A Defence of Robust Virtue Epistemology

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Abstract

Virtue-theoretic approaches to the theory of knowledge aim to explain the nature and value of knowledge by appeal to the cognitive character of the agent. Robust virtue epistemology holds that knowledge is ‘true belief attained through cognitive ability’, and that no other conditions, such as an additional anti-luck condition, are needed to capture the nature and value of knowledge. In this thesis I defend robust virtue epistemology.

In chapter one I outline criteria of adequacy for an account of knowledge. I explain how an account of knowledge should fit with natural language use and intuitive knowledge attributions and should make intelligible why we have the concept of knowledge that we do. I also explicate four guiding platitudes for a theory of knowledge: that knowledge has value, that knowledge is immune from luck, that knowledge is the product of ability, and that we have some knowledge.

In chapter two I explain the emergence of robust virtue epistemology from two of its predecessor views, process reliabilism and agent reliabilism, and I explain why robust virtue epistemology holds great promise as an account of knowledge. I next present a central criticism of robust virtue epistemology that has been pressed separately by Lackey and by Pritchard. I explain how this criticism brings into focus the importance of the through relation in understanding robust virtue epistemology.

In chapter three I survey three attempts to elucidate this through relation, and I explain why none are adequate. In chapter four I consider Pritchard’s alternative to robust virtue epistemology, which he calls anti-luck virtue epistemology; this view posits both a virtue-theoretic condition and a separate anti-luck condition on knowledge. I argue that this view has weaknesses which warrant a return to robust virtue epistemology.

In the fifth and final chapter I suggest two refinements to orthodox understandings of robust virtue epistemology. Firstly I propose that we understand the through relation using Mackie’s so-called ‘inus’ account of causation. Secondly I suggest that we understand cognitive abilities as relative to environments. I thus propose a new version of robust virtue epistemology, one which answers Lackey’s and Pritchard’s criticisms and so holds great promise for explaining the nature and value of knowledge.
Chapter One: The Project

1.1 The Ubiquity of ‘Knows’

The word ‘knows’ has many different conversation uses. To assure people: ‘trust me, I know what I am doing’; as a defence for action: ‘I knew it would be fine’; to justify decisions: ‘I think we have enough petrol for this stretch, but I don’t know, so we’d better fill up’, to express doubt: ‘how do you know that?’ The term ‘knowledge’ and its cognates appears in almost every natural language in the world,\(^1\) one of only twenty-four or so words to do so, which suggests that the concept of knowledge plays an important role in our action and thinking. But what is it about knowledge that allows it to perform all these tasks? What does it mean to say that someone knows? What are the truth conditions of ‘S knows that p’, and what else might statements of this schema conversationally imply? Many epistemologists are engaged in the project of analysing knowledge. In the next section I say more about what this project aims to achieve and in section 1.3 I suggest some criteria of adequacy for such a project.

1.2 What is the Project of analysing knowledge?

The ‘project of explanation’ is the project of explaining what knowledge is, explaining the difference between knowing and not knowing.\(^2\) The first thing to note is that our everyday word ‘knows’ can be used to denote three different kinds of knowledge; context and grammatical structure determines which sense of ‘knows’ is being used. ‘Sam knows Tom’ or ‘Laura knows Barcelona’ expresses knowledge by acquaintance; it expresses that he has met the person, or she has familiarity with the city. ‘Sam knows how to play chess’ or ‘Laura knows how to ride a bike’ expresses know-how; it expresses that the agent possesses a

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\(^1\) A term that appears in every, or almost every, known language is called a ‘universal lexeme’. See Wierzbicka, A. (2006: section 2.5).

\(^2\) The expression ‘project of explanation’ appears in Greco (2010), where he distinguishes it from the project of vindication; he describes the latter as the project of demonstrating whether we have any knowledge and asking ‘what do, or can, we know?’ Greco (2010: 5). Clearly the project of explanation and the project of vindication are related – what knowledge is will have bearing on what we can know. This thesis is engaged in the former project – establishing what knowledge is. Rather than take up the project of vindication I assume that we do have a lot of knowledge, and that we indeed know much of what we take ourselves to know. Whilst not an intellectually satisfying response to those engaged on sceptical projects, it is a more fruitful approach to the project of explanation to assume that much of our everyday language use and intuitions about knowledge are correct.
certain skill or ability. Finally, ‘Sam knows what rabbits eat’ or ‘Laura knows that I am ifing’ express propositional knowledge; it expresses that the agent stands in a particular relation to a proposition. It suggests, at least approximately, that they believe the proposition, that it is true, and that their belief is well-founded, justified or in some other way good. These three kinds of knowledge have some relations to each other, for example acquaintance with a city will often come with the ability to navigate around it, and knowing a person will usually mean knowing some facts about them. But epistemologists tend to be primarily interested in the project of explaining propositional knowledge, as this is an important concept, with intimate links to rationality and normativity.3

The second thing to note is that the question ‘what is knowledge?’ admits of two distinct readings. One question is what kind of thing knowledge is: is it a natural kind, is it a linguistic entity, is it a social construct, is it an inferential node. This reading is a higher-order question, and is more fruitfully examined using the methods of metaphysics and metaethics. A second way to interpret the question ‘what is knowledge?’ is that it is asking ‘what are the conditions for knowledge?’: what properties must a belief and believer possess so that the belief is known, and not merely believed. It is looking for the first-order conditions that distinguish knowledge from mere true belief and other epistemic standings. This thesis engages the second question: I look for a set of individually necessary and jointly sufficient conditions such that they capture all and only cases of knowledge.

