(GEP) may seem sensible, and it is easy to see why critics of evidentialism might be persuaded by the examples, such as Example 4.6, that appeal to it. Applied to this example, (GEP) implies that the professor's belief is not justified because he had readily available evidence, he should have looked at this evidence, and this additional evidence does not support his belief about the time of the movie.[7]

However, evidentialists have a good response to this objection. We should distinguish epistemic justification from other matters. The question relevant to evidentialism, and to theories of epistemic justification generally, is "What should S believe now, given the situation he's actually in?" Apply this question to Example 4.6. As the professor is driving to the theater, it would be quite irrational for him to do anything other than believe that the movie starts at 8:00. After all, he knows that it was at 8:00 yesterday and that theaters usually show the movies at the same time each night. He has no reason at all to think that it is at any time other than 8:00. It would be quite unreasonable for him to believe that it starts at 7:30. So given the situation he is actually in, this is the justified attitude. Evidentialism has exactly the right result in this case.

It is important to distinguish some related questions. The one just discussed has to do with what it is reasonable to believe given the situation one is actually in. Other questions have to do with whether one should get more evidence (or get into a different situation). Suppose it is true that the professor should have looked at today's newspaper. He messed up and did not do that. Still, the question remains, given that he has been negligent and not done what he should, what is it most reasonable for him to believe? The answer is that it is most reasonable for him to believe that the movie starts at 8:00. More generally, it is most reasonable to believe what is supported by the evidence one does have. Because one does not know what the evidence one does not have will support, it would be unreasonable to be guided by that evidence. So (GEP) is mistaken. Even when one should get more evidence, the thing to do at any given time is to be guided by the evidence one does have.

In the example, perhaps it would have been a good idea to look at the listings in today's newspaper. However, before drawing that conclusion it is worth noting that it is almost always possible to be even more careful and to look for more evidence. The professor had good reason to think that the movie started at 8:00 and to believe that the newspaper would say that it did. With hindsight, it is easy to criticize him. But if he should have checked today's newspaper, then perhaps he also should have checked the movie listings online, or he should have called the theater to confirm what the newspaper said. Maybe he should have called a second time to get someone to confirm what was said on the recording heard during the first call. Further checking is almost always possible. Depending upon the seriousness of the situation, the likelihood that new information will be helpful, and other factors, it is sometimes in your interest to do some further checking. However, it is surely not always sensible to keep on checking. But all of this is independent of the reasonableness of believing what he did given the situation he actually was in.

C2. Objection 2: Loyalty

Example 4.7: The Accusation

A good friend is accused of a crime, and you are aware of some incriminating evidence. You also know this friend well and have evidence that committing such a crime would be out of character. Your friend is terribly distressed by the charges brought against her, and she calls you for support. Out of loyalty to your friend, and given the mixed quality of your evidence, you believe that your friend is not guilty.

This is a praiseworthy reaction. It displays loyalty toward a friend in need. One might be tempted to say that believing that your friend is not guilty is justified, even though your evidence does not support your belief. It is, perhaps, plausible to say that matters of loyalty and friendship take precedence here, and that it is better for you to go against your evidence in this case. This may seem to be a problem for evidentialism, because evidentialism says that evidence alone determines what is justified. It entirely discounts considerations of loyalty, friendship, and the like. That, you might think, is a mistake.

The evidentialist response turns on a point discussed earlier in this chapter. Epistemology generally, and evidentialism in particular, are about the nature of rational belief. They do not address questions about morality. The rational attitude in this case is, as evidentialism asserts, to suspend judgment, or perhaps believe that your friend is guilty. This may be a case in which a morally good person will set rationality aside. But that is another matter. That fact casts no doubt on evidentialism's verdict about what the epistemically rational attitude is in this example.[8]

Evidentialism is thus able to withstand these initial objections. Hard questions remain. Recall the list of things that *The Standard View* says that we know. There are hard questions about exactly what our evidence for these things is and how that evidence manages to provide support for our beliefs. We turn next to some views about how these matters work out. These are not alternatives to evidentialism. They are, instead, some ways in which the details of evidentialism might be spelled out. We will use one of the most famous arguments in the history of philosophy as a way to begin discussion of these matters: *The Infinite Regress Argument*.

