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

CHAPTER THREE

Modifying *The Traditional Analysis of Knowledge*

I. AN OBJECTION TO THE TRADITIONAL ANALYSIS

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

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

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

A. The Counterexamples

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

Example 3.1: The Ten Coins Case

Smith is justified in believing:

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

The reason Smith is justified in believing (1) is that he has just seen Jones empty his pockets, carefully count his coins, and then return them to his pocket. Smith also knows that Jones is extremely well qualified for the job and he has heard the boss tell the secretary that Jones has been selected. On the basis of (1), Smith correctly deduces and believes another proposition:

2. The man who will get the job has ten coins in his pocket.

Smith is justified in believing (2) on the basis of this inference. In spite of Smith's evidence, (1) is not true after all. The boss misspoke when he said that Jones was going to get the job. In fact, the job is going to the company vice president's nephew, Robinson. Coincidentally, Robinson also happens to have ten coins in his pocket.

In this example (2) is true even though (1) is false. Smith was justified in believing (1), correctly deduced (2) from (1), and believed it as a result. So, Smith was also justified in believing (2). And (2) is true. So Smith's belief in (2) is justified and true. But clearly Smith does not know (2). It is just a coincidence that he is right about (2).

Example 3.2: The Nogot/Havit Case[2]

Smith knows that Nogot, who works in his office, is driving a Ford, has Ford ownership papers, is generally honest, etc. On this basis he believes:

3. Nogot, who works in Smith's office, owns a Ford.

Smith hears on the radio that a local Ford dealership is having a contest. Anyone who works in the same office as a Ford owner is eligible to enter a lottery, the winner receiving a Ford. Smith decides to apply, thinking he eligible. After all, he thinks that (3) is true, so he concludes that:

4. There is someone who works in (my) Smith's office who owns a Ford. (There is at least one Ford owner in Smith's office.)

It turns out that Nogot is a Ford faker and (3) is false. However, (4) is true because some other person unknown to Smith, Havit, works in his office and owns a Ford.

So Smith has a justified true belief in (4), but he does not know (4). It is just a lucky coincidence, resulting from Havit's having it, that makes him right about (4).

Example 3.3: The Sheep in the Field[3]

Having won a Ford in a contest, Smith goes for a drive in the country. He looks off into a nearby field and sees what looks exactly like a sheep. So he justifiably believes:

5. That animal in the field is a sheep.

Smith's son is in the back seat reading a book and not looking at the scenery. The son asks if there are any sheep in the field they are passing. Smith says "Yes," adding:

6. There is a sheep in the field.

Smith is justified by what he sees in thinking that (5) is true. (6) follows from (5), so he is justified in believing (6) as well.

As it turns out, (5) is false. What Smith sees is a sheep dog (or a sheep statue, or some other perfect sheep look-alike). But (6), as it happens, is true anyway. Out in the field, but out of view, there is a sheep.

So, Smith has a justified belief in (6), and it is true. But he does not know it. It is only by luck that he is right about (6).

It should be noted that the details of the examples can be modified to strengthen Smith's support for his belief in the false proposition in each case. For example, you can add whatever you like to his support for the belief that Nogot owns a Ford. Nogot can show him his keys with a Ford insignia and wear a Ford tee shirt, etc. No matter how much you add to the case, it will remain possible that Nogot is faking his Ford ownership. And given that this is possible, it remains possible to construct a case in which it is coincidentally true that someone in the office owns a Ford. Similar remarks apply to the other examples. Merely requiring stronger reasons for a belief to be justified would not avoid the objections.

B. The Structure of the Counterexamples

Examples 3.1–3.3 share a common structure. In each case, Smith has some basic evidence that strongly supports some proposition. It is the sort of evidence that *The Standard View* counts as good enough for knowledge. He believes that proposition and then draws a further conclusion from it. In each example, the odd-numbered sentence describes the first proposition Smith believes:

1. Jones is the man who will get the job and Jones has ten coins in his pocket.
3. Nogot, who works in Smith's office, owns a Ford.
5. That animal in the field is a sheep.

The even-numbered sentences describe the conclusions Smith draws from the first step:

2. The man who will get the job has ten coins in his pocket.
4. Someone who works in Smith's office owns a Ford. (There is at least one Ford owner in Smith's office.)
6. There is a sheep in the field.