1.3 Criteria

So the project we are engaged in is finding the first-order conditions for propositional knowledge. What will a successful account of knowledge look like? Below I suggest some criteria for success in the project – what we are aiming to do. Getting clear on this question will be useful when we are assessing various accounts of knowledge in sections chapters three and four, and will help guide us when we develop a new account of knowledge in chapter five.4

3 Zagzebski suggests two other reasons why epistemologists primarily focus on propositional knowledge. One reason is that it is via propositions that we pass information among people. The second reason is that it is via propositions, rather than experience, that reality becomes understandable to the human mind. Zagzebski (1999: 92).
4 Additionally looking at the aims of the project is an important way to ensure that the methods implemented are appropriate. If for (hypothetical) example we are engaged on the project of exactly capturing and explaining natural language, collecting data on ordinary language use will be the vastly superior method. In contrast if we are trying to capture the extension of a folk intuition then asking non-philosophers about cases may be the best method.
Firstly, a successful account of knowledge will be in accordance with, and make intelligible, most natural language use regarding ‘knows’ and its cognates. It is a bad sign for a theory of knowledge if it entails that significant chunks of our language use are wrong. If we have a theory that knowledge is true belief, for example, this entails that all expressions such as ‘hey, you didn’t know that, that was merely a lucky guess’ are mistaken or non-literal. This is a serious cost to the theory. A successful theory of knowledge should be able to explain paradigmatic uses of ‘knows’ in natural language and be able to explain what we are doing when we attribute knowledge in everyday contexts.

If a theory of knowledge entails that there are a class of uses that are mistaken, it should be able to shed light on why we talk this way, and provide a story about why such false or non-competent uses occur. It should also be able to make sense of non-literal, metaphoric uses of the term – uses which are strictly false but are clearly widespread, systematic and useful. As an illustration: A theory of knowledge might entail that only people, and not animals, can know. We often talk about animals as knowers, however, and a theory of knowledge should be able to make this intelligible. Perhaps the theory suggests that knowledge is an honorific, and so when we say that our dog knows its way around the woods, knows what food it likes etc, we are tapping into the honourific aspect of knowledge attributions. We are proud of the dog, the dog has achieved something. Alternatively a theory may rule that only agents, but not machines or computer programmes, can know. We frequently say things like ‘Google will know’. A theory could explain such a use of ‘knows’ by proposing that knowledge functions as a way of tagging good informants, and it is this aspect which makes the expression intelligible: Google often acts like an informant.

Not all conversational uses of ‘knows’ are equal: ‘Hey, you didn’t know that, that was merely a lucky guess’ feels like a literal use, and so is costly to explain away. Compare this to the soccer player who loses the game, but afterwards utters ‘I just knew I was going to win’. This doesn’t have the feel of a literal use; in fact it is easier to say it with some slight vocal emphasis on the ‘knew’, which is a linguistic marker for a non-literal use. Perhaps some non-literal uses refer to the ‘feeling of knowing’ rather than to propositional knowledge.

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5 I don’t mean to suggest here that I think animals can’t be knowers. The example is merely for illustration.
6 The ‘feeling of knowing’ is the strong sense that you know the answer to something. It is a phenomenon in psychology, rather than philosophy, but it does seem that non-factive and non-belief uses of ‘knows’ are often best explained by appealing to the feeling of knowing – the agent strongly felt that they knew. Nagel, J. (2007: 809-10).
As well as making true and intelligible most uses of ‘knows’, a theory of knowledge should also be able to shed light on the various conversational functions of knowledge attributions. Knowledge attributions frequently provide assurance, for example, as in ‘trust me I know’; they have a relation to praise and blame, as in ‘you knew what would happen’, which expresses that the speaker is blaming the agent for an outcome (more so than ‘you thought that would happen’?); and it is frequently used to solicit information, as in ‘does anyone know where to find good fishing’ or ‘excuse me, do you know where the station is?’

It can also be used as a way of praising people. On this John Greco writes:

Note an important illocutionary force of knowledge attributions: namely, that when we attribute knowledge to someone we mean to give the person credit for getting things right.\(^7\) [emphasis mine]

But also more generally knowledge attributions play an honorific role. ‘He doesn’t know anything’ is an insult in a way that ‘he doesn’t believe anything’ isn’t (even though both claims are almost certainly false, only the former has a distinctively insulting tone).

Another criterion for a theory of knowledge is that it ought to make intelligible the various normative roles that knowledge plays. For example, it is often claimed that knowledge is the norm of practical rationality: if you know that p it is proper for you to act as if p.\(^10\) If this is right it might suggest pragmatic encroachment about knowledge.\(^11\) Pragmatic encroachment holds that practical factors can affect whether the agent’s epistemic position with respect to p is sufficient for knowledge (or, to formulate it as a semantic thesis, practical factors affect the

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\(^7\) I owe this suggestion to Matthew McGrath.

\(^8\) I once watched a speaker at an APA attempting to formulate a request for information without using “knows” or one of its cognates. It was instructive (and amusing) to see how difficult he found it. Eventually he gave up, and claimed that it could be done, it is just difficult. Given that his point was supposed to be that ‘knows’ is only one way of many to tag good informants, and so his difficulty ran counter to his claim, this vividly illustrates just how important the term ‘knows’ is when soliciting information in our community. Of course, we can approach people to ask for information without using ‘knows’, such as by asking ‘can you tell me where to find good fish?’ My point is not that it can’t be done, but rather that when asking for information we tend to use the term ‘know’.


\(^10\) For defences of this claim see Fantl and McGrath (2009: especially Ch. 5). See also Fantl and McGrath (2007), Stanley (2005) and Hawthorne (2004).

\(^11\) Greco exemplifies someone who holds that knowledge functions as the norm of rational action, and so posits pragmatic encroachment on knowledge. Greco (2010: 78-80). See also Hawthorne (2004), Stanley (2005) and Fantl and McGrath (2009).
truth value of knowledge attributions). This is because if knowledge marks when you can act on your belief, then where a lot is at stake, you might be rational to act only if you have eliminated more error possibilities and gathered more evidence than usual. We should spend more time inquiring into those propositions that we have more reason to care about. So it takes less inquiry to reach the point of stopping when we are inquiring about less important propositions. Thus if knowledge is the norm for proper action then it is easier to know less important facts.