II. THE INFINITE REGRESS ARGUMENT

Statements of *The Infinite Regress Argument* go way back—some say to Sextus Empiricus (third century A.D.), others say to Aristotle (fourth century B.C.). The argument begins with the observation that what makes a belief justified, at least in the typical case, are other beliefs or reasons. This just seems to be a statement of evidentialism itself. But if you think about this for a moment, you will notice that a problem arises. If one belief is based on some reasons, but those reasons do not have a basis themselves, then it looks as if what depends on those reasons

is no better justified than a belief for which one has no reasons at all. For example, if, in Example 4.1, Hasty concocted out of thin air a whole story about why Filcher stole the painting, he might be able to cite this story as his "reason" for believing (1). But if he has no good reason to believe the supporting story, then, in the end, he has no good reason to believe (1). In short, it seems that you need reasons for your reasons if your belief is to be justified. And this looks like trouble. There is a regress threatening: You need reasons for your reasons, and you need reasons for those reasons, and so. But it does not seem as if any of us could ever have this endless supply of reasons.

The problem just posed has had a central role in epistemology, both because it has been historically influential and because it is useful to organize theories on the basis of how they respond to it. Some terminology will help in the discussion that follows. It seems that as a matter of logic, there are two possibilities about justified beliefs: Either every justified belief is justified because it is supported by some other beliefs or else there are some justified beliefs that do not depend on other beliefs. Beliefs of the latter sort are said to be *justified basic beliefs*. Other terms for the same category are *immediately justified beliefs* and *noninferentially justified beliefs*. We can state this as a formal definition:

JB. B is a justified basic belief = df. B is justified, but is not justified on the basis of any other beliefs.

Nonbasic justified beliefs (*mediately justified beliefs, inferentially justified beliefs*), then, are beliefs that are justified on the basis of other beliefs.

Another useful idea is that of a *chain of reasons* or an *evidential chain*. This is a structured sequence of beliefs, each of which is justified by its predecessors. It is important to notice that an evidential chain need not have just one proposition at each link or level. For example, in tracing out the evidential chain associated with Careful's belief in (1), we might have the facts about the fingerprints and the possession of the painting as the reasons for (1). There will be further reasons for each of these, perhaps involving the results of the fingerprint tests and the like.

There seem to be a limited number of ways evidential chains can be structured. One possibility is that they are infinitely long—for each step there is a prior reason. Another possibility is that they go in loops or circles—if you trace the reasons for a belief back far enough, you eventually come back to that very belief. Another possibility is that evidential chains really do have beginnings. At the beginning of any evidential chain are justified basic beliefs. A final possibility is that evidential chains trace back to beliefs that are not justified at all.

This is a rather puzzling set of options. None of them seems entirely satisfactory. How could we have an infinite series of justified beliefs? How could a belief be justified if it traces back to itself? That seems like blatantly objectionable circular reasoning. How could a belief be justified without the support of other beliefs—how could there be justified basic beliefs? How could beliefs be justified if they trace back to beliefs that are not themselves justified? Every account of evidential chains seems unpromising.

We can formulate these considerations into a precise argument. The main value of formulating this argument is that it makes explicit a variety of ideas and assumptions involved in the considerations just put forward. Furthermore, theories about justification can usefully be grouped according to how they respond to this argument.

Argument 4.1: The Infinite Regress Argument

1-1. Either there are justified basic beliefs or each justified belief has an evidential chain that either
  (a) terminates in an unjustified belief
  (b) is an infinite regress of beliefs
  (c) is circular

1-2. But beliefs based on unjustified beliefs are not themselves justified, so no justified belief could have an evidential chain that terminates in an unjustified belief (that is, not (a)).

1-3. No person could have an infinite series of beliefs, so no justified belief could have an evidential chain that is an infinite regress of beliefs (that is, not (b)).

1-4. No belief could be justified by itself, so no justified belief could have an evidential chain that is circular (that is, not (c)).

1-5. There are justified basic beliefs (1-1)–(1-5).

The argument is valid. That is, if the premises in the argument are correct, then the conclusion must be correct as well. If the argument goes wrong at all, it must have a false premise. Thus, either we must accept the conclusion that there are justified basic beliefs or else reject one of the premises. Theories in epistemology can be classified in part by what they say about this argument:

Foundationalism: The argument is sound. There are justified basic beliefs, and they are the foundation upon which all our other justified beliefs rest.

Coherentism: The argument goes wrong at premise (1-4). The justification for one proposition can be another, which is itself justified by still others. More generally, a person's belief is justified when it fits together with the person's other beliefs in a coherent way. A belief is thus justified by a whole system, of which it is a part. Hence, a belief is partially justified by itself, and (1-4) is false.

Skepticism: Because neither foundationalism nor coherentism is at all plausible, and there is no other place at which the argument goes wrong, it must go wrong right at the start when it assumes that there are justified beliefs. There cannot be any justified beliefs.

