

CHAPTER FOUR

UNDERSTANDING

§4.1. INTRODUCTION

In the previous chapters we have rejected the idea that there is a theory of knowledge which can account for its final value, and hence we have concluded that there is no positive response available to the value problem in its strongest, tertiary, form. That said, we have argued for a positive conclusion about the nature of knowledge—that it is has the structure dictated by anti-luck virtue epistemology—and we have argued that two weaker value problems in the epistemic domain—the secondary (and thus primary) value problem and the swamping problem—can be given positive resolutions. Finally, we have also argued that anti-luck virtue epistemology is able to offer a compelling diagnosis of why we might be wrongly led into thinking that knowledge is distinctively, and hence finally, valuable. This diagnosis proceeds by appeal to the epistemic category of cognitive achievements, an epistemic standing which is closely related to knowledge but which is plausibly distinctively, and hence finally, valuable.

The aim of this chapter is to enhance this diagnostic story by demonstrating that there is a species of understanding which is closely connected to the corresponding states of knowledge and which is itself finally valuable. Moreover, it is also shown that this type of understanding is itself a kind of cognitive achievement, and hence we are in addition able to offer an explanation of why understanding of this sort is finally valuable.

§4.2. THE FINAL VALUE OF ACHIEVEMENTS

Before we can explore the relevance of understanding to the issues that concern us, however, we first need to revisit the very idea of an achievement, in order to get a firmer handle on

why, and to what extent, achievements are finally valuable. Recall the argument offered by robust virtue epistemology in chapter two which purported to derive the final value of knowledge by appeal to a certain conception of achievement:

From Robust Virtue Epistemology to the Final Value of Knowledge

- (P1) Achievements are successes that are because of ability. (Achievement thesis)
- (P2) Knowledge is a cognitive success that is because of cognitive ability. (Robust Virtue Epistemology)
- (C1) So, knowledge = cognitive achievement. (K=A thesis)
- (P3) Achievements are finally valuable. (Value of Achievements thesis)
- (C2) So, knowledge has final value.

In chapter two our critical focus when it came to this argument was on (P2)—the robust virtue epistemological account of knowledge—and its role in generating the intermediate conclusion (C1), the K=A thesis. In particular, we argued that there are cases in which agents have knowledge but don't exhibit the corresponding cognitive achievements, and also that there are cases in which agents exhibit cognitive achievements while failing to possess the corresponding knowledge. Moreover, we noted that the cases offered in this regard work just as effectively against the claim that knowledge is a cognitive success that is because of cognitive ability, and hence that the problem here does not lie with the particular conception of cognitive achievements in play (i.e., it is not as if the problem with (C1) specifically concerns (P1) rather than (P2)).

Denying (P2) is of course sufficient to block the argument, but one might nevertheless reasonably ask about the status of the other two premises that make up this argument. In chapter two we said relatively little about these two premises. As regards (P3), we noted one objection which we argued was unpersuasive on closer inspection. This concerned the possibility of achievements which were all things considered either disvaluable or at least had very little value, such as wicked or trivial achievements. We noted that this objection didn't work because the claim that achievements have final value does not entail that all achievements are of great all things considered value. Instead, the claim is only that successes, *qua* achievements, have final value—i.e., it is a claim about *prima facie* or *pro tanto* value, and not all things considered value. As regards (P1) we also noted one objection—concerning the possibility of 'easy' achievements—but in this case we set this problem aside for future discussion. This is now a good juncture at which to revisit this issue. As we will see, this will also give us cause to think again about (P3) as well.

According to the ‘easy achievements’ objection, if one defines achievements as successes that are because of ability, then one will be forced to treat some successes as achievements which, intuitively, aren’t achievements. Relatedly, these questionable cases of ‘achievement’ won’t be plausible candidates for final value in the way that *bona fide* achievements are. The reason why I deferred consideration of this objection until now is because responding to it requires us to complicate our conception of achievements in ways that are only now relevant to our wider philosophical concerns. In particular, the worry posed by this objection is that the characterisation of achievements as successes that are because of ability is too broad as it stands, at least if we are to simultaneously defend the claim that achievements are finally valuable.

Let’s consider an example. Suppose that in normal circumstances I raise my arm. Here we clearly have a successful action on my part, in that there is something that I am aiming to do and which I do in fact do. Moreover, if circumstances really are normal then there ought to be no problem with the idea that this success was *because of* the exercise of my relevant ‘arm-raising’ abilities. But would we naturally call the raising of one’s arm in these circumstances an achievement? Intuitively, the answer is ‘no’, and the reason for our reluctance to so describe this success is surely because of the ease with which it was brought about.

The reason why we do not count easy successes as real achievements is that our intuitive conception of an achievement involves either the application of a significant level of skill or at least the overcoming of a significant obstacle to the relevant success. In cases of easy successes of the sort just described, however, neither element is present. In order to see this point in more detail, notice first that where a significant level of skill is being exercised we are perfectly happy to treat any successful outcome that is thereby attained as an achievement, even if it was not a difficult feat for that agent to perform. For example, Tiger Woods may well sink a tricky put with ease, but this would still count as an achievement. There is no obstacle for him to overcome here, of course, but that there is great skill on display suffices for an achievement. Another way of putting this point is to say that while this success is easy for *him*, it is not an easy success.

Conversely, cases in which there is no great skill on display but where a significant obstacle has been overcome also qualify as *bona fide* achievements. Consider, for example, someone raising her arm who had suffered a serious injury and for whom such an action was

extremely difficult. Here we would surely be inclined to regard this success as an achievement even though no great skill is involved in this success. The key point, however, is that a genuine obstacle is being overcome in this situation, unlike the ordinary case in which someone raises their arm.

So some successes are intuitively too easy to be in the market to count as achievements, either because they do not involve the overcoming of a significant obstacle or because they do not involve a significant degree of skill. Clearly, there are cases in the epistemic domain which illustrate this point too. Suppose that I form the true belief that the wall before me is white by looking at it in entirely normal circumstances. Here we have a cognitive success and the cognitive success is, intuitively, appropriately related to my relevant cognitive abilities in such a way that it is because of my cognitive ability. And yet it seems odd to think of such a success as an achievement on my part, given that this is a cognitive success which is neither the result of overcoming a significant obstacle to that success nor involving the exercise of significant cognitive skill.

In contrast, imagine a case which is obstacle-overcoming in the relevant sense. Perhaps, for example, there are defeaters present which indicate that there may be some deception taking place—e.g., a reliable source informs one that the lighting in the room can be apt to mislead when it comes to identifying the colour of objects in the room. Suppose now that one takes appropriate measures to defeat these defeaters. Perhaps, for example, one observes the wall with and without the aid of the lighting to determine what effect the lighting is having on the apparent colour of the wall. After completing this process, one satisfies oneself that the wall is indeed white. Would this cognitive success count as a cognitive achievement? I think so, and the natural explanation for why is that one has used one's cognitive ability in order to appropriately overcome a significant obstacle to one's cognitive success.

Similarly, there will be cases where even an easy cognitive success can count as a cognitive achievement so long as a significant degree of cognitive ability is on display. Imagine, for example, someone with acute powers of observation and deduction, such as Sherlock Holmes, observing the very same visual scene as someone with normal powers of observation and deduction, such as Holmes's sidekick Watson. Holmes may well be able to immediately observe certain features of the environment with ease that Watson could only detect with great effort and guidance. Still, Holmes's cognitive success would count as an

achievement even despite the ease with which he brings this about because of the great cognitive skill that he is exhibiting.

How might the proponent of the success-because-of-ability account of achievements respond to this problem? One response could be to simply concede the point and argue that the conception of achievements in play is just a very inclusive one. That is, they might argue that all that they are trying to describe is some general sense of achievement that captures the idea of a successful exercise of agential power. Accordingly, they could simultaneously grant that there is in ordinary language a more restrictive conception of achievement which brings with it the idea that one's success involves either the exercise of great skill or the overcoming of a significant obstacle. In this spirit, let us characterise the two conceptions of achievement as follows:

<i>(Weak Achievement Thesis)</i>	Achievements are successes that are because of ability.
<i>(Strong Achievement Thesis)</i>	Achievements are successes that are because of ability where the success in question either involves the overcoming of a significant obstacle or the exercise of a significant level of ability.

Robust virtue epistemology is thus to be read as endorsing the weak achievement thesis rather than the more austere strong achievement thesis.

This is a perfectly legitimate move for proponents of robust virtue epistemology to make, but the problem is that while the weak achievement thesis might be an adequate account of a very inclusive sense of achievement, it is not this sense of achievement which is in play in the claim that achievements have final value. Think of the cases of easy achievements that we have just noted, such as raising one's arm in normal circumstances, or forming the belief that the wall before one is white in normal cognitive conditions. Do we have *any* intuition that such successes are finally valuable? I suggest not. In contrast, when we turn our attentions specifically towards the class of achievements demarcated by the more restrictive strong achievement thesis, the intuition of final value returns.

Now one might try to respond to this objection by making the same kind of move that we made in chapter two in response to the charge that since some achievements were of little value or disvaluable it followed that they can't be the sort of thing that has final value. There we responded by arguing that once the target thesis was properly understood—such that it merely claimed that successes *qua* achievements have final value, and hence did not maintain that achievements have a significant degree of all things considered value—this objection

disappeared. Similarly, one might argue here that just because some achievements, construed in line with the weak achievement thesis, are lacking in final value it does not follow that there is a problem with the idea that achievements have final value on this conception.

The cases are not analogous, however, because the objection that some achievements on the weak reading lack final value does not appeal to the all things considered value of the achievements in question. Accordingly, there is no scope to appeal to this fact in order to rescue the claim that achievements, even on the weak conception, have final value. In order to see this, we just need to note that the easy ‘achievements’ in play could well be of great all things considered value and yet they would equally demonstrate the intended point. Perhaps, for example, there is a great practical value that accrues to raising one’s arm in this context (e.g., one gets identified as the prize winner, and so is awarded a prize that would have otherwise been missed through lack of identification). Still, there is no temptation to suppose that the mere raising of one’s arm in normal circumstances, *qua* weak achievement, is of final value. The issue, then, is not that these ‘achievements’ are in themselves lacking in value *simpliciter*, but more specifically that they are lacking in *final* value.

With this point in mind, we should regard only achievements as understood by the strong achievement thesis as being the kind of thing that has final value. Henceforth, then, when we talk of ‘achievements’ we will (unless otherwise indicated) have the strong account of achievements in mind.

There are a number of advantages to understanding achievements in this way. We will explore one key advantage in a moment, which is that it enables us to get a better handle on why understanding is such a valuable epistemic state to be in. Before we do so, however, there are two further peripheral advantages to this account that are worthy of note.

First, notice that the claim that achievements are finally valuable is even more secure now that we have restricted the class of successes that count as achievements. Indeed, it is worth noting that some of the trivial achievements that we saw creating a *prima facie* tension for this thesis in chapter two will be in any case excluded by the strong account of achievements on the basis that they are too easily gained.

Second, the strong account of achievements can also accommodate some other problem cases that might be thought to afflict the weak account of achievements. Two such cases are particularly salient in this regard, and they both have specific application to cognitive achievements.

The first concerns successes that are essentially *passive*, in that they do not involve any substantive act of will on the part of the subject. In the case of actions, it is hard to make sense of such successes as actions, since where there is no substantive act of will involved in bringing about that success it is natural to suppose that this is a mere behaviour on the part of the subject and hence not an action at all (and thus not a success that can be attributed to the agent). Think, for example, of the instinctive movements of one's body when one is asleep which take place in order to ensure that one is comfortable enough to remain asleep. Such behaviour is clearly passive in the relevant sense, but it is also intuitively not an action on the part of the subject, no matter how successful this behaviour might be at ensuring one's continued slumber.

Matters are different in the cognitive realm, however, since here it is far more plausible to suppose that there could be entirely passive cognitive successes. Indeed, one might argue that passively forming beliefs about one's environment is the norm. The problem is that where one's belief-forming is indeed passive in this sense, then it is hard to see why we would count any cognitive success that thereby results as being in the market for achievement.

There is an issue here, of course, regarding how the passivity of our belief-forming is to be understood. If one thinks that belief is in its nature truth-directed—or at least evidence-sensitive, if one takes that to be a different matter—then one might argue that in the relevant sense even our most spontaneously formed beliefs are 'directed' and hence not passive. Notice, though, that we do not need to take a stance on this issue here, for however one understands these 'passive' beliefs they are not going to pose a challenge to the strong achievement thesis. In the normal case, after all, such beliefs will be dealt with by the demand that the agent should be overcoming significant obstacles in attaining the relevant cognitive success. Moreover, although this condition need not be met in cases where significant skill is in play, it is crucial that where this further condition is met it is natural to regard the belief so formed as *not* being in the relevant sense passive. Sherlock Holmes may be able to spontaneously form quite sophisticated beliefs in response to environmental stimuli, but there is nothing passive about the exercise of this cognitive ability, despite its spontaneous application. Holmes has, after all, trained himself to acutely observe his environment, and there is nothing passive about that.

The second problem that might face the weak achievement thesis but which is avoided by the strong achievement thesis (and which is also specific to the cognitive realm), concerns cases where the target subject matter is *transparent* to the agent. For example, suppose I am suffering from a raging migraine and consequently form the true belief that I am in pain. Suppose further that I in this way gain knowledge of what I believe (this is by no means an uncontroversial supposition). Nonetheless, it seems odd to think of such a cognitive success as an achievement even though one might naturally describe it as a cognitive success that is because of one's cognitive ability.

Notice that the issue here is not simply that such cognitive success is very easy, since the problem rather relates to the fact that there could, it seems, be no such thing as an obstacle to cognitive success in this case. This is why, I take it, it is so hard to conceive of an analogue case in the realm of action, since here it is arguably always possible to think of an obstacle standing in the way of one's successful action. Now the proponent of the weak achievement thesis could respond to this problem by denying that it even makes sense to talk about knowledge in these cases, either because it makes no sense to talk of belief in this context or because it makes no sense to talk of the application of a cognitive ability. Notice, however, that the proponent of the strong achievement thesis has a very easy time accounting for these cases. For if there is indeed no obstacle present in these 'transparency' cases, and if indeed no great skill is needed to form the target belief (assuming it is a belief that is being formed), then the belief isn't even in the market to be an achievement in the first place.

There is thus a lot going for the strong achievement thesis, for not only can it handle a range of problem cases, but it also offers additional support for the idea that achievements are in their nature distinctively, and hence finally, valuable. We can now bring this account of achievements to bear on the issues regarding epistemic value that concern us. Previously we have argued that while knowledge is not, it turns out, distinctively valuable—i.e., finally valuable in a way that lesser epistemic standings are not—we can explain why we might have thought that it was by implicitly (and incorrectly) identifying knowledge with a distinct epistemic standing—that of cognitive achievement—which is distinctively valuable. We can now add a bit more precision to this claim, for it is not cognitive achievements *per se* that are distinctively valuable, but only cognitive achievements by the lights of the strong achievement thesis. Epistemic standings which fall short of this, including cognitive

successes that only qualify as cognitive achievements by the lights of the weak achievement thesis, are lacking in final value and hence are not distinctively valuable.

As we will now see, this point is important because a particular kind of epistemic standing—understanding, or at least a species of understanding at any rate—constitutes a cognitive achievement in just this (strong) sense, and hence we are now in position to explain why this epistemic standing is of special epistemic value—i.e., why it is distinctively valuable.

§4.3. UNDERSTANDING

The intuition that understanding is distinctively valuable is surely even stronger than the intuition that knowledge is distinctively valuable. Indeed, insofar as knowledge and understanding come apart—we will explore whether they do, and if so, how, in a moment—then understanding seems to be preferable to knowledge. As we might be tempted to put the point, we would surely rather understand than merely know. If that is right, and assuming that knowledge and understanding do come apart, then it would be premature to conclude from the fact that knowledge is, on closer inspection, not distinctively valuable that therefore neither is understanding. Instead, we should treat these two issues as potentially separate from one another.

Before we can evaluate a claim of this sort, however, we need to be a little clearer about what we are talking about. One problem that afflicts any direct comparison between knowledge and understanding is that knowledge (of the propositional sort that we are concerned with at any rate) is concerned with propositions, whereas understanding usually isn't, at least not directly anyway. That is, the kind of knowledge we are interested in is knowledge that *p*, but it is rare to talk of understanding that *p*.

I want to take the paradigm usage of 'understands' to be in a statement like 'I understand why such-and-such is the case'. Notice that this usage is very different from a more holistic usage which applies to subject matters, as in 'I understand quantum physics', or even 'I understand my wife'. I think the holistic usage of 'understands' is related to the non-holistic, or atomistic, usage that is our focus, but the former raises problems of its own that

we've not the space to cover here (though we will flag some of these problems as we go along).¹

Regarding understanding-why—henceforth just ‘understanding’—there are, interestingly, two standard views—a standard view within epistemology and a standard view *outside* of epistemology (particularly in the philosophy of science). The standard view within epistemology is that understanding is distinctively valuable but that it is *not* a species of knowledge. One finds a view of this sort in the work of such figures as Catherine Elgin (1996; 2004; *forthcoming*), Linda Zagzebski (2001), Jonathan Kvanvig (2003) and Wayne Riggs (*forthcoming*) and we will examine the motivation for such a thesis in a moment.

In contrast, outside of epistemology the consensus is that understanding *is* a species of knowledge. In particular, most philosophers of science who have expressed an opinion on this matter have endorsed the claim that understanding why X is the case is equivalent to knowing why X is the case, where this is in turn equivalent to knowing that X is the case because of Y. So, for example, my understanding of why my house burned down is equivalent to my knowing why my house burned down, where this in turn is tantamount to my knowing that my house burned down because (say) of faulty wiring. One finds a view of this general sort—expressed in varying levels of explicitness—in the work of such figures as Peter Achinstein (1983), Wesley Salmon (1989), Philip Kitcher (2002), James Woodward (2003) and Peter Lipton (2004).²

I will be claiming that both of these conceptions of understanding are wrong, at least strictly speaking, and that once we get clearer on the relationship between understanding and knowledge we can make some progress towards dealing with the problem of epistemic value.

Let us look first at some of the accounts of understanding offered by epistemologists. One guiding theme in this discussion is that understanding is construed along epistemically internalist lines. An extreme example of this can be found in the work of Zagzebski (2001). She argues, amongst other things, that understanding is, unlike knowledge, “transparent” in the sense that there is no gap between seeming to understand and understanding. Relatedly, she also claims that understanding is, unlike knowledge, non-factive, in that even if one’s relevant beliefs were false, one’s understanding could be unaffected.³ Finally, she holds that understanding, unlike knowledge, is immune to epistemic luck, in that if one’s understanding is subject to such luck it will not thereby be undermined.

Of these claims, the first is clearly the most radical and also, I venture, the one that is most obviously false. To construe understanding in this way seems to reduce it to nothing more than some sort of minimal consistency in one's beliefs, something which might well be transparent to one (though I'm actually doubtful of this). Understanding clearly involves much more than this, however. To see this, let us focus on the non-factivity claim that Zagzebski makes. This claim is also, I will argue, false, but if understanding does imply factivity in the relevant sense, then it will be easy to show that understanding is not transparent in the way that Zagzebski suggests.

To illustrate this point, consider my understanding of why my house has burned down. Let us grant the plausible assumption that this understanding involves a coherent set of relevant beliefs concerning, for example, the faulty wiring in my house. But now suppose that these beliefs are mistaken and that, in particular, there was no faulty wiring in my house and so it played no part in the fire. Would we still say that I understand why my house burned down? I think not. For sure, I *thought* I understood—indeed, it could well be that I *reasonably* (or at least *blamelessly*) thought that I understood—but the fact remains that I did not understand. Once one grants that understanding is factive in this way, however, then the transparency claim starts to look equally suspect, since there is now a distinction to be drawn between (reasonably) thinking that one understands and in fact understanding, contrary to what the transparency thesis demands.

So the transparency and non-factivity claims that Zagzebski offers are false. It is difficult to diagnose why Zagzebski made this mistake. Part of the reason may be that there is a failure to be clear about the type of understanding under consideration. After all, when it comes to the kind of holistic understanding that applies to a subject matter, this plausibly *is* compatible with at least *some* false beliefs about that subject matter, but this sort of understanding is precisely not the sort at issue. Moreover, it would seem that the analogue of Zagzebski's non-factivity claim as regards understanding when it comes to holistic understanding would be that such understanding can be possessed even though one has *no* relevant true beliefs, and that is surely implausible.⁴

More generally, however, I think that the right diagnosis of where Zagzebski's conception of understanding goes awry lies in her overstating the internalist aspect of understanding. Understanding clearly is very amenable to an account along epistemically

internalist lines, in the sense that it is hard to make sense of how an agent could possess understanding and yet lack good reflectively accessible grounds in support of that understanding. Understanding thus cannot be ‘opaque’ to the subject in the way that knowledge, by epistemically externalist lights at least, can sometimes be. Granting this, however, does not entail that one should regard understanding as non-factive, much less transparent.

With this in mind, let us consider a second account of understanding in the epistemological literature—due to Kvanvig (2003)—which does not succumb to the mistakes made by Zagzebski’s account. Zagzebski holds that both knowledge and understanding are distinctively valuable. In contrast, Kvanvig maintains that it is only understanding that is distinctively valuable, where understanding is distinct from knowing.

Unlike Zagzebski, Kvanvig does not hold that understanding is transparent or non-factive. He does, however, treat the notion along internalist lines which, as we’ve just noted, is entirely plausible. The way in which he distinguishes knowledge from understanding is primarily through two further claims. The first is that understanding, unlike knowledge, admits of degrees. The second is that understanding, unlike knowledge, is immune to epistemic luck, a thesis which we saw Zagzebski putting forward a moment ago.

The import of the first claim is, I think, moot. After all, even if this is true, it needn’t follow that there are cases of knowledge which aren’t corresponding cases of understanding, or that there are cases of understanding which aren’t corresponding cases of knowledge. The weight of the distinction between knowledge and understanding on this view thus falls on the second claim, which merits further consideration.

This thesis is meant to reflect, I take it, the internalist dimension to understanding. That is, the idea is that just as one’s justification, internalistically conceived, is not undermined by epistemic luck (just the sufficiency of that justification, with true belief, for knowledge), so one’s understanding is not undermined either. Closer inspection of this claim reveals that the relationship between understanding and epistemic luck is, however, more complex than Kvanvig and Zagzebski suppose.

§4.4. UNDERSTANDING AND EPISTEMIC LUCK

The example that Kvanvig offers to illustrate his claim that understanding, unlike knowledge, is compatible with (knowledge-undermining) epistemic luck is that of someone who, by reading a book on the Comanche tribe, gains a series of beliefs about the Comanche and, thereby, an “historical understanding of the Comanche dominance of the southern plains of North America from the late seventeenth until the late nineteenth century” (Kvanvig 2003, 197).⁵ We are told that the relevant class of beliefs contains no falsehood, and that the agent can answer all the relevant questions correctly in this regard (thereby illustrating that the putative knowledge possessed is not ‘opaque’). However, Kvanvig argues that although in such a case one would expect the agent to have knowledge of the relevant beliefs, this is not essential—it could well be, as he points out, that the true beliefs in question have been ‘gettierized’, perhaps because the information that the agent has is only “accidentally true” (*ibid.*).

I think that a case like this is ambiguous in a crucial respect, but we can get a better handle on what is going on here by taking a simpler case and then returning to consider this more complex example in the light of our intuitions as regards the simpler case.

Consider again the example of understanding why one’s house burned down. Suppose first that we have a standard Gettier-style case in which something ‘intervenes’ between the agent’s belief and fact—on the model of the ‘Roddy’ example considered in chapter two—in order to ensure that one’s true belief is only true as a matter of luck, and so is unsafe. For example, imagine that, upon finding one’s house in flames, one approaches someone who looks as if she is the fire officer in charge and one asks her what the reason for the fire is. Suppose one is told by this person that the reason why one’s house is aflame is faulty wiring, and that this coheres with one’s wider set of beliefs. But suppose now that the person one asked in this regard is not in fact the fire officer in charge but instead someone who is simply dressed in a fire officer’s uniform and who is on her way to a fancy dress party. Still, one did indeed gain a true belief in this regard. So, even though the epistemic luck in question prevents one from having knowledge of the relevant propositions, does one lose one’s understanding? Seemingly, it does, for ask yourself the question now of whether you understand why your house burnt down. Surely the answer to this question is a

straightforward ‘no’. One cannot gain an understanding of why one’s house burnt down by consulting someone who, unbeknownst to you, is not a real fire officer but instead merely someone in fancy dress.

So does this mean that Kvanvig is just wrong in thinking that understanding is immune to epistemic luck? Not entirely since, as we have noted in chapter two (see §2.5), there is a kind of epistemic luck—what we referred to as *environmental* epistemic luck, and which we noted was found in the barn façade case—which is knowledge-undermining but which is not of the sort that appears in standard Gettier-style cases where the luck ‘intervenes’ between belief and fact. In cases of environmental luck the luckiness of one’s true belief is entirely due to the fact that one is in an epistemically unfriendly environment (e.g., an environment in which barn façades are common, although what one is looking at is indeed a genuine barn).

With this distinction between two kinds of knowledge-undermining epistemic luck in mind, consider a variant on the case just described where the kind of epistemic luck that is at issue is specifically the environmental epistemic luck found in the barn façade case. For example, imagine that the apparent fire officer that one asks about the cause of the fire is indeed a genuine fire officer, but that one could nevertheless have been easily wrong in forming one’s belief in this way because there are other people in the vicinity dressed as fire officers—all going to the same fancy dress party, say—who one could very easily have asked and who would have given one a false answer (while failing to indicate that they were not real fire officers).

In such a case, as we saw in chapter two, one’s cognitive success would be because of one’s cognitive abilities, and so would constitute a cognitive achievement, and yet the environmental epistemic luck at issue would prevent it from counting as knowledge. The critical question for us, however, is whether this is a case of understanding. I want to argue that it is, and thus that Kvanvig is right on at least this score: environmental epistemic luck, unlike standard Gettier-style epistemic luck, *is* compatible with understanding. After all, the agent concerned has all the true beliefs required for understanding why his house burned down, and also acquired this understanding in the right fashion. It is thus hard to see why the mere presence of environmental epistemic luck should deprive the agent of understanding.

With this distinction between two types of epistemic luck in mind—one, the standard

Gettier-style epistemic luck, which is inconsistent with understanding and a second, the environmental epistemic luck, which is consistent with understanding—we can return to evaluate Kvanvig's 'Comanche' case. Whether or not the agent retains her understanding in this case will depend on the type of epistemic luck at issue.

So, for example, suppose that the agent forms her beliefs about the Comanches by reading an apparently scholarly book which is in fact nothing of the sort. Let us say, for instance, that the author of this book simply took lots of rumours and unchecked stories about the Comanche and presented them, along with some inventive guesswork, as established fact. But suppose further that despite this lack of attention to scholarship, the author did get matters entirely right. This would thus be a standard Gettier-style case in which our agent gains lots of true beliefs about the Comanches: she has good reason to think that her beliefs about the Comanche are true, and they are true, but it is just a matter of luck that they are true given that the source of these beliefs is so unreliable. Can one gain an understanding of the Comanche tribe in this way? In particular, can one gain an historical understanding of why the Comanche were so dominant in the southern plains of North America from the late seventeenth until the late nineteenth century in this fashion? I want to suggest that one cannot, any more than one can gain an understanding of why one's house burnt down by gaining a true belief about what caused the fire from someone pretending to be a fire officer.

Matters are different, however, if we redescribe the case as specifically involving environmental epistemic luck, rather than standard Gettier-style epistemic luck. Suppose, for example, that the book that the agent consults is indeed appropriately scholarly—and thus reliable—when it comes to this subject matter, and that the agent accordingly gains lots of true beliefs about the Comanche. Nevertheless, luck enters the picture because of how all the other books on this topic—which are also superficially just as scholarly—are very unreliable, and one could very easily have consulted one of these books. Does epistemic luck of this sort undermine one's understanding in the way that it would undermine one's knowledge? I don't think that it does, since one did indeed find out the relevant facts in the right kind of way. Just as one can gain an understanding of why one's house burnt down by speaking to the fire officer—even though one could just have easily been misled by someone who isn't the fire officer—so one can gain an understanding of the Comanche by reading a reliable book even though one could have very easily consulted an unreliable book.⁶

So while Kvanvig and others are right to think that understanding is compatible with a certain type of knowledge-undermining epistemic luck, they are wrong to think that it is compatible with all types of knowledge-undermining epistemic luck. Their mistake is to fail to distinguish between two crucial ways in which epistemic luck can be knowledge-undermining. That understanding is compatible with one type of knowledge-undermining epistemic luck suffices, however, to show that knowledge is distinct from understanding, since it entails that one can have understanding without the associated knowledge.

§4.5. UNDERSTANDING AND COGNITIVE ACHIEVEMENT

One consequence of this point is that the standard view of understanding outside of epistemology, such that understanding is a species of knowledge, is false. Indeed, this is not the only respect in which this conception of understanding is mistaken. Recall that on this conception of understanding, to understand why X is the case is equivalent to knowing why X is the case, which is in turn equivalent to knowing that X is the case because of Y. As we have seen, however, cases involving environmental epistemic luck illustrate that I can understand why my house burned down even while failing to know why it burned down (indeed, even while failing to know that it burned down because of faulty wiring).

There is also a second respect in which this conception of understanding is mistaken, since it is possible to know why one's house has burned down (and indeed know that it burned down because of faulty wiring), even though one does not understand why one's house burned down. We can illustrate this point via an example of testimonial knowledge cast along the general lines of the 'Jenny' case considered in chapter two.

Suppose that I understand why my house burned down, know why it burned down, and also know that it burned down because of faulty wiring. Imagine further that my young son asks me why his house burned down and I tell him. He has no conception of how faulty wiring might cause a fire, so we could hardly imagine that merely knowing this much suffices to afford him understanding of why his house burned down. Nevertheless, he surely does know that his house burned down because of faulty wiring, and thus also knows why his house burned down. Indeed, we can imagine a teacher asking my son if he knows why his house burned down and him telling the teacher the reason. It asked by a second teacher if my

son knew why his house burned down, we could then imagine the first teacher saying that he did. So, it seems, one can not only have understanding without the corresponding knowledge, but also knowledge without the corresponding understanding.⁷

Just as the ‘Jenny’ case offered in chapter two demonstrated that sometimes one might have knowledge without exhibiting the corresponding cognitive achievement, the same moral can be drawn here. My son might know why his house burned down, but this knowledge does not constitute a cognitive achievement on his part (even by the lights of the weak achievement thesis) because of how the truth of his belief is not sufficiently creditable to his cognitive ability. Interestingly, however, we have just seen that while knowledge and cognitive achievement come apart on this score, understanding and cognitive achievement do not. My son’s knowledge does not constitute a cognitive achievement, but then neither does it constitute genuine understanding on his part either.⁸

Indeed, there is good reason to think that all understanding involves cognitive achievement. More specifically, there is good reason to hold that all understanding involves cognitive achievement even by the lights of the more restrictive strong achievement thesis. Recall that the moral of the barn façade case described in chapter two was that one could exhibit a cognitive achievement and yet lack knowledge, because of how knowledge, unlike cognitive achievement, is incompatible with environmental epistemic luck. The same applies to understanding. When one couples this observation to the fact that the cases in which an agent has knowledge while not exhibiting a cognitive achievement are cases in which the agent lacks the relevant understanding, then one can see that there is a strong *prima facie* case for thinking that all understanding involves a cognitive achievement.

Indeed, I think this thesis is highly plausible. Its plausibility relates to the fact that understanding seems to be essentially an epistemically internalist notion, in the sense that if one has understanding then it should not be opaque to one that that one has this understanding—in particular, one should have good reflectively accessible grounds in support of the relevant beliefs that undergird that understanding. But given that this is a requirement of understanding, it is unsurprising that one can construct a ‘Jenny’-style testimonial case in which an agent has knowledge but not understanding, since such cases work precisely by using examples of agents who, while having knowledge, lack good reflectively accessible grounds in favour of their beliefs.

That understanding is both factive and resistant to standard Gettier-style epistemic

luck also demonstrates, however, that we should be wary of construing understanding along purely internalist lines. One's reflectively accessible grounds in favour of one's belief might well survive the falsity of what one believes and also be compatible with standard Gettier-style luck, but as we have seen, the same is not true of understanding. Just as genuine cognitive achievements do not depend exclusively on the cognitive efforts of the agent, but also on the relevant cognitive success and the right connection obtaining between cognitive ability and cognitive success, so genuine understanding makes the same 'external' demands.

Finally, notice that the kind of cognitive achievement in play when one has understanding seems to explicitly be of the sort at issue in the strong achievement thesis. Typically, after all, one gains understanding by undertaking an obstacle-overcoming effort to piece together the relevant pieces of information. Moreover, where understanding is gained with ease, this will be because of the fact that one is bringing to bear significant cognitive ability. Perhaps, for example, in coming across one's house in flames one is immediately able to gain an understanding of why this event is occurring because one is able to observe some crucial feature of the event taking place before one which—along, say, with the relevant background information that one possesses—definitively indicates how this event came about in such a way as to afford one the relevant understanding. But here the spontaneity of the understanding is entirely due to the exercise of significant cognitive ability, and hence poses no challenge to the idea that understanding specifically involves cognitive achievement along the lines set out by the strong achievement thesis.

§4.6. BACK TO THE VALUE PROBLEM

The import of this point about understanding being a form of cognitive achievement in keeping with the strong achievement thesis is that it gives us a way of validating our intuition that understanding is distinctively—and therefore finally—valuable. Indeed, as noted above, it is often claimed in epistemology that understanding is distinctively valuable without any explanation being offered of why this is so. Instead, there is a mere appeal to intuition on this score. By tying our account of understanding to a conception of cognitive achievement, an epistemic standing which has been shown to be itself of distinctive value, we are able to go

much further in this regard and offer a concrete explanation of why this epistemic standing is valuable in this way.

Moreover, given that understanding of the sort that we have discussed here will tend to go hand-in-hand with the corresponding states of knowledge—e.g., typically, when one understands why *X* is the case then one will know that *X* is the case because of *Y*—the distinctive value of understanding further supports the diagnostic story about why we tend to suppose that knowledge is distinctively valuable that was offered at the end of chapter three. For if there is an epistemic standing that tends to go hand-in-hand with knowledge and which is distinctively valuable, then it is hardly that surprising that we might initially regard knowledge as itself distinctively valuable, prior to a closer inspection.

This also means, of course, that one will be unable to run a swamping problem for this epistemic standing. This is because the final value of understanding ensures that it is a fundamental epistemic good, and hence its epistemic value cannot be swamped by the value of the cognitive success that is involved in acquiring that understanding.

§4.7. TWO POTENTIAL IMPLICATIONS OF THE DISTINCTIVE VALUE OF UNDERSTANDING THESIS

This claim that it is understanding, *qua* cognitive achievement, which is distinctively valuable, and not knowledge, potentially has some important ramifications for our understanding of a number of central issues in epistemology. I will close by outlining two such potential ramifications.

The first concerns the problem of *radical scepticism*. Typically, the radical sceptical problem is understood as being designed to deprive us of knowledge. If knowledge is not distinctively valuable in the way that many suppose, however, then this raises the obvious question of whether the difficulty posed by scepticism is best interpreted in this fashion. That is, why not treat the sceptic as trying to deprive us of an epistemic standing that is distinctively valuable, such as either cognitive achievement (on the strong conception) more generally or understanding more specifically?

The import of this point is that it would no longer be enough to respond to the sceptic

by simply showing that one has the widespread knowledge that the sceptical problem, traditionally conceived, aims to deprive us of. Instead, given that one can possess that knowledge even while lacking a distinctively valuable epistemic standing, one would have to argue for the more specific thesis that the distinctively valuable epistemic standing in question is widely attained. Moreover, at least where we are focussing on understanding here, then there are good *prima facie* grounds for supposing that this task is going to be more difficult.

On the one hand, understanding has a strong internalist element to it, in that when one has understanding that understanding is backed by good reflectively accessible grounds. And yet it is often noted that radical scepticism poses a far stronger threat to epistemic internalist accounts of knowledge than to epistemic externalist accounts.⁹ On the other hand, however, it is not as if understanding is a pure internalist notion, as a classical internalist account of the justification is often characterised. That is, as we have noted above, in order to possess understanding various external conditions must be realised as well, not least of which that one's belief in the target proposition must be true. Had understanding been a purely internalist notion then one option might have been to insist that it is not touched by sceptical arguments at all, in that there is no difference in epistemic standing in this regard between oneself and one's radically deceived (e.g., envatted) counterpart.¹⁰ Clearly this option is unavailable to an anti-sceptical defender of understanding.

On the face of it, then, the realisation that understanding, unlike knowledge, is distinctively valuable gives us good reasons both for recasting the sceptical problem as being directed against understanding rather than knowledge, and also for thinking that such a sceptical challenge will be far harder to resolve than its knowledge-directed counterpart.¹¹

The second potential ramification of this thesis regarding the distinctive value of understanding that I want to mention concerns how we should conceive of the *goal of inquiry*. Various conceptions of the goal of inquiry have been offered, including truth, justified belief, explanatory adequate belief, coherent belief and knowledge. I want to suggest that the story told here regarding the distinctive value of understanding should give us pause to wonder whether we should instead regard understanding as the goal of inquiry.

In order to see why there may be some mileage in this suggestion, compare how understanding fares against the most robust epistemic standing just listed as a potential goal of inquiry—*viz.*, knowledge. Now ask yourself whether an inquiry that resulted in knowledge

but not in the corresponding understanding would be deemed a successful inquiry (and thus a ‘closed’ inquiry, at least as regards the original question under investigation). I suggest not.

Imagine, for example, that one’s inquiry leads one to a reliable informant who passes on the answer that you were looking for. One could thereby gain knowledge of this answer. But suppose now that this answer, which you don’t doubt is correct (you know the informant is reliable and sincere etc.), simply makes no sense to you. That is, while you grant that it is correct, you cannot make sense of *why* it is correct. In such a case one would lack understanding in the relevant sense. But then wouldn’t one as a result continue inquiring in order to gain such an understanding?

Consider the example of someone coming home and finding her house ablaze. This would naturally prompt our hero to begin an inquiry into the reason why her house is burning down. Merely gaining knowledge from a known to be reliable source that the cause was faulty wiring will, however, not settle this inquiry if she has no conception of how faulty wiring could do this. Instead, we would expect her, *qua* responsible inquirer, to continue inquiring until she has gained an understanding of why her house burned down. Her inquiry has not yet reached its goal.¹²

Given the centrality of the sceptical debate and the question of the goal of inquiry to epistemological theorising, there is thus a strong *prima facie* case for holding that the thesis we have argued for here regarding the distinctive value of understanding has important ramifications for contemporary epistemology.¹³

§4.8. CONCLUDING REMARKS

I will conclude by summarising the main claims that I have argued for. First, I argued for a certain account of the value problem, such that it demands, in its strongest (tertiary) form, that one be able to show that knowledge is distinctively valuable, in the sense that it is more valuable not merely as a matter of degree but of kind than that which falls short of knowledge. I argued that answering the value problem, so conceived, requires one to show that knowledge has final value.

Second, I considered, and rejected, what I took to be the best possible defence of the distinctive, and thus final, value of knowledge, which is due to robust virtue epistemology. In

particular, I argued that contrary to this proposal knowledge is not to be identified with cognitive achievement. Thus, even if cognitive achievements are distinctively valuable, this won't suffice to ensure that knowledge is distinctively valuable. I concluded that a positive response to the value problem in its tertiary form was not going to be possible, and hence that we must instead seek a diagnostic story regarding why we might have supposed knowledge to be distinctively valuable in this way even though it in fact isn't.

Third, in light of the failure of the robust virtue epistemic proposal, I argued for a new theory of knowledge—anti-luck virtue epistemology—which has many of the advantages of other views (like robust virtue epistemology) and none of their failings. Moreover, I showed how anti-luck virtue epistemology is in a position to answer the value problem in its weaker (primary and secondary) forms and also offer a compelling diagnosis of why we might wrongly suppose knowledge to be distinctively valuable.

Fourth, I argued for a certain account of understanding and demonstrated that this epistemic standing, so construed, was in its nature a cognitive achievement. Accordingly, I argued that while knowledge is not distinctively valuable, understanding is.

Along the way we have also explored what bearing the swamping problem has for the debate about the value of epistemic standings. As we saw early on, this problem is not as closely related to the value problem for knowledge as many suppose.

We began our inquiry into the value of knowledge by noting that part of what drives the intuition that knowledge is distinctively valuable is that if it is not valuable in this way then it is simply odd that much of our epistemological theorizing has tended to focus on this epistemic standing to the exclusion of others. When we made this observation we were engaged in the project of seeking a way to *validate* this largely tacit meta-epistemological presupposition, but as we have progressed on our journey through this topic we have found that a certain degree of *revisionism* is in fact necessary in this regard.

Taking the revisionist line can often be a depressing and defensive activity, as when a forest ranger destroys a section of forest in order to preserve the trees as yet left untouched by the oncoming conflagration. As we have seen, however, the recognition that knowledge is lacking in distinctive value brings with it a new way of thinking not just about the value of epistemic standings, but also about the structure of knowledge and its place in epistemological inquiry. To pursue the metaphor, revisionism of this sort is more akin to a farmer burning off the chaff in the field in order to prepare the land for a new and more

fruitful crop in the years to come.¹⁴

NOTES

¹ For more on holistic and non-holistic conceptions of understanding, see Brogaard (2007b).

² Consider the following remark made by Lipton (2004, 30) and quoted in Grimm (2006, 1), “Understanding is not some sort of super-knowledge, but simply more knowledge: knowledge of causes”. The natural way to read this passage is as suggesting that understanding why one’s house burned down is just knowing why it burned down—i.e., knowing that it burned down because of (say) faulty wiring. I am grateful to Grimm (2006) for alerting me to some of these references.

³ Riggs (*forthcoming*) and Elgin (*forthcoming*; cf. Elgin 1996; 2004) also argue that understanding is not factive, although their claim is ultimately much weaker than Zagzebski’s since it in effect only applies to certain conceptions of understanding (and not, in particular, to the non-holistic conception of understanding in play here).

⁴ It should be noted that there are some good arguments offered by Elgin (*forthcoming*) in this respect regarding the growth of understanding within false scientific theories, and the use of idealisations in scientific thinking, which might seem to suggest a conception of holistic understanding which is entirely non-factive. It would take us too far afield to consider these arguments here, however, and Zagzebski clearly doesn’t have considerations like this in mind when she offers her conception of (non-holistic) understanding. For my own part, I think that even here we should say that genuine understanding entails a system of beliefs which is broadly correct, at least as regards the beliefs that are fundamental to that system. For more on this point, see Pritchard (*forthcomingc*, §5).

⁵ Understanding of this very general claim might start to look dangerously close to holistic understanding of a subject matter, rather than the non-holistic understanding that we are interested in here. In what follows, I will set this concern to one side and simply read it as non-holistic understanding.

⁶ While noticing that Kvanvig’s claim that understanding is compatible with epistemic luck is not quite right, Grimm (2006) fails to recognise that the mistake here is simply to equate environmental epistemic luck with Gettier-style epistemic luck. As a result, he concludes that understanding is just as incompatible with epistemic luck as knowledge is, and thus that knowledge is a species of understanding after all.

⁷ For more on the relationship between understanding and knowing-why, see Pritchard (*forthcomingb*).

⁸ I argue in Pritchard (*forthcomingb*) that this point has some important implications for the epistemology of testimony. See also Pritchard (2008b).

⁹ This is a point that I explore in detail in Pritchard (2005, part one).

¹⁰ This is the so-called ‘new evil genius’ intuition about justification, first introduced by Lehrer & Cohen (1983).

¹¹ I explore this recasting of the sceptical problem in more detail in Pritchard (2008e).

¹² This way of thinking about the goal of inquiry prompts some very interesting further questions. For example, we have noted that understanding, unlike knowledge, is compatible with environmental epistemic luck. Does that mean that we would deem an inquiry as settled even where the understanding gained by the inquirer was subject to environmental luck? On the face of it, one would think not. On closer inspection, however, this does not seem quite so implausible. After all, discovering that one’s understanding is subject to environmental luck would not make one re-open the inquiry. Think, for example, of the case in which one gains an understanding of why one’s house burned down by listening to the testimony of a genuine fire officer in an environment in which one could have very easily been deceived by a fake fire officer. Crucially, however, discovering that one’s belief is subject to environmental luck in this way would in fact *confirm* the pedigree of one’s epistemic source, and hence it would be very odd to take this as a reason for further inquiry in this regard.

A related issue is whether there can be cognitive achievements in the strong sense that are not thereby understandings. I’m inclined to think that there are, but not in the context of an inquiry. That is, I would argue that for an inquiry to generate a cognitive achievement in the strong sense is for it to thereby generate understanding. I discuss what ramifications the distinctive value of understanding has for the way we should think of the goal of inquiry in more detail in Pritchard (*forthcomingb*).

¹³ Another possible ramification of this account of the distinctive value of understanding—developed by Hills (2008) in response to the account of understanding that I offer in Pritchard (*forthcoming*)—is that it may offer a way of neutralising some of the counterintuitive implications of the idea that there could be ethical experts. In essence, the thought is that while one could gain ethical knowledge merely by listening to the testimony of an ethical expert, one could not gain ethical understanding in this way, and yet it is the latter that one should be seeking in this regard. In a similar way, one might be able to appeal to this account of understanding in order to explain why it is in general, and all other things being equal, preferable to find things out for oneself rather than by merely trusting the (reliable) word of another. After all, while trust in others can issue one with knowledge, it cannot issue one with understanding, and yet it is understanding that is the distinctively valuable epistemic standing.

¹⁴ Much of the material that makes up my contribution to this book has been presented at various venues over the last few years. These venues include the *Royal Institute of Philosophy* in London as part of the *Epistemology* lecture series in October 2006, the *Basic Knowledge* conference at the University of St. Andrews in November 2006, the *Dialectica* annual conference in Geneva in December 2006, a conference on *Epistemology* at the University of Leuven in February 2007, a Pacific APA invited symposium on *Epistemic Value* in San Francisco in April 2007, the *Newcastle Philosophy Society* annual conference in August 2007, the *Joint Session of the Mind Association and the Aristotelian Society* in July 2008, a workshop on *The Value of Knowledge* at the University of Stirling in October 2008, and departmental talks during 2006, 2007 and 2008 at the Universities of Edinburgh, Geneva, Leeds, Lund, Sheffield, St. Andrews, Sussex and UNAM, Mexico City. Thanks to Sharar Ali, Kelly Becker, Martijn Blaauw, Jesus Zamora Bonilla, Brit Brogaard, Campbell Brown, Ross Cameron, Matthew Chrisman, Andy Clark, John Divers, Igor Douven, Julien Dutant, Pascal Engel, Paul Faulkner, Miguel Fernandez, Gordon Finlayson, Lizzie Fricker, Peter Graham, John Greco, Patrick Greenough, Dominic Gregory, Lars Gundersen, Bob Hale, Lottie Hanson, John Hawthorne, Allan Hazlett, Chris Hookway, Robert Hopkins, Jennifer Hornsby, Carrie Jenkins, Jesper Kallestrup, Matthew Kieran, Jon Kvanvig, Bob Lockie, Anne Meylan, Andy McGonigal, Michael Morris, Antony O’Hear, Erik Olsson, Steve Petersen, Diana Raffman, Murali Ramachandran, Mike Ridge, Bruce Russell, Jenny Saul, Sarah Sawyer, Barry Smith, Jason Stanley, Bob Stern, Helen Steward, Kathleen Stock, John Turri, Margarita Valdes, Robbie Williams, Tim Williamson, René van Woudenberg and Crispin Wright. Special thanks to Adam Carter, Georgi Gardiner, Adrian Haddock, Chris Kelp, Alan Millar, Wayne Riggs and Ernie Sosa. My research in this area has benefited from an AHRC Research Leave award and a Philip Leverhulme Prize.