Similarly it is often held that knowledge marks the end of inquiry – if you know that p you can stop inquiring as to whether p. And some hold that knowledge is the norm of assertion: one should assert only what one knows, or someone who asserts something known has done nothing wrong, qua assertion, from the epistemic point of view.

Of course, any of these norms – the norm of rational action, end of inquiry and assertion – might be mistaken. Perhaps knowledge does not play these normative roles. The fact that so many people hold that they do is itself, however, something to be explained. A successful theory of knowledge should either be able to make intelligible why knowledge plays these roles, or else be able to explain why it appears that it does so but in fact does not.

As competent users of a concept we have intuitions about which cases fall under the extension of that concept. We can describe a case, real or imaginary, and have an intuition about whether the agent knows in this case. To illustrate, imagine that Sally throws a die and then makes a guess that it will land a six. As it happens she guesses correctly – the die did land a six. We have the intuition that in this case Sally didn’t know. Compare this to: Sally throws a die, she then looks to see what number it lands, and based on what she sees, believes that it lands a six. In this case we have the intuition that Sally knows that it landed a six.

A ‘better epistemic position’ with regard to p might include having ruled out more error possibilities about p, having more evidence with regard to p, being more justified, having been formed more cautiously, the beliefs being more modally stable etc.

For a defence of the claim that knowledge marks the proper end of inquiry, see Kappel (2010: 75f), Kelp (2011) and Schaffer (2006).

Note that the first formulation given above of the knowledge norm of assertion is a necessity claim (knowledge is necessary for epistemically proper assertion), the latter is a sufficiency claim (knowledge is sufficient for epistemically proper assertion). For more on the knowledge norm of assertion, see DeRose (2002), Lackey (2008: especially chapter 4).

Note that if we are in a philosophy classroom or have recently been thinking about sceptical scenarios, our intuitions might waver on this point. But at least in the everyday case this is a clear case of knowledge. Perhaps it is another criterion for a successful theory of knowledge that it explains why our intuitions about the extension of the concept wobble when confronted with sceptical hypotheses.
These are intuitions about the extension of the concept. Our theory of knowledge should be able to explain this difference in our intuitions.

The naïve theory that knowledge is true belief performs poorly on this score, as it rules that Sally knows in both cases. The theorist would have to either revise her theory to vindicate this intuition about the extension, or else explain the intuition away (provide an error theory), claiming that our intuitions are wrong in this case. In contrast, the theory that knowledge is safe true belief (a safe belief is any true belief where the agent couldn’t easily have been wrong\textsuperscript{16}) does better on this score, as one cannot easily form a false belief by looking at the die, but one can easily be wrong by guessing the result. The theory that knowledge is safe true belief thus accounts for the difference in intuition.

An influential family of cases that tap into the intuitive extension of knowledge are Gettier cases.\textsuperscript{17} Imagine that a person comes downstairs in the morning and looks at her grandfather clock. It says eight o’clock, and she forms the corresponding belief. As consulting clocks is a good way of telling the time, the belief is well grounded and justified. Unbeknownst to the agent, however, the clock had stopped at eight o’clock the previous evening. Thus she could easily have formed a false belief. But by chance the belief she formed was true in this instance – the clock stopped exactly twelve hours ago, and it is now exactly eight o’clock. Although the belief is justified and true, we do not intuit that it is knowledge. This is because there is a fissure between the agent and the truth: the agent didn’t get to the truth in the right way. It was not true because it was well formed, it was true only by luck. Gettier cases share a general structure. Take a belief which is justified, but where some bad luck means that the belief-forming method would lead to a false belief in this case. A second piece of luck is in play, however, meaning that by happenstance the belief is true.\textsuperscript{18} We shall be returning to Gettier cases in section 2.3.

\textsuperscript{16} For more on safety see Sosa (1999; 2000), and Pritchard (2005; 2007a; 2009e).
\textsuperscript{17} This case is repurposed from Russell (1948: 170-1). Gettier cases were originally conceived as a problem for the justified true belief account of knowledge. But they can be generalised.
\textsuperscript{18} Unger describes Gettier cases as when there is luck between fact and agent. Unger (1968: 159). Greco holds that in Gettier cases the agent gets to the truth via a deviant causal chain. Greco (2010: 75). Zagzebski (1994: 66 and 1996: 288-9) notes the double-luck structure of Gettier cases.
Note that our intuitions about extension are not sacrosanct. A theorist need not hold the intuitions as fixed positions, but can instead explain the intuitions away. This is especially true at the periphery – as cases get convoluted, and intuitions waver, it is less costly to deny intuitions about extension. But it is a great cost to the theory to deny the intuitions about guiding or central cases (those that we are most sure about; that are clear-cut or paradigmatic cases of knowledge).

In addition to intuitions about the extension, we also have intuitions directly about the intension of the concept. These are insights we have as competent concept possessors regarding the meaning of concepts. We believe, for example, that whether S knows that p isn’t sensitive to what day of the week it is. Furthermore, we can access this day-of-the-week-invariance platitude directly from our intuitive understanding of the concept, without proceeding via the intuitive extension. Whilst the day-of-the-week datum won’t be much help in formulating a theory of knowledge, there are other intuitions about the intension that have more bearing on our analysis.

The following four intuitions about the intension are widely held, and I take it to be criterion for adequacy in the project of analysing knowledge that the theory either helps explain, or else can explain away, the four intuitions. There may be other intuitions, such as that knowledge requires ruling out salient error possibilities, or that knowledge requires having some reason for belief, or that you can’t know something if you have strong reason to believe it is false, but these intuitions as more controversial, and so don’t take them to be criteria for a theory.

One platitude, or widely held intuition, is that knowledge has value. In particular, it seems

19 ‘Fixed positions’ is data that we cannot deny, or that is very costly to dent. For more information on fixed points in philosophical methodology see Rawls (1971:19-20, 579-581; 1993: 8, 124), See also Rawls (1975: especially section 2).