Other responses to the argument are possible. Some philosophers have said that evidential chains terminate in beliefs that are not justified, so they reject (1-2). Others say that infinite chains of reasons are possible. So they reject (1-3). We will not consider such views here.

For a long time, foundationalism was the prevailing view, and the main issue was whether foundationalists had any decent way to defend their view from skepticism. A large part of this involved clarifying just what foundationalism amounted to—explaining just what a basic belief would be like. In recent years, many philosophers have rejected foundationalism and some have accepted coherentism. Foundationalism and coherentism are the focus of the rest of this chapter.

III. CARTESIAN FOUNDATIONALISM

Foundationalism involves two fundamental claims:

F1. There are justified basic beliefs.
F2. All justified nonbasic beliefs are justified in virtue of their relation to justified basic beliefs.

These assertions prompt the following questions for foundationalists:

QF1. What are the kinds of things our justified basic beliefs are about? Which beliefs are justified and basic?
QF2. How are these basic beliefs justified? If they are not justified by other beliefs, how do they get justified?
QF3. What sort of connection must a nonbasic belief have to basic beliefs in order to be justified?

Different versions of foundationalism can be identified by their answers to these questions.

A. The Main Idea of Cartesian Foundationalism

René Descartes was an extremely influential seventeenth-century philosopher. He is widely known as a defender of a particular version of foundationalism. It is, however, difficult to extract from his writings the version of foundationalism frequently attributed to him.[9] We will call the view to be discussed *Cartesian foundationalism*, and in some places introduce aspects of the view by saying, "The Cartesian view is that . . ." even though it is unlikely that Descartes actually would agree to all aspects of the view to be described.

The Cartesian foundationalist answer to (QF1) singles out as basic beliefs our beliefs about our own states of mind. Propositions describing what one seems to see, what one thinks, how one feels, etc. are basic. Descartes seems to have thought that basic beliefs were beliefs that were in some sense indubitable or

free from all possibility of error. He noted that your own belief that you exist could not be mistaken, and this seemed to put it in the class of basic beliefs. The rest of what we know, according to Cartesian foundationalism, is what we can deduce from our basic beliefs. So if we have knowledge of the world around us, it is because we can deduce the things we know from these basic beliefs.

B. A Detailed Formulation of Cartesian Foundationalism

It is important to understand properly the beliefs Descartes counts as basic. Consider a sentence such as:

4. René seems to see a tree.

There might not actually be things of the sort René seems to see. (4) just describes how things look to him. Things can look this way when he really sees a tree. But they can also look this way in other circumstances, such as when he is dreaming or suffering from an illusion. (4) simply describes his internal state of mind. Descartes thinks of feeling pain in an analogous way. One can "feel pain" even if there is nothing going on in the part of the body that seems to be hurting.

In general, then, Descartes's answer to (QF1) says that basic beliefs include beliefs about states of mind—beliefs about how things look or sound to you, what you seem to remember, etc. These beliefs are *appearance beliefs* and the inner states they describe are *appearances*. It is important to realize that appearance beliefs are not limited to beliefs about how things look. They include beliefs about how they sound, taste, feel, and smell. In addition, beliefs about what you seem to remember and perhaps beliefs about what you yourself believe are included. In general, appearance beliefs are beliefs about the current contents of your own mind.

By themselves appearance beliefs do not imply anything about what is in the world outside one's own mind. In other words, they do not by themselves imply anything about the *external world*. In principle, you could have the same inner state in a dream, hallucination, or normal perception. As philosophers use the phrase *external world*, then, it refers to everything outside of one's own mind. So your own experiences and your beliefs about them are inside your mind. Everything else is, from your perspective, part of the external world. Thus, things in the minds of your friends and neighbors are, from your perspective, part of the external world.

There is a distinction here worth noting. You could take "It seems to me that p" to mean "I believe that p." Similarly, you might take (4) to mean that René believes that he sees a tree. This is not what we mean. Rather, we mean that his state of mind is one of seeming to see a tree. The image before his mind is "tree-like." As we understand (4), Descartes would believe (4), and it would be true, if he had a tree-like image before his mind that he knew had been induced artificially in some sort of psychological experiment. He could say in such a case, "I seem to see a tree, but I do not believe that I really see a tree."

One interpretation of the Cartesian foundationalist answer to (QF2) relies on the idea that the basic beliefs are beliefs in propositions that one *cannot doubt*. They are said to be *indubitable*. In other words, the basic beliefs are appearance beliefs that cannot be doubted, or disbelieved. Perhaps when a tree-like image is before your mind, you cannot help but believe that you seem to see a tree. If this is the idea behind the answer to (QF2), then the general answer seems to be that basic beliefs are justified because they are beliefs in propositions that, in the circumstances, we are incapable of doubting. But this is not a good answer to (QF2). The inability to doubt a proposition does not make believing it epistemically justified. It may instead be the result of a psychological limitation. Suppose a person is so psychologically dependent upon his mother's love that he cannot doubt that his mother loves him. That does not make the belief epistemically justified. The person may have plenty of good reasons to believe otherwise but lack the capacity to believe what his reasons support. So inability to doubt does not make something justified, and thus cannot explain why it is a justified basic belief.

There is another theme in Descartes's writings. He suggests that beliefs about our own internal states are beliefs that could not be mistaken. The idea is that if he believes a thing like (4), then he could not be mistaken about that. He might be mistaken about whether there really is a tree there, but not about whether it looks as if there is a tree there. More generally, the idea is that basic beliefs are justified because they are beliefs in propositions about which we cannot be mistaken. In other words, we are *infallible* about them. So we will take the Cartesian foundationalist answer to (QF2) to be that basic beliefs are justified because we cannot be mistaken.

Consider next what is commonly taken to be Descartes's answer to (QF3). He apparently thought that everything else that is justified must be *deduced* from the justified basic beliefs. Thus, he held that to get justified beliefs about the external world you must combine basic beliefs in ways that guarantee the truth of those beliefs about the world. Because statements about how things look or seem have no such guarantee, this is a difficult task. Descartes's own approach went as follows.[10] He claimed that certain elementary beliefs about logical and conceptual matters were also basic. Perhaps his idea was that elementary propositions about these matters are ones that we can just see to be true, simply by reflecting on them. Examples might be the proposition that everything is identical to itself or the proposition that if the conjunction *P and Q* is true, then *P* is true. Without examining this issue in detail here, it will suffice to identify this class of basic beliefs as *elementary truths of logic* and attribute to Descartes the view that our beliefs in these propositions are also justified basic beliefs.

Descartes's way of arguing that some external world beliefs are justified, given his answers to (QF1), (QF2), and (QF3), was to argue that the elementary truths of logic included propositions on the basis of which he was able to prove conclusively that God exists and that God would not or could not be a deceiver. But if our appearance beliefs were misleading, then God would be a deceiver. Using this conclusion combined with his appearance beliefs, he derived a large number of external world beliefs. In this way, he concludes that we do have knowledge of lots of facts in the world.

Cartesian foundationalism, then, is the view characterized by the following three claims, which comprise answers to the three questions for foundationalists:

CF1. Beliefs about one's own inner states of mind (appearance beliefs) and beliefs about elementary truths of logic are justified basic beliefs.

CF2. Justified basic beliefs are justified because we cannot be mistaken about them. We are "infallible" about such matters.

CF3. The rest of our justified beliefs (e.g., our beliefs about the external world) are justified because they can be deduced from our basic beliefs.

C. Three Objections to Cartesian Foundationalism

C1. We Are Not Infallible About Our Own Mental States The combination of (CF1) and (CF2) can be refuted if it can be shown that we are not infallible about our own mental states. The following example shows that there is good reason to think that we can be mistaken, even about these matters.

Example 4.8: The Frying Pan

You are walking toward a counter that has an electric frying pan on it. You have just been told to be careful of the pan because it is very hot. As you approach the counter, you trip and put your hand out to stop your fall. Your hand unfortunately comes down right on the pan. You immediately pull it away, thinking:

5. I am now having a sensation of extreme heat.

In fact, as you soon realize, the pan is actually not on. You did not feel heat at all.[11]

It is alleged that in this sort of example you believe (5), that (5) is a proposition about your own current mental states, and that (5) is false. If all of this is right, then we are not infallible about our own mental states.

To assess this example, it is important to be careful about exactly what (5) means. The word *sensation* is ambiguous. It can be used in ways that imply that there really is an external thing that is being sensed. It can also be used to refer to a purely internal state. According to the first usage, (5) is true only if there is actual contact with a very hot thing. So understood, (5) does not express the sort of belief that Cartesian foundationalists claim to be basic. It is not about one's mental state. Instead, it is about the causes outside of the mind of the current experience. On this interpretation, (5) says that an extremely hot thing is causing the current feeling of heat.

The second interpretation of (5) makes it about your internal state alone. It just says that you are having the hot feeling, that you feel heat. It says nothing