The odd-numbered proposition is false in each case. Still, given the evidence, it is extremely reasonable for Smith to believe it. It is a justified belief. And the final

conclusion follows logically from the previous step. The final conclusion is, in each case, true. In effect, the final conclusion is true "by coincidence." It just so happens that the person who got the job has ten coins, that there is a Ford owner in the office, and that there is a sheep in the field. So Smith has very good reasons to believe the first step and follows perfectly good logical principles in deriving the second step. Thus, he has a justified true belief in each of the final conclusions. But in each case the truth of that conclusion is unconnected to the original evidence. Smith does not have knowledge, even though he has justified true beliefs.

Stating the structure of the examples helps to bring out two important principles that they rely on. One principle allows that the person can be justified in believing the odd-numbered propositions even though they are false. We can state this as *The Justified Falsehood Principle*, or *(JF)*:

JF. It is possible for a person to be justified in believing a false proposition.

The second important principle is the one that says that the second proposition is justified because it is deduced from the first. This is *The Justified Deduction Principle*, or *(JD)*:

JD. If S is justified in believing p, and p entails q, and S deduces q from p and accepts q as a result of this deduction, then S is justified in believing q.

If the three examples just described are possible and these two principles are true, then the *TAK* is mistaken. The examples may be odd, but they are clearly possible. Things like this can, and do, happen. The two principles do seem correct. Thus, it looks as if we have a strong case against the *TAK*. As we shall see, however, some people have tried to defend the *TAK* by rejecting the principles.

To state a Gettier-style example, then, first one has to find a case of a justified false belief. If (JF) is correct, there are such cases. One then identifies some truth that logically follows from that falsehood. There will always be such truths. The example proceeds by having the believer deduce this truth from the justified false belief. If (JD) is correct, the resulting belief will be a justified true belief that is not knowledge.

It appears, therefore, that Gettier-style examples show that the *TAK* is incorrect.

II. DEFENDING THE TRADITIONAL ANALYSIS

You may have some misgivings about Gettier-style examples. Usually, doubts are based on the idea that the person in the example is not justified in believing the final proposition and thus does not really have a justified true belief.[4] And this idea relies on rejecting one or the other of the two principles just stated.[5] In this section we will examine the plausibility of these responses to the examples.

A. Rejecting (JF)

One way to defend the *TAK* is to reject (JF). You might think that if a proposition is false, then a person who believes it must not have good enough reasons for that belief. If correct, this provides a defense of the *TAK* in the following way. It implies that in each of our examples Smith is not justified in believing the false proposition. If Smith is not justified in believing the false proposition (the odd-numbered one), then he is not justified in believing what he deduces from it. Thus, his belief in the even-numbered proposition is not justified either. As a result, Gettier-style examples are not cases of justified true beliefs (because they are not cases of justified beliefs), and thus they do not refute the *TAK*.

Consider how this response applies the Nogot/Havit case. The critic contends that, in spite of the evidence, Smith is not justified in believing proposition (3), that Nogot owns a Ford. The reason for this is that (3) is false, and thus Smith's evidence must not have been good enough. More generally, the critic says, a person can never be justified in believing a false proposition. (JF) is mistaken.

Because Smith's reasons for believing (3) can be extremely strong, this is an implausible response. Moreover, given one very sensible assumption, rejecting (JF) implies that hardly anyone is ever justified in believing anything! To see why, consider any example in which a person has what *The Standard View* regards as a justified belief. Assume that there is nothing odd about the case, and that things are exactly as the person believes them to be. Call this *"The Typical Case."* Now, it is always possible to construct an example that is a variation on *The Typical Case*. In this variant, the person has that very same evidence, but the proposition in question is nevertheless false. Call this variant *"The Unusual Case."* To fill in the details of *The Unusual Case*, it will be necessary to add in unusual efforts at deception and the like. Although such things are unusual, they are possible. The key thing to note is that in *The Typical Case* and in *The Unusual Case*, the believer has exactly the same reasons for believing exactly the same thing. So the belief is either justified in both cases or else not justified in both cases. If (JF) is false, then the belief is not justified in *The Unusual Case* (because it is false). But then it is not justified in *The Typical Case* either, since the reasons are the same. This can be done for virtually any allegedly justified belief, so if (JF) is false, virtually no beliefs are justified.