20 There are many questions regarding the value and evidential weight of intuitions about the extension of the concept. There are related questions about whether the intuitions of philosophers are of more value and evidential weight than the intuitions of the ‘folk’. The judgements of philosophers may have more value because they have thought more about the concept or are better thinkers. On the other hand, the intuitions of the ‘folk’ may have more value because theorists’ intuitions are tainted by theory. This debate is intimately related to how we conceive of the aim of epistemology: whether we are trying to capture a folk concept or do something else. Alas whilst these questions of method and aim are fascinating, they lie beyond the scope of this project. For a useful overview of this topic see Nagel, J. (2007).

21 For a useful overview of recent thinking about epistemic value see Pritchard (2007d). See also Pritchard (2010b: especially ch. 1) and Kvanvig (2003). That a theory of knowledge must be compatible with claims about the value of knowledge was emphasised by Kvanvig (2003: ch. 1) See also e.g. Zagzebski (1999), Williamson (2000: ch. 1).
that knowing that p is more valuable than other epistemic standings, such as luckily guessing that p. The exact nature and amount of the value of knowledge is contentious and in order to guide theorizing this platitude needs to be precisified.

There are many different axes along which the value of knowledge platitude can be sharpened. One axis concerns how valuable knowledge is.\(^\text{22}\) The weakest claim holds merely that knowledge is valuable. The next weakest (often referred to as the ‘primary value assumption’, see footnote\(^\text{22}\)) holds that knowledge is more valuable than mere true belief.\(^\text{23}\) This claim would be vindicated if, for example, knowledge is justified true belief, and justified true belief is more valuable than mere true belief. A third available claim, stronger than the previous two, holds that knowledge is more valuable than a proper subset of its parts. (This claim is often referred to as the ‘secondary value assumption’.\(^\text{23}\)) Suppose, for example, knowledge is justified true belief plus some other condition to deal with Gettier cases. To be consistent with the claim that knowledge is more valuable than a proper subset of its parts, this extra condition must also contribute value to the whole. A fourth claim (the ‘tertiary value assumption’) holds that knowledge is more valuable than the sum of its parts.\(^\text{24}\) This platitude holds that when knowledge obtains some special value emerges, perhaps as a result of the arrangement of its parts. This latter value claim can be understood to hold that knowledge is more valuable than other epistemic standings not just as a matter of degree, but also of kind.

There is a great deal of support for the weaker claims – those holding that knowledge is valuable and that knowledge is more valuable than mere true belief. Knowledge is something that we seek out, and given the choice we would, all else being equal, rather know something

\(^{22}\) I am taking this four-way taxonomy of the value of knowledge from Kvanvig (2003). See also Greco (2010: 93-97). Note that this taxonomy of the value of knowledge claims is distinct from Pritchard’s three way schema. For Pritchard’s summary of the various available value platitudes see Pritchard (2007d: 86-87, n 4; 2010: 5-13). I favour the Kvanvig/Greco analysis, in part because it explicitly recognises that someone who holds that knowledge has equal value to true belief still holds some positive thesis with regard to the value of knowledge.

\(^{23}\) Two classes of philosopher will hold that the first value claim is the strongest one ought endorse. Firstly those who hold that knowledge simply is true belief will hold that knowledge is not more valuable than mere true belief. Sartwell (1992). Secondly some people may think that knowledge is true belief plus some other conditions, but that those other conditions do not make the whole any more valuable than mere true belief.

\(^{24}\) The fourth claim doesn’t strictly entail the second and third value claims, as one could think that when all the parts of knowledge come together in the right way (in other words, when knowledge obtains) some of the parts, or their arrangement, detract from the value of a mere subset of the parts, rendering knowledge less valuable than a proper subset of the parts. I don’t know of anyone who holds this view.
than merely truly believe it. There is also some motivation to endorse the stronger claims. For one thing we tend to focus on knowledge, rather than other epistemic standings, in both everyday life and in our philosophical theorising. This suggests knowledge has a distinctive value, not shared by other epistemic standings. Support for the claim that knowledge is more valuable than a proper subset of its parts comes from the following consideration: Suppose knowledge can be rendered into constituents, call them A, B, C and D, and the first three constituents all contribute some value to the whole, but D doesn’t contribute any value. This would leave it puzzling why we care so much about knowledge rather than the whole formed by the parts A, B and C. This puzzling result pushes a theory towards claim that knowledge is more valuable than any proper subset of its parts. Pritchard has argued that we often treat knowledge as valuable for its own sake and so motivates the fourth value claim (that the difference in value that knowledge enjoys is a difference in kind, not merely in degree). He suggests that if the value of knowledge was just another spot on a continuum of value this leaves it puzzling why we tend to focus it.\textsuperscript{25} Note too that given the disagreement about the value of knowledge, it is an advantage of a theory if it is compatible with stronger claims about the value of knowledge, as this means it is consistent with more views and so more powerful.

Given the strong case for thinking that knowledge possesses a distinctive value, I shall take the third claim, which holds that knowledge is more valuable than a proper subset of its parts, as a criterion for an account of knowledge. It would be a surprise to learn that this is false, given how much of our thinking focuses on knowledge in particular. There are two promising ways to meet this criterion. Firstly one may posit a set of conditions on knowledge and explain why each condition contributes some value to the whole; or secondly one may also endorse the fourth value claim, and hold that when knowledge obtains a distinctive value emerges. I return to these ways in sections 2.4 and 4.2.

A second platitude is the anti-sceptical platitude. This intuition holds that we have some knowledge. This too needs to be sharpened up – we need to discern what kind of knowledge we have, for example, and about what topics. It seems fairly clear that we know many mundane facts, such as that there is a glass of water in front of me, but it is less clear that we know the tenets of metaphysics.\textsuperscript{26} This platitude is supported by the intuitive extension of the concept of knowledge, and also by appeals to natural language. We have strong intuitions

\textsuperscript{25} Pritchard (2010: 7-8).
\textsuperscript{26} A second example of the kinds of things we seem to not know is lottery propositions. It seems that we do not know that a given ticket in a very large lottery will lose, despite the overwhelming odds. A theory of knowledge should be able to explain this. For more on lottery propositions, see Hawthorne (2004: especially ch. 1).
that knowledge has a large extension, and our language reflects this; thus it is highly
revisionary to claim that we don’t have (much) knowledge, or that we can only possess
knowledge about a limited range of subjects. Thus it is a criterion of adequacy that a theory
of knowledge entails that we know basic facts.

The next two intuitions are more abstract and hence harder to formulate. The first is the anti-
luck intuition: knowledge is incompatible with certain kinds of luck. If S’s belief that p is
merely luckily true – if she could easily have been wrong about whether p – then S does not
know that p.

Again the intuition needs precisifying. Knowledge is compatible with some kinds of luck:
perhaps it was only by chance that the bank robber’s mask fell off during the raid, allowing
the back teller to see the robber’s face clearly, and so recognise that the bank robber is Jesse
James. Although it was only by luck that the teller was in a position to see the face and so
form a true belief about the robber’s identity, this kind of luck does not preclude knowledge.
We can call luck that is compatible with knowledge ‘benign’ luck. 27 28

But knowledge is incompatible with other kinds of luck. If I guess that my veggie box will be
delivered at 3.26pm based on the fact that, whilst it is delivered at a slightly different time
every week, the average time for delivery is 3.26pm, then even if it is delivered at 3.26pm
and so my belief is true, I did not know this. I could so easily have been wrong; my belief
was only luckily true. Indeed I could have used great skill in calculating the average delivery
time, but regardless of the skill involved we intuit that this isn’t a case of knowledge because
of the luck involved. 29

The kind of luck that is incompatible with knowledge is known as veritic luck. It can be
characterised thus: it is a matter of luck, given how the belief is formed, that the belief is
true.30 Veritic luck comes in two varieties, intervening and environmental. Intervening luck is
the kind of luck in play in Gettier cases and the veggie box cases. Indeed some hold that the
moral of Gettier cases, such as the one described above, is that knowledge is incompatible

27 For a useful taxonomy of kinds of luck which are compatible with knowledge, see
28 The Jesse James case is due to Nozick (1981: 193).
29 The kind of luck involved in the Jesse James case is known as evidential luck (Evidential
Luck: it was only by luck that the agent had access to the evidence). For a fuller account of
various kinds of epistemic luck see Pritchard (2005, especially ch. 5 and 6).
30 This characterisation is based on Pritchard (2005: 146).
with veritic luck.\(^3\) We shall be returning to environmental luck in section 2.6. Thus we can use as a guiding intuition about knowledge, and a criteria of adequacy for a theory, that it captures the way that knowledge is immune from luck.

Lastly there is the ability platitude. This intuition about the intension brings together two interrelated strands of thinking about knowledge. Firstly, knowledge is the product of cognitive ability, as opposed to say, lucky guesses, or gullibly and irrationally held beliefs. To possess knowledge one needs to believe with competence. Additionally some aspects of the agent’s cognitive faculties or character (for example, their eyesight or their judiciousness) must be in play in the right way. We hold agents responsible for the knowledge they possess, and for this to be so, knowledge must in some way be attributable, or creditable, to the agent.\(^3\)

Closely connected with this strand of thought is a second idea. This one is more controversial\(^3\) and holds that saying that someone knows that p says something good about the cognitive character of the agent. It is very hard to criticise someone by saying that they know something, and in the typical case such an attribution praises them.\(^3\) This second strand of the ability platitude is supported by our linguistic behaviour (that claiming an agent knows is rarely, if ever, used as an insult, and that knowledge attributions often play an honorific role), and by the first strand of the ability platitude, which holds that in cases of knowledge the agent must have done something well. The agent must engage with the proposition in a responsible or skilled way – at the very least not be gullible or irresponsible in their belief forming. This suggests that knowledge is a state which entails something good about the agent.

Notice that this claim is importantly distinct from the Credit Thesis account of knowledge.\(^3\)

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\(^3\) Dancy (1985: 134); Pritchard (2005).
\(^3\) See Zagzebski (1996: 261). She writes ‘Knowledge is not merely something that happens to us but is something which we contribute to through our own efforts and skills… we claim our putative knowing states as our own and take credit or discredit for them.’
\(^3\) For example Pritchard denies that the second strand is a platitude about knowledge, Pritchard (m.s; 2010), even though he endorses the weaker strand of the ability platitude.
\(^3\) I believe the stronger claim that you can’t criticise them, at least from the epistemic point of view, by saying that they know, but such a strong claim is not required for my purpose here.
\(^3\) The Credit Thesis is an analysis of knowledge that holds that S knows that p if S deserves credit for the truth of her belief. See for example Greco (2003a). I do not discuss this view of knowledge here. For more on the distinction between a success being of credit to an agent (the agent deserves praise for the success) and the success being creditable to the agent (the
The Credit Thesis holds that a belief is knowledge iff the agent deserves some credit for the truth of her belief. This account is strongly influenced by the ability platitude, but the ability platitude, even in its second more controversial strand, merely holds that knowledge tends to be something that we praise agents for; it does not attempt to define knowledge this way, nor hold that agents always deserve praise for known beliefs.

As an illustration of the ability platitude, consider the following case. Imagine Rene starts gambling. He randomly guesses roulette results, and thus believes via an unreliable and irresponsible method. Fortunately, but unbeknownst to him, there’s a guardian angel making whatever Rene believes true. The guardian angel changes the results of the wheel to conform to Rene’s beliefs. His beliefs couldn’t easily be false, so the anti-luck intuition is fulfilled, but we still don’t attribute knowledge to Rene. Why? I suggest that the reason is that he isn’t getting to the truth in the right way – his cognitive character doesn’t play the right role. Knowledge should be, at least in part, creditable to the knower. Rene’s epistemic abilities don’t cause his true beliefs, he believes any old thing and the world conforms. This is the first strand of the ability platitude. We intuit, furthermore, that he doesn’t deserve the status of knowledge. I suggest that the second strand of the ability platitude best explains this judgement.

Thus a view of knowledge which doesn’t respect the ability intuition, and so says that Rene knows, fails on this account. The theory that knowledge is safe true belief, whilst performing well at capturing the anti-luck platitude, doesn’t perform as well with the ability platitude. Given that on this theory all that counts towards knowledge are the truth of the belief and its modal profile, the theory doesn’t countenance the aetiology of the belief. Once we notice this we can generate counterexamples to this view, as illustrated by the Rene case, by imagining beliefs that have the right modal profile but don’t involve the agent’s abilities in the right way.

These intuitions (value, anti-sceptical, anti-luck and ability) can be used in two distinct ways. One is to guide the theorising to begin with, so that we use the platitudes to shape the account of knowledge. The other way uses these platitudes to evaluate a view once it is offered, and

agent played some role in the success such that it is (at least in part) attributable to them) see Pritchard (2010: 27).

36 This case is found in Gardiner (2010). A similar version is used as a counterexample to process reliabilism. Greco (1999: 286). See also (Pritchard (2005: 187). In the original case the agent reasons according to the Gambler’s Fallacy. By making Rene not even care about the truth I have altered the case to make it even more clear that the agent doesn’t deserve the status of knowledge.
thus they play a role as criteria of adequacy. In chapter five I build an account of knowledge that I hope does justice to these four intuitions about the intension of the concept of knowledge.

Another criterion for a successful account of knowledge is that it makes intelligible why we have the epistemic concepts that we do (and why the concept of knowledge is so widespread, so important, and used so much). This means that it is a strike against a theory if it is excessively complicated or unintuitive, so that it is unlikely that this concept would naturally have evolved in our socio-cognitive life. It is also a strike against the theory if the concept isn’t able to perform any useful function, or performs its supposed functions badly, or if some other simpler epistemic standing could have fulfilled the same function. This is because in these cases it is hard to see why we would have come to have such a concept. If knowledge is supposed to play the various normative roles outlined above, for example, but the account of knowledge offered means that we have very little access to whether we know, then it makes it hard to see how knowledge can fulfil its role.

Thus a successful theory of knowledge will posit at least one important function for knowledge and explain how it performs this function. It will also cohere well with other everyday concepts we have. If we posit that knowledge is a kind of achievement, for example, then this construes knowledge as an instance of a familiar kind. This helps make it more intelligible why we have the concept. Similarly it is a virtue of a theory if it posits that knowledge comprises familiar concepts (such as reliability) or partially composes familiar concepts (such as understanding).

Thus we have some idea of what a theory of knowledge is aiming at. There are guiding platitudes (value, anti-sceptical, anti-luck and ability) that an account of knowledge must be in accordance with, and we have some insight about how to use the intuitive extension of the concept and linguistic data to guide and test our theories. We also want the account to make intelligible why we have the concept of knowledge that we do, and to explain how it fulfils

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Thee platitudes can be used to drive a theory of knowledge. Sosa (2007) for example, presents the thesis that knowledge is valuable as a guiding platitude for his account of knowledge. (See section 3.3). Pritchard develops his anti-luck virtue epistemology from theorising about the anti-luck and ability platitudes. (see chapter 4 of this paper and Pritchard 2009a; 2010; m/s). Plausibly contextualism about knowledge can be seen as arriving from trying to square the anti-sceptical intuition that we have some knowledge, with the view that knowledge requires ruling out relevant alternatives. Using these two guiding platitudes we are lead to contextualism about knowledge. Meanwhile the role that the intuitive intensions can play as a criterion for adequacy can be observed in my above criticism of the view that knowledge is safe true belief: the view didn’t adequately vindicate the ability platitude.
functions in our socio-cognitive economy, our language and our thought. Our aim should be to create a theory which makes best sense of all of these considerations. We have seen that if we must deny some intuitions, or explain away some language uses or purported functions, then it should be less central ones – the figurative cases rather than the paradigmatic uses, the wavering intuitions rather than the fixed ones.

Chapter Two: The Emergence of Robust Virtue Epistemology

Now that we have seen our aims, we can move on to examine various accounts of knowledge. In section 2.4 and chapter five I argue that robust virtue epistemology holds great promise for satisfying these criteria. To fully appreciate the view, however, one must first look at the emergence of robust virtue epistemology from its predecessors.

2.1 Process Reliabilism

Margaret and Lauren are sitting in class. On hearing the door opening, Margaret turns to see who has entered. Recognising her classmate Timothy Margaret thinks ‘Oh Timothy is here’. Meanwhile Lauren is in love with Timothy, and is sitting at her desk daydreaming about him. On hearing the door open Lauren wishfully thinks ‘Oh, Timothy is here!’ Priscella introspects on how she feels about music and so concludes ‘I am a perfectionist piano player’. Markus reflects on the pleasing alliteration in the sentence, and therefore believes ‘Priscella is a perfectionist piano player’. A skilled birdwatcher and an inexperienced birdwatcher are walking in the forest. ‘That is a pink-spotted flycatcher’ observes the birdwatcher carefully to himself, whilst the other guesses ‘That is a pink-spotted flycatcher’.  

In each pair of cases the first person knows the proposition in question, and the second one doesn’t. A fruitful way to explain this extension of knowledge is by examining the belief-forming processes employed. In the first case of each pair the belief is formed via standard cognitive processes: perception, introspection, memory, and good reasoning. In the second of each pair the belief is formed through wishful thinking, epistemically irrelevant aesthetic considerations, and guesswork. One important difference between the kinds of belief-forming processes is that the latter types of process are unreliable (they produce a large number of false beliefs compared to true beliefs) whilst the former processes are reliable (they tend to

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38 These examples are all adapted from Goldman (1979) The alliteration example originates from Kornblith.
produce true beliefs rather than false beliefs). Process reliabilism holds that this is what distinguishes knowledge from mere true belief. A belief is known only if it is true and formed via a reliable method.\textsuperscript{39}

**Process reliabilism:** A belief is known iff it is a true belief that is the product of a reliable process, where a reliable process is one that tends to result in true beliefs.\textsuperscript{40}

Process reliabilism then, captures the way that knowledge, unlike merely true belief, is something on which we can rely. It articulates a way that knowledge enjoys veritic stability, and is not merely accidentally true. Process reliabilism also captures the thought that knowledge requires good cognitive contact with the world, as forming beliefs though reliable processes is a good epistemic practice.

Process reliabilism also holds promise for explaining why the agent doesn’t know in Gettier cases. Recall that in the Gettier case described above the agent formed the true belief that it was eight o’clock by looking at a stopped clock. The reliabilist can respond that she fails to fulfil the conditions of knowledge because looking at a stopped clock is not a reliable way to form beliefs about the time. She would more often than not form a false belief via this method.

Thus process reliabilism’s focus on how the belief is formed, and emphasis on reliability rather than mere luckiness, seems a promising approach to capturing the nature of knowledge.

### 2.2 From Process Reliabilism to Agent Reliabilism

Whilst process reliabilism is a promising start to an account of knowledge, the posited conditions are too permissive. Take the following case from Bonjour:\textsuperscript{41} Norman reliably forms true beliefs about a range of subjects through his clairvoyance. He has no particular reason to think that clairvoyance is reliable, or even that he has it. Norman generally accepts the beliefs in question, and never checks empirically to see whether the beliefs he forms are

\textsuperscript{39} Process reliabilism is also known as generic reliabilism and simple reliabilism. Sosa (1992). For discussion of process reliabilism see Goldman (1977; 1979)

\textsuperscript{40} Often the elocution ‘a higher preponderance of true beliefs over false beliefs’ is used. See, for Example Sosa (1992: 79).

\textsuperscript{41} The case of the reliable clairvoyant is found in Bonjour, L (1985: 41-45). See also Bonjour, L. (2003: 28f).
true. These beliefs occur ‘spontaneously and forcefully.’\textsuperscript{42} Norman fulfils the conditions on knowledge set out by process reliabilism. His true beliefs are formed via a reliable process, yet it seems clear that his clairvoyantly formed beliefs are not known. He isn’t a responsible or conscientious believer; he is not checking up on the truth of his beliefs. This case suggests that process reliabilism is too permissive – that not all reliable belief-forming processes are knowledge-conducive.

When faced with this charge a reliabilist might hold that, in spite of our intuitions about the case, Norman does obtain knowledge from clairvoyance. Goldman takes this approach and holds that as Norman’s belief-forming process is in fact reliable; he knows his clairvoyantly formed beliefs. He then provides an error theory for our intuitions that Norman doesn’t know. He argues that as our judgements about knowledge attributions are formed in a world where clairvoyance is not reliable, we wrongly withhold a knowledge attribution in this case.\textsuperscript{43}

But such a response looks unappealing when we consider additional cases. Zagzebski describes an agent who gullibly but reliably forms beliefs.\textsuperscript{44} Again, it seems like the agent doesn’t know, but does fulfil the conditions. This suggests the agent needs to fulfil other conditions, in addition to using a reliable method. Plantinga offers a case where curious circumstances cause a person to develop a rare brain lesion. The effect of this brain lesion is that she strongly believes that she had a brain lesion.\textsuperscript{45} The belief is thus true and reliably formed, yet we intuit that the agent isn’t justified in her belief, and so doesn’t know. Reflecting on this case may offer some insight as to why we judge that the agent doesn’t know: the belief-forming process is not well integrated with the rest of her cognitive character. In Greco’s terms, the brain-lesion beliefs are formed via ‘strange and fleeting’ processes\textsuperscript{46} and not via a stable and well-integrated part of her cognitive character. Were the agent to have had the condition for a long time or come to find out that such lesions exist, then we would be more inclined to judge that she knows in this case. Yet the reliability of the belief-forming method hasn’t changed – she would have had those true beliefs regardless – what has changed is how the belief-forming method has become integrated into her cognitive life. It has become a part of her cognitive character.

\textsuperscript{42} Bonjour (2003: 28).
\textsuperscript{43} Goldman (1993: 279).
\textsuperscript{44} Zagzebski (1996: 305-8).
\textsuperscript{45} Plantinga (1993a: 199; 1999).
\textsuperscript{46} Greco (1999: 286-287).
This constraint on what counts as a knowledge-conducive process may arise because knowledge is something on which we rely and, even when reliable, the products of strange processes are not ones we can rely on. We can thus refine process reliabilism further to reflect this insight, such that that the cognitive traits in question must be *stable aspects* of the cognitive character of the agent.

But what about the case of Rene the Gambler? Recall that Rene forms beliefs about a roulette wheel by simply guessing the results. Unbeknownst to him, he has a guardian angel changing the world so that his beliefs come out true. Given that he has this guardian angel, his beliefs are reliably formed – most of his beliefs are true – and so he fulfils the conditions of process reliabilism. Additionally his belief-forming process is a well-integrated and stable part of his character – he has been a cognitively irresponsible guesser for a long time – so he fulfils the refinements suggested above. Yet when we consider this case, it is clear that Rene doesn’t know. It seems that he is not getting to the truth the right way: the reliability isn’t coming from the agent. Furthermore Rene doesn’t care about the truth of his belief, and is doing nothing to ensure that his beliefs are true. This suggests further restrictions are required on what belief-forming processes and methods count as knowledge-conducive. Perhaps in order to know an agent must be motivated towards obtaining truth and avoiding falsehood, have subjective justification, and believe conscientiously.

The above cases suggest that process reliabilism doesn’t capture every facet of knowledge. In particular, as the above cases illustrate, process reliabilism is inadequate at capturing how in cases of knowledge the agent’s cognitive character must be playing the right role in getting to the truth and must be responding appropriately to the facts. In other words, process reliabilism isn’t sufficiently attuned to the ability platitude. In contrast, when the processes are integrated, stable parts of the agent’s cognitive character, the true beliefs that they generate can be properly attributed to the agent: They are produced by her character.47 Call the resulting view ‘agent reliabilism.’48

**Agent reliabilism (necessity claim):** S knows that p only if S’s true belief that p is the product of reliable cognitive traits that make up her cognitive character.

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47 See for example Sosa (1991: 276-277. He notes that only when the reliably formed true beliefs come from a stable and well-integrated capacity that the agent can ‘develop, exercise, retain and admire’ does the agent deserve credit for possessing the true belief.

48 Many of these developments were made in Greco 1999; 2000). The ‘term agent reliabilism’ was introduced in Greco (1999: 288). Note that this is only a necessity claim on knowledge, not a bi-conditional.
Once we refine reliabilism to better reflect the demands of the ability platitude, the resulting view is also better positioned to explain other aspects of knowledge. By requiring that the relevant belief-forming methods be stable, for example, agent reliabilism better captures the anti-luck platitude than process reliabilism does: the sources of knowledge are sources that we can rely on.

As these amendments shift focus away from the properties of the belief and belief-forming process, and towards the broader features of the cognitive character of the agent, they offer new avenues for explaining the value of knowledge. In particular, it seems, the extra value of knowledge might be the value of an agent performing virtuously. Thus we can see that dissatisfaction with process reliabilism has led theorists to develop a virtue epistemology, seating the agent at the heart of epistemic evaluation, and understanding person-level excellences as the fundamental element in epistemic evaluation. Knowledge is true belief that is virtuously formed. It is therefore a thesis about the ‘direction of analysis’ – that we can understand knowledge and epistemic value by looking at the more explanatorily fundamental properties of persons, rather than say, the properties of beliefs themselves.\footnote{Greco (2010: 42).}

This virtue epistemic idea leaves a lot of scope for different views on the nature of the relevant cognitive traits. One important question is whether they are best understood as faculties (eyesight, hearing, etc), or character traits (such as judiciousness, conscientiousness, etc) that we must learn and develop over time? Other questions concern how important reliability and motivation are in cognitive character. Virtue responsibilists such as Zagzebski tend to emphasise the importance of character traits and the motivations of the agent. Virtue reliabilists such as Greco tend to emphasise the reliability component.\footnote{See for example Zagzebski (1996; 2003), Greco (1999; 2010); See also Pritchard 2009a: 56-59).} I hope to remain ecumenical about this. I hope that my offered virtue-theoretic account allows for both faculties and character traits to count as cognitive virtues, because both kinds of capacity are part of the agent’s cognitive character, and so beliefs formed from both kinds are connected to the agents in the right kind of way (in accordance with the ability platitude).

Note that agent reliabilism wasn’t intended by its earliest proponents to be a full account of knowledge.\footnote{See, for example, Greco (1999, 2000). Greco claims that ‘a belief $p$ has positive epistemic status for a person $S$ just in case S's believing $p$ results from stable and reliable dispositions that make up S's cognitive character’. [Greco (1999: 287, 295-96) emphasis mine] Note that this is importantly different from the claim that this fully captures the nature of knowledge.} It was only supposed to be a significant necessary condition on knowledge.
augmented with a separate condition to capture other aspects, such as to eliminate knowledge-undermining luck. This position is now known as modest virtue epistemology, and we shall be exploring such one account in chapter four. The idea behind modest virtue epistemology is that virtue-theoretic conditions play an important role in understanding knowledge, but this does not entail the stronger thesis that the nature of knowledge can be entirely captured this way. Later views held that agent reliabilism could be developed into a full account of knowledge, which can be expressed with the following bi-conditional:

**Agent Reliabilism:** S knows that p iif S’s true belief that p is the product of reliable cognitive traits that make up her cognitive character

They held that we can entirely understand the nature and normativity of knowledge by exploring how the relevant person-level excellences produce true belief, and that no supplementary conditions, such as an explicit modal condition, are required in an analysis of knowledge.

### 2.3 A Problem for Process Reliabilism

But agent reliabilism (along with process reliabilism) faces a dilemma. How reliable must a process be in order for it to yield knowledge? Either the process must be perfectly reliable or not. If we opt for the former then we don’t have much knowledge since our belief-forming processes and faculties are fallible – we have few perfect, or nearly perfect, belief-forming methods. Such demanding conditions on knowledge thus make it bizarre that we talk and act as if we have a lot of knowledge. This suggestion therefore performs badly by the intuitive extension, ordinary language use and anti-sceptical criteria. It claims, for example, that the fact that our senses sometimes deceive us and our teachers are occasionally wrong entails that we can’t know anything from perception or from believing our teachers. This leads to a fairly wide-scope scepticism.

In particular, Greco held that agent reliabilism couldn’t deal with Gettier cases. Greco’s agent reliabilist framework idea dates back at least as far as Greco 1995 (type script) quoted in Kvanvig (2003: 83-84).

52 One may be tempted to think that this is a false dichotomy. This is because one might contend that a contextualist about the ‘reliability’ parameter can cut through horns by holding that in some contexts (where the stakes are high) the process needs to be very reliable, but in other contexts (where the stakes are low) the process need not be so reliable, in order for the process to yield knowledge. But even this contextualism will suffer the dilemma, because for each context we can ask the question ‘how reliable does the process need to be?’ and so find that the two horns appear at each context.
We can avoid this impending sceptical problem by making our notion of reliability less demanding: A cognitive process or faculty is reliable, and therefore knowledge-conducive, if it gets things right most of the time, or a large proportion of the time. This is more promising, as it vindicates the idea that we have a lot of knowledge, and doesn’t render most of our talk and thought about knowledge mistaken. It also explains how we can know things from our perceptual faculties despite the fact that they sometimes mislead us, and from teachers, books and testimony despite the fact that sometimes we form false beliefs via such methods.

Once we take this second route, however, and allow that the belief-forming method need not be entirely reliable a new problem develops. Take a belief formed by a method that is sufficiently reliable for knowledge and fulfils the other conditions required by agent reliabilism. Suppose, