and virtue epistemology*. Oxford: Oxford University Press.
- Bergmann, M. (2006). *Justification without awareness: A defense of epistemic externalism*. New York: Oxford University Press.
- Bishop, M. (2010). Why the generality problem is everybody's problem. *Philosophical Studies*, 151, 285–298.
- BonJour, L. (1978). Can empirical knowledge have a foundation? *American Philosophical Quarterly*, 15, 1–13.
- BonJour, L. (1980). Externalist theories of empirical knowledge. *Midwest Studies in Philosophy*, 5, 53–73.
- BonJour, L. (1985). *The structure of empirical knowledge*. Cambridge, MA: Harvard University Press.
- BonJour, L. (2000). Toward a defense of empirical foundationalism. In M. DePaul (Ed.), *Resurrecting old-fashioned foundationalism* (pp. 21–40). Lanham: Rowman & Littlefield.

- BonJour, L. (2006). Replies. *Philosophical Studies*, 131, 743–759.
- BonJour, L. (2010). *Epistemology: Classic problems and contemporary responses* (2nd ed.). Lanham: Rowman & Littlefield.
- Bosanquet, B. (1920). *Implication and linear inference*. London: Macmillan.
- Bovens, L., & Hartmann, S. (2003). *Bayesian epistemology*. Oxford: Clarendon Press.
- Brewer, B. (1997). Foundations of perceptual knowledge. *American Philosophical Quarterly*, 34, 41–55.
- Burge, T. (1986). Individualism and psychology. *Philosophical Review*, 95, 3–45.
- Chisholm, R. M. (1956). Epistemic statements and the ethics of belief. *Philosophy and Phenomenological Research*, 16, 447–460.
- Chisholm, R. M. (1966). *Theory of knowledge*. Englewood Cliffs: Prentice Hall.
- Chisholm, R. M. (1977). *Theory of knowledge* (2nd ed.). Englewood Cliffs: Prentice Hall.
- Chisholm, R. M. (1982). *The foundations of knowing*. Minneapolis: University of Minnesota Press.
- Chisholm, R. M. (1989). *Theory of knowledge* (3rd ed.). Englewood Cliffs: Prentice Hall.
- Cohen, G. (1996). *Memory in the real world* (2nd ed.). East Sussex: Psychology Press.
- Cohen, S. (1984). Justification and truth. *Philosophical Studies*, 46, 279–295.
- Cohen, S. (2002). Basic knowledge and the problem of easy knowledge. *Philosophy and Phenomenological Research*, 65, 309–329.
- Comesaña, J. (2006). A well-founded solution to the generality problem. *Philosophical Studies*, 129, 27–47.
- Comesaña, J. (2010). Evidentialist reliabilism. *Nous*, 44, 571–600.
- Conee, E. (1988). The basic nature of epistemic justification. *Monist*, 71, 389–404.
- Conee, E. (2013). The specificity of the generality problem. *Philosophical Studies*, 163, 751–762.
- Conee, E., & Feldman, R. (1998). The generality problem for reliabilism. *Philosophical Studies*, 89, 1–29.
- Conee, E., & Feldman, R. (2004). Making sense of skepticism. In E. Conee & R. Feldman (Eds.), *Evidentialism* (pp. 277–306). New York: Oxford University Press.
- Conee, E., & Feldman, R. (2011). Replies. In T. Dougherty (Ed.), *Evidentialism and its discontents* (pp. 428–501). New York: Oxford University Press.
- Dancy, J. (1985). *Introduction to contemporary epistemology*. Oxford: Blackwell.
- Davidson, D. (1986). A coherence theory of knowledge and truth. In E. Lepore (Ed.), *Truth and interpretation* (pp. 307–319). Oxford: Blackwell.
- DePaul, M. (2014). Foundationalism. In S. Bernecker & D. Pritchard (Eds.), *The Routledge companion to epistemology* (pp. 235–244). New York: Routledge.
- Descartes, R. (1641/1988). *Meditations on first philosophy*. In J. Cottingham, R. Stoothoff, & D. Murdoch (Trans.), *Descartes: Selected philosophical writings* (pp. 73–123). Cambridge, UK: Cambridge University Press.
- Dietrich, F., & Moretti, L. (2005). On coherent sets and the transmission of confirmation. *Philosophy of Science*, 72, 403–424.
- Douven, I., & Meijs, W. (2007). Measuring coherence. *Synthese*, 156, 405–425.
- Engel, M. (1992). Personal and doxastic justification. *Philosophical Studies*, 67, 133–151.
- Ewing, A. C. (1934). *Idealism: A critical survey*. London: Methuen.
- Feldman, R. (1985). Reliability and justification. *Monist*, 68, 159–174.
- Feldman, R. (1988). Epistemic obligations. *Philosophical Perspectives*, 2, 235–256.
- Feldman, R. (2003). *Epistemology*. Upper Saddle River: Prentice Hall.
- Feldman, R. (2005). Justification is internal. In M. Steup & E. Sosa (Eds.), *Contemporary debates in epistemology* (pp. 270–284). Malden: Blackwell.
- Feldman, R., & Conee, E. (1985). Evidentialism. *Philosophical Studies*, 45, 15–34.
- Feldman, R., & Conee, E. (2001). Internalism defended. *American Philosophical Quarterly*, 38, 1–18.
- Fumerton, R. (1995). *Metaepistemology and skepticism*. Lanham: Rowman & Littlefield.
- Fumerton, R. (2000). Classical foundationalism. In M. DePaul (Ed.), *Resurrecting old-fashioned foundationalism* (pp. 3–20). Lanham: Rowman & Littlefield.

- Fumerton, R. & Hasan, A. (2010). Foundationalist theories of epistemic justification. In E. N. Zalta (Ed.), *The Stanford encyclopedia of philosophy* (Summer 2010 Edition). <http://plato.stanford.edu/archives/sum2010/entries/justep-foundational/>
- Gertler, B. (2012). Understanding the internalism-externalism debate: What is the boundary of the thinker? *Philosophical Perspectives*, 26, 51–75.
- Ginet, C. (1975). *Knowledge, perception, and memory*. Dordrecht: Reidel.
- Ginet, C. (2005a). Infitism is not the solution to the regress problem. In M. Steup & E. Sosa (Eds.), *Contemporary debates in epistemology* (pp. 140–148). Malden: Blackwell.
- Ginet, C. (2005b). Reply to Klein. In M. Steup & E. Sosa (Eds.), *Contemporary debates in epistemology* (pp. 153–155). Malden: Blackwell.
- Glass, D. H. (2007). Coherence measures and inference to the best explanation. *Synthese*, 157, 257–296.
- Goldberg, S. (Ed.). (2007). *Internalism and externalism in semantics and epistemology*. Oxford: Oxford University Press.
- Goldman, A. I. (1979). What is justified belief? In G. Pappas (Ed.), *Justification and knowledge* (pp. 1–23). Dordrecht: Reidel.
- Goldman, A. I. (1986). *Epistemology and cognition*. Cambridge, MA: Harvard University Press.
- Goldman, A. I. (1988). Strong and weak justification. *Philosophical Perspectives*, 2, 51–69.
- Goldman, A. I. (1992). Epistemic folkways and scientific epistemology. In A. I. Goldman (Ed.), *Liaisons: Philosophy meets the cognitive and social sciences* (pp. 155–175). Cambridge, MA: MIT Press.
- Goldman, A. I. (1999). Internalism exposed. *Journal of Philosophy*, 96, 271–293.
- Goldman, A. I. (2008). Immediate justification and process reliabilism. In Q. Smith (Ed.), *Epistemology: New essays* (pp. 63–82). New York: Oxford University Press.
- Goldman, A. I. (2009). Internalism, externalism, and the architecture of justification. *Journal of Philosophy*, 106, 309–338.
- Goldman, A. I. (2011a). Reliabilism. In E. N. Zalta (Ed.), *The Stanford encyclopedia of philosophy* (Spring 2011 Edition). <http://plato.stanford.edu/archives/spr2011/entries/reliabilism/>
- Goldman, A. I. (2011b). Toward a synthesis of reliabilism and evidentialism? or: Evidentialism’s troubles, reliabilism’s rescue package. In T. Dougherty (Ed.), *Evidentialism and its discontents* (pp. 393–426). New York: Oxford University Press.
- Greco, J. (2000). *Putting skeptics in their place: The nature of skeptical arguments and their role in philosophical inquiry*. Cambridge, UK: Cambridge University Press.
- Greco, J. (2005). Justification is not internal. In M. Steup & E. Sosa (Eds.), *Contemporary debates in epistemology* (pp. 257–270). Malden: Blackwell.
- Greco, J. (2010). *Achieving knowledge*. Cambridge, UK: Cambridge University Press.
- Greco, J. (2011). Evidentialism about knowledge. In T. Dougherty (Ed.), *Evidentialism and its discontents* (pp. 167–178). New York: Oxford University Press.
- Haack, S. (1993). *Evidence and inquiry*. Oxford: Blackwell.
- Harman, G. (1973). *Thought*. Princeton: Princeton University Press.
- Henderson, D. K., & Horgan, T. (2011). *The epistemological spectrum: At the interface of cognitive science and conceptual analysis*. Oxford: Oxford University Press.
- Huemer, M. (2007). Weak Bayesian coherentism. *Synthese*, 157, 337–346.
- Huemer, M. (2011). Does probability theory refute coherentism? *Journal of Philosophy*, 108, 35–54.
- Klein, P. (1999). Human knowledge and the infinite regress of reasons. *Philosophical Perspectives*, 13, 297–325.
- Klein, P. (2005). Infitism is the solution to the epistemic regress problem. In M. Steup & E. Sosa (Eds.), *Contemporary debates in epistemology* (pp. 131–140). Malden: Blackwell.
- Klein, P. (2007). Human knowledge and the infinite progress of reasoning. *Philosophical Studies*, 134, 1–17.
- Klein, P. (2014a). Infitism. In S. Bernecker & D. Pritchard (Eds.), *The Routledge companion to epistemology* (pp. 245–256). New York: Routledge.

- Klein, P. (2014b). No end in sight. In R. Neta (Ed.), *Current controversies in epistemology* (pp. 95–115). New York: Routledge.
- Kornblith, H. (1989). The unattainability of coherence. In J. W. Bender (Ed.), *The current state of the coherence theory: Critical essays on the epistemic theories of Keith Lehrer and Laurence Bonjour, with replies* (pp. 207–214). Dordrecht: Kluwer.
- Kripke, S. (1972). *Naming and necessity*. Oxford: Blackwell.
- Kvanvig, J. (1992). *The intellectual virtues and the life of the mind: On the place of the virtues in contemporary epistemology*. Savage: Rowman & Littlefield.
- Kvanvig, J. (2012). Coherentism and justified inconsistent beliefs: A solution. *Southern Journal of Philosophy*, 50, 21–41.
- Kvanvig, J. (2014). Epistemic justification. In S. Bernecker & D. Pritchard (Eds.), *The Routledge companion to epistemology* (pp. 25–36). New York: Routledge.
- Lau, J. & Deutsch, M. (2014). Externalism about mental content. In E. N. Zalta (Ed.), *The Stanford encyclopedia of philosophy* (Summer 2014 Edition). <http://plato.stanford.edu/archives/sum2014/entries/content-externalism/>
- Lehrer, K. (1974). *Knowledge*. Oxford: Clarendon Press.
- Lehrer, K. (2000). *Theory of knowledge* (2nd ed.). Boulder: Westview Press.
- Lehrer, K., & Cohen, S. (1983). Justification, truth, and coherence. *Synthese*, 55, 191–207.
- Lewis, C. I. (1946). *An analysis of knowledge and valuation*. LaSalle: Open Court.
- Littlejohn, C. (2009). The new evil demon problem. *Internet Encyclopedia of Philosophy*. <http://www.iep.utm.edu/evil-new/#SH2a>
- Locke, J. (1690/1975). *An essay concerning human understanding*. Oxford: Clarendon Press.
- Lycan, W. G. (1988). *Judgement and justification*. Cambridge, UK: Cambridge University Press.
- Lycan, W. G. (2012). Explanationist rebuttals (coherentism defended again). *Southern Journal of Philosophy*, 50, 5–20.
- Lyons, J. (2009). *Perception and basic beliefs: Zombies, modules, and the problem of the external world*. New York: Oxford University Press.
- Maffie, J. (1990). Recent work on naturalizing epistemology. *American Philosophical Quarterly*, 27, 281–293.
- Matheson, J. (2015). Is there a well-founded solution to the generality problem? *Philosophical Studies*, 172, 459–468.
- McCain, K. (2014). *Evidentialism and epistemic justification*. New York: Routledge.
- McCain, K. (2015a). A new evil demon? No problem for moderate internalists. *Acta Analytica*, 30, 97–105.
- McCain, K. (2015b). Is forgotten evidence a problem for evidentialism? *Southern Journal of Philosophy*, 53, 471–480.
- McCain, K. (2015c). No knowledge without evidence. *Journal of Philosophical Research*, 40, 369–376.
- McGrew, T. (1995). *The foundations of knowledge*. Lanham: Littlefield Adams Books.
- Montmarquet, J. (1993). *Epistemic virtue and doxastic responsibility*. Lanham: Rowman & Littlefield.
- Moon, A. (2012a). Knowing without evidence. *Mind*, 121, 309–331.
- Moon, A. (2012b). Three forms of internalism and the new evil demon problem. *Episteme*, 9, 345–360.
- Moser, P. K. (1989). *Knowledge and evidence*. Cambridge, UK: Cambridge University Press.
- Neurath, O. (1932). Protokollsätze. *Erkenntnis*, 3, 204–214.
- Nozick, R. (1981). *Philosophical explanations*. Cambridge, MA: Harvard University Press.
- Olsson, E. (2005). *Against coherence: Truth, probability, and justification*. Oxford: Clarendon Press.
- Olsson, E. (2014a). Coherentism. In S. Bernecker & D. Pritchard (Eds.), *The Routledge companion to epistemology* (pp. 257–267). New York: Routledge.
- Olsson, E. (2014b). Coherentist theories of epistemic justification. In E. N. Zalta (Ed.), *The Stanford encyclopedia of philosophy* (Spring 2014 Edition). <http://plato.stanford.edu/archives/spr2014/entries/justep-coherence/>

- Olsson, E., & Schubert, S. (2007). Reliability conducive measures of coherence. *Synthese*, 157, 297–308.
- Plantinga, A. (1993a). *Warrant and proper function*. New York: Oxford University Press.
- Plantinga, A. (1993b). *Warrant: The current debate*. New York: Oxford University Press.
- Pollock, J. (1984). Reliability and justified belief. *Canadian Journal of Philosophy*, 14, 103–114.
- Pollock, J. (1986). *Contemporary theories of knowledge*. Totowa: Rowman & Littlefield.
- Post, J. (1980). Infinite regress of justification and of explanation. *Philosophical Studies*, 38, 32–37.
- Poston, T. (2008). Internalism and externalism in epistemology. *Internet Encyclopedia of Philosophy*. <http://www.iep.utm.edu/int-ext/>
- Poston, T. (2014). *Reason & explanation: A defense of explanatory coherentism*. New York: Palgrave-MacMillan.
- Pritchard, D. (2005). *Epistemic luck*. Oxford: Oxford University Press.
- Pritchard, D. (2010). Knowledge and understanding. In D. Pritchard, A. Millar, & A. Haddock (Eds.), *The nature and value of knowledge: Three investigations* (pp. 5–88). Oxford: Oxford University Press.
- Pryor, J. (2001). Highlights of recent epistemology. *British Journal for the Philosophy of Science*, 52, 95–124.
- Putnam, H. (1975). *Philosophical papers, vol. 2: Mind, language, and reality*. Cambridge, UK: Cambridge University Press.
- Quine, W. V. O., & Ullian, J. S. (1970). *The web of belief*. New York: Random House.
- Rescher, N. (1973). *The coherence theory of truth*. Oxford: Oxford University Press.
- Roush, S. (2005). *Tracking truth: Knowledge, evidence, and science*. Oxford: Oxford University Press.
- Russell, B. (1912a). *The problems of philosophy*. London: Williams and Norgate.
- Russell, B. (1912b/2001). Truth and falsehood. In M. P. Lynch (Ed.), *The nature of truth: Classic and contemporary perspectives* (pp. 17–24). Cambridge, MA: MIT Press.
- Schupbach, J. N. (2008). On the alleged impossibility of Bayesian coherentism. *Philosophical Studies*, 141, 323–331.
- Sellars, W. (1956). Empiricism and the philosophy of mind. *Minnesota Studies in the Philosophy of Science*, 1, 239–252.
- Smithies, D. (2014). Can foundationalism solve the regress problem? In R. Neta (Ed.), *Current controversies in epistemology* (pp. 73–94). New York: Routledge.
- Sosa, E. (1980). The raft and the pyramid. *Midwest Studies in Philosophy*, 5, 3–25.
- Sosa, E. (1991). *Knowledge in perspective*. Cambridge, UK: Cambridge University Press.
- Sosa, E. (2007). *A virtue epistemology: Apt belief and reflective knowledge* (Vol. I). Oxford: Oxford University Press.
- Sosa, E. (2009). *Reflective knowledge: Apt belief and reflective knowledge* (Vol. I). Oxford: Oxford University Press.
- Sosa, E. (2011). *Knowing full well*. Princeton: Princeton University Press.
- Steup, M. (1996). *An introduction to contemporary epistemology*. Upper Saddle River: Prentice Hall.
- Thagard, P. (2000). *Coherence in thought and action*. Cambridge, MA: MIT Press.
- Thagard, P. (2005). Testimony, credibility, and explanatory coherence. *Erkenntnis*, 63, 295–316.
- Toulmin, S. E. (2003). *The uses of argument*. Cambridge, UK: Cambridge University Press.
- Turri, J. (2014). *Epistemology: A guide*. Malden: Wiley Blackwell.
- Vahid, H. (2014). Externalism/internalism. In S. Bernecker & D. Pritchard (Eds.), *The Routledge companion to epistemology* (pp. 144–155). New York: Routledge.
- Vogel, J. (2000). Reliabilism leveled. *Journal of Philosophy*, 97, 602–623.
- Wedgwood, R. (2002). Internalism explained. *Philosophy and Phenomenological Research*, 65, 349–369.
- Williamson, T. (2000). *Knowledge and its limits*. Oxford: Oxford University Press.
- Zagzebski, L. (1996). *Virtues of the mind: An inquiry into the nature of virtue and the ethical foundations of knowledge*. Cambridge, UK: Cambridge University Press.