The reasoning just displayed depends upon *The Same Evidence Principle*, or *(SE)*:

SE. If in two possible examples there is no difference at all in the evidence a person has concerning some proposition, then either the person is justified in believing the proposition in both cases or the person is not justified in believing the proposition in both cases.

(SE) is an extremely plausible principle. If (SE) is true and (JF) is false, then virtually nothing is justified. And that violates our basic assumption (for now, at least) that we do know things. So this first defense of the *TAK* is no good.[6]

Some readers may still think that rejecting (JF) is correct. Recall, however, that the point of the current chapter is to see what the consequences of *The Standard*

View are. *The Standard View* holds that we do know a lot, and rejecting (JF) implies that hardly anything is justified and thus hardly anything is known. So rejecting (JF) requires rejecting *The Standard View*. In other words, (JF) is a consequence of *The Standard View*. Thus, rejecting it is out of place at this stage of our inquiry. We will return to this topic when we examine *The Skeptical View*.

B. Rejecting (JD)

Recall that the Gettier examples depended on (JD) as well as (JF). (JD) says that justification can be transferred through deduction. A second possible basis for defending the traditional analysis from these counterexamples is to reject (JD). The idea is that when you reason properly from justified truths, the result is justified, but when you reason properly from justified falsehoods, the result is not justified. In other words, if you start with a justified true belief and properly draw a conclusion from it, then the resulting belief is justified. However, if you start with a justified false belief—remember, we are accepting (JF)—and correctly draw a conclusion from it, then the resulting belief is not justified. Thus, in this view, in each of the Gettier cases the person is justified in believing the first step—the odd-numbered proposition—but not justified in believing the consequence drawn from it. Advocates of this view therefore reject (JD).

This view also requires rejecting (SE). Imagine an example like any one of the Gettier-style cases but in which there is no trickery going on and the first step is actually true. Drawing the final conclusion is, under those circumstances, justified. But, according to the present proposal, it is not justified in the Gettier cases. Yet the person has exactly the same reasons in each case. This is implausible.

Consider carefully what someone who rejects (JD) would be saying about Smith in each of the Gettier cases. The critic would say of Smith, "Yes, Smith is justified in believing that Nogot, who works in his office, owns a Ford. And it is true that he can deduce from this that someone who works in his office owns a Ford. But, nevertheless, he is not justified in believing that conclusion." This seems absurd. We might sensibly wonder what attitude Smith would be justified in taking toward the proposition that someone in his office owns a Ford. Would it be reasonable for him to believe that Nogot owns one but to deny or suspend judgment about whether someone owns one? Clearly not. But that is what the rejection of (JD) seems to recommend. Rejecting (JD) just is not a good way to defend the *TAK* from Gettier's examples.

These attempts to defend the *TAK* from Gettier-style examples fail. We turn next to responses according to which knowledge requires something in addition to justified true belief.

III. MODIFYING THE TRADITIONAL ANALYSIS

A plausible idea is that you cannot have knowledge if your belief depends on a false proposition. In this section we will consider a few efforts to spell out this idea more clearly.

A. The No False Grounds Theory

One way in which the justification of a belief might depend upon a falsehood is if there is a false proposition among the grounds or reasons for the belief. Michael Clark has proposed a solution to the Gettier problem making use of this idea.[7] Clark suggests the following *No False Grounds* account of knowledge. It adds a fourth condition to the three in the *TAK*:

> NFG. S knows p =df. (i) S believes p; (ii) p is true; (iii) S is justified in believing p; (iv) All of S's grounds for believing p are true.

The idea here differs from, and is better than, the proposal discussed in Section II, according to which beliefs that have false grounds are not even justified. Here the idea is that having all true grounds is an additional condition for knowledge, but not a condition for justification. Thus, defenders of (NFG) agree that the victims of the Gettier examples are justified in their beliefs. This was what the previously discussed critics denied. Instead, this response says that knowledge cannot depend on any false grounds. In each of the preceding examples, Smith does have a false ground for his final belief. So (NFG) seems to avoid Gettier-style counterexamples.

(NFG) will work provided that (a) in all Gettier cases the believer has a false ground, and (b) there are no cases of knowledge in which the believer does have a false ground. There are reasons to doubt each of these.

Consider (a) first. There are Gettier-style cases in which the person does not explicitly go through a false step in his or her reasoning. As we will see, these *may* be Gettier cases in which the believer does not have a false ground. We can use a revised version of the Nogot/Havit case to illustrate the point.

> *Example 3.4: The Alternate Route*[8]
>
> Smith notices that Nogot is driving a Ford, has a Ford ownership certificate, and so on. But instead of drawing a conclusion about Nogot, Smith draws the following conclusion:
>
> 7. There is someone who works in Smith's office who drives a Ford, has Ford ownership papers, etc.
>
> On the basis of (7), Smith draws the same final conclusion as before:
>
> 4. There is someone who works in Smith's office who owns a Ford.

The difference between the two examples is that in the original version Smith explicitly reasoned through a false step to get to his true conclusion, and in the new version he takes an alternate route to get to that same conclusion.

In the original version of the example, Smith's thinking went:

> N. Nogot, who works in Smith's office, drives a Ford, has Ford ownership papers, etc.

3. Nogot, who works in Smith's office, owns a Ford.
4. There is someone who works in Smith's office who owns a Ford.

(N) is true, (3) is false, and (4) is true. So this route to (4) goes through a falsehood. But in the second case Smith replaces (3) with (7). Smith's thinking now goes:

N. Nogot, who works in Smith's office, drives a Ford, has Ford ownership papers, etc.
7. There is someone who works in Smith's office who drives a Ford, has Ford ownership papers, etc.
4. There is someone who works in Smith's office who owns a Ford.

(N) and (4) are still true, but now the middle step, (7), is also true. So in this version of the example, Smith does not reason through a false proposition. Yet Smith still does not know (4). It is still a Gettier case. Thus, not all Gettier examples rely on a person deriving a truth from a falsehood.

It is true that in Example 3.4 there is still a falsehood "in the vicinity." Proposition (3), Nogot owns a Ford, is false, and this seems to matter. You might even think that (3) is part of Smith's grounds, even though he does not explicitly think about it. Thus, we are faced with a question. In Example 3.4 is (3) part of Smith's grounds for (4) or not?

We can think of what is included in the grounds for a belief in a broader or a narrower way. The narrower account is follows:

G1. The grounds for a belief include just those other beliefs that are explicit steps in the chain of inferences leading to the belief.

If clause (iv) of (NFG) makes use of this account of grounds, then Example 3.4 refutes the theory. It is a Gettier case in which explicit steps of reasoning include no falsehood. This suggests that Clark would be better off appealing to a broader account of the grounds of belief, an account according to which the grounds include more than the explicit steps of reasoning. For example, he might propose:

G2. The grounds for a belief include all beliefs that play any role in the formation of the belief, including "background assumptions" and presuppositions.

If Clark uses (G2) in explaining clause (iv) of his account of knowledge, then Example 3.4 does not refute it. This is because there is a false background assumption in the example, namely (3). So, by appealing to (G2), Clark could plausibly argue that condition (iv) of (NFG) is not satisfied in Example 3.4, and thus his theory has just the right result here: it says that Smith does not know that someone in his office owns a Ford.

The problem with this reply is that the theory now faces a different objection. As was noted earlier in this section, (NFG) works only if there are no cases of knowledge in which there are falsehoods among the person's grounds. However, it is clear that there can be knowledge even when some of one's grounds are false. This is true on either the more-inclusive or the less-inclusive account of grounds, but it is especially obvious when the grounds include background beliefs and presuppositions. The following example illustrates the point:

Example 3.5: The Extra Reasons Case

Smith has two independent sets of reasons for thinking that someone in his office owns a Ford. One set has to do with Nogot. Nogot says he owns a Ford, and so on. As usual, Nogot is merely pretending. But Smith also has equally strong reasons having to do with Havit. And Havit is not pretending. Havit does own a Ford, and Smith knows that he owns a Ford.

In this example, Smith does know that someone in his office owns a Ford. This is because his reasons having to do with Havit are good enough to give him knowledge. Yet one of his reasons, the one having to do with Nogot, is false. This shows that you can still have knowledge even if there is some falsehood somewhere in the picture. This objection is decisive. It shows that Clark's condition is too strong.[9]

Thus, Clark's way of fixing up the *TAK* does not work. If he uses (G1), then Example 3.4 refutes it. If he uses (G2), then Example 3.5 refutes it. The mere fact that there is a falsehood among one's reasons for a belief does not show that one lacks knowledge.

B. The No Defeaters Theory

There is another way philosophers have tried to explain what it is for the justification of a belief to depend upon a false proposition. A notable feature of the Gettier cases may be that there is a true proposition such that if the believer knew about it, then he would not believe (or would not be justified in believing) the proposition in question. In effect, then, the believer's justification depends upon the denial of this truth.[10]

We can apply this thought to our examples. In Example 3.1, if Smith realized that Jones will not get the job (which is true), then he would not believe that the man who will get the job has ten coins in his pocket (or he would no longer have any good reason to believe this). In Examples 3.2 and 3.4, if Smith realized that Nogot does not own a Ford, then, given the rest of the example, he would no longer have any good reason to believe that someone in the office owns a Ford. In Example 3.3, if Smith realized that the thing he was looking at is not a sheep, then he would no longer be justified in believing that there is a sheep in the field. (In contrast, in Example 3.5 he would continue to believe that someone in the office owns a Ford even if he learned that Nogot does not own one.)

Thus, in each Gettier example (Examples 3.1–3.4), there is a false proposition that Smith actually believes. If he did not believe it, and instead justifiably believed its negation (which is true), then he would stop believing, or stop having justification for, the Gettier proposition. That true proposition is said to *defeat* Smith's justification. And the idea is that one has knowledge when there are no truths that defeat one's justification. Thus, the proposal is to add to the *TAK* the requirement that there be no defeater:

ND. S knows p = df. (i) S believes p; (ii) p is true; (iii) S is justified in believing p; (iv) There is no true proposition t such that, if S were justified in believing t, then S would not be justified in believing p. (No truth defeats S's justification for p.)

(ND) seems to deal correctly with all the examples considered so far.

Unfortunately, there are problems for the no defeaters theory. Here are two.

Example 3.6: The Radio Case

Smith is sitting in his study with his radio off and Smith knows that it is off. At the time, Classic Hits 101 is playing the great Neil Diamond's great song "Girl, You'll Be a Woman Soon." If Smith had the radio on and tuned to that station, Smith would hear the song and know that it is on.

It may not be immediately obvious why this poses a problem, but it does. In Example 3.6 Smith knows:

8. The radio is off.

Conditions (i)–(iii) of the *TAK* are satisfied. But is (iv) satisfied? That is, is there any true proposition such that if Smith were justified in believing it, then he would not be justified in believing (8)? One true proposition in this story is

9. Classic Hits 101 is now playing "Girl, You'll Be a Woman Soon."

Suppose Smith were justified in believing (9). In any typical case there are many ways in which he might be justified in believing (9). The most likely way is that he would have the radio on. Of course, it might be that he could learn about (9) by having someone call him on the telephone and tell him, or by getting an e-mail message alerting him to the news. But suppose that in our example these other ways are not available. In our example, if Smith were justified in believing (9), then he would have his radio on and he would hear the song. But if that were the case, then Smith would not be justified in believing that the radio is off. So condition (iv) is not satisfied. There is a true proposition, (9), such that if Smith were to be justified in believing it, then Smith would not be justified in believing (8). In a sense (or perhaps in several senses), Smith is

lucky not to know (9). For one thing, it enables him to know (8). For another, Smith does not have to hear the song.

This example may be confusing. That is largely because sentences that say that if one thing were true, then another thing would be true are confusing. These sentences are called *subjunctive conditionals*. Applied to this case, the conditional concerns what would be the case if Smith were justified in believing (9). The best way to determine this is to consider how Smith would come to be justified in believing (9). In the circumstances described, the way is that Smith would have the radio on, tuned in to Classic Hits 101, and he would hear the song on the radio. But if that were the case, then Smith would know that the radio is on. So if that were the case, Smith would not be justified in believing that the radio is off. And this is what makes trouble for (ND). It says that Smith does not know (8) if there is some other truth such that if he were justified in believing it he would not be justified in believing (8). But (9) is just such a truth.

Once you see how Example 3.6 works, it is easy to generate additional examples along the same lines. The underlying point is very simple, though surprising. It is that one can know some facts and there can be other facts such that if one knew these other facts, then one would not know the original facts. This is because, if one were in a position to know the latter facts, then one would not be in a position to know the former facts. And, in some cases, if one knew the latter facts, then the former facts would not even be true. The current version of the no defeaters theory says that when there are such facts, one lacks knowledge. Because there typically will be such facts, the theory implies that we know very little.

There is another way that ignorance of some truths can help us to know things. (ND) has a problem with these cases as well. Here is one such example.

Example 3.7: The Grabit Case[11]

Black sees her student Tom Grabit stick a tape in his coat pocket and sneak out of the library. She knows that Tom took the tape. Now, imagine that Tom's crime is reported to Tom's mother in her room at the psychiatric hospital. And she replies that Tom didn't do it, that it was his twin brother Tim. And imagine further that he has no twin, that this is just another one of her delusions. Black is ignorant of all this.

Why is this a problem? Consider this truth:

10. Tom's mother said that Tom's twin Tim took the tape.

Notice that (10) itself is true, even though what Tom's mother said is false. If Black were justified in believing just this truth—but not the rest of the story about her—that would defeat Black's justification. It is a misleading defeater.

Again, this may seem confusing. But the idea is relatively simple. If we can know ordinary things, then there can be other truths such that if we learned

them, they would undermine our justification for the thing we know. But some of these defeaters are misleading. That is, we actually know things, but we would not know them if we learned about these defeaters. We are lucky not to know about the defeaters. Mrs. Grabit's testimony is like this. Notice that in the Tom Grabit case, unlike the real Gettier cases, things are exactly as Black thinks they are. Black is fortunate to be ignorant of the demented mother's ramblings. Black would have lost her justification for her belief about Tom if she knew about them.

So this version of the no defeaters theory will not work. There are lots of possible variations on (ND), and perhaps some versions avoid the examples considered here. The other variations add more complexity to the analysis, and there are even more odd counterexamples proposed against them, but we will not pursue them here.[12]

D. A Modest Proposal

It is safe to say that there is no agreed-upon solution to the problem Gettier raised for the *TAK*. The defenses of the *TAK* discussed in Section II are inadequate and the modifications considered in this section face serious problems. The Gettier problem remains unresolved.

It remains true, however, that in all the Gettier cases there is a false proposition involved that makes it the case that the person lacks knowledge. Somehow, the justification depends on this falsehood, even if we have not spelled out in detail just how it depends on that falsehood. We can make use of this point in taking at least a modest step toward a solution to the problem.

The key thing in all the Gettier-style cases is that, in some sense, the central belief "essentially depends upon a falsehood." The idea of essential dependence is reasonably clear. For example, in *The Sheep in the Field Case*, Smith's belief that there is a sheep in the field depends essentially on the proposition that what he sees is a sheep. In the *Extra Reasons Case*, Smith has two independent lines of thought that lead to the same conclusion. One line of thought, concerning Nogot, does depend on a false proposition. The other line of thought, involving Havit, does not depend on anything false. In this case, Smith's belief that someone owns a Ford does not *essentially* depend upon the falsehood. This is because there is a justificatory line that ignores the falsehood. That is why there can be knowledge in such a situation, even though the reasoning does involve a false proposition. It does not *essentially* depend upon that falsehood.

The *Alternate Route Case* and other cases in which the belief does not directly rely on the falsehood also help to bring out the idea of essentially depending upon a falsehood. In these cases, Smith does not explicitly reason through a false proposition. However, there is implicit dependence upon a false proposition. Typically, the things one depends upon include things that, if pressed, one would say are relevant.

The idea of essential dependence is admittedly not completely clear. However, it gives us a useful working definition of knowledge with which we can proceed. The definition, then, is

EDF. S knows p ≡ df.
(i) p is true.
(ii) S believes p.
(iii) S is justified in believing p.
(iv) S's justification for p does not essentially depend on any falsehood.

By adding clause (iv), (EDF) makes an important modification to the *TAK*. Nevertheless, it retains the heart of the traditional view, because it retains the idea that knowledge requires justified true belief. It simply adds an extra condition. A key question concerning (EDF), as well as the traditional view upon which it is based, has to do with the concept of justification. We will turn to that in detail in Chapter 4. Following that we will examine the views of some philosophers who think that no relatively minor modification of the *TAK* will yield a correct analysis of knowledge. They think that an entirely different account is preferable. We will examine their views in Chapter 5.

IV. CONCLUSION

The traditional answer to (Q1), which asked what the conditions for knowledge are, was that knowledge is justified true belief. The *TAK* is an elegant and appealing analysis of knowledge, but Gettier's examples show that it is less than fully satisfactory. The moral is that knowledge requires justified true belief and something else as well—there is a fourth condition on knowledge. Saying just what that fourth condition is turns out to be remarkably difficult. The no false grounds theory and the no defeaters theory do not succeed. What seems to be crucial is that the justification not *essentially depend* upon anything false. Although this idea has not been spelled out in complete detail, it does give us a useful account of knowledge. Thus, our answer to (Q1) is that knowledge requires justified true belief that does not essentially depend upon a falsehood.

ENDNOTES

1. *Analysis* 23 (1963): 121–3.
2. This example is based on one presented by Keith Lehrer in "The Fourth Condition for Knowledge: A Defense," *The Review of Metaphysics* 24 (1970): 122–8. See p. 125.
3. An example such as this one was presented by Roderick Chisholm in *Theory of Knowledge*, 2nd ed. (Englewood Cliffs, NJ: Prentice Hall, 1977), p. 105.
4. It is possible to argue that Smith does have knowledge of the even-numbered proposition in each of the examples. But that is an approach almost no philosophers have taken. Careful reflection on the cases yields an almost unanimous verdict on them. You just cannot get knowledge when your belief is coincidentally true, as is the case in all these examples.

5. It is possible to argue that in our examples Smith's reasons just are not very good reasons. But as noted at the end of Section IA, one can make Smith's reasons as strong as one likes. No response along these lines seems promising.
6. In Chapter 5 we will examine some theories that reject (SE). However, even according to these theories, (JF) is true and the *TAK* is refuted by Gettier-style examples.
7. "Knowledge and Grounds: A Comment on Mr. Gettier's Paper," *Analysis* XXIV (1963): 46–48.
8. An example such as this one was presented in Richard Feldman, "An Alleged Defect in Gettier Counterexamples," *Australasian Journal of Philosophy* 52 (1974): 68–69.
9. Note that this objection works whether you use (G1) or (G2).
10. For a defense of a view along these lines, see Peter Klein, "Knowledge, Causality, and Defeasibility," *Journal of Philosophy* 73 (1976): 792–812.
11. A slightly modified version of this example first appeared in Keith Lehrer, "Knowledge, Truth and Evidence," *Analysis* XXV (1965): 168–175.
12. For discussion of these alternatives, see Robert Shope, *The Analysis of Knowing* (Princeton, N.J.: Princeton University Press, 1983), Chapter 2.

CHAPTER FOUR

Evidentialist Theories of Knowledge and Justification

If something like the modified version of the *Traditional Analysis of Knowledge* proposed in Chapter 3 is correct, then justification is a crucial necessary condition for knowledge. Furthermore, justification is an interesting and puzzling concept in its own right. It will be the focus of this chapter and the one that follows. The present chapter will cover a traditional, and still widely accepted, account of justification. The next chapter will introduce some rather different, and more recent, accounts of justification (and of knowledge).

To help focus clearly on the central questions, it will be best to use an example in which two people believe the same thing, but one is justified in that belief and the other is not.

Example 4.1: Thievery

Someone has broken into Art's house and stolen a valuable painting. Officer Careful investigates the case and comes up with conclusive evidence that Filcher committed the crime. Careful finds the painting in Filcher's possession, finds Filcher's fingerprints at the scene of the crime, and so on. Careful comes to believe:

1. Filcher stole the painting.

Meanwhile, Hasty also hears about the theft. Hasty happens to live next door to Filcher and has had some unpleasant dealings with him. Hasty dislikes Filcher intensely and blames him for many bad things that happen. Hasty has some vague idea that Filcher works in the art business but has no specific knowledge about what he does. With nothing more to go on, Hasty also believes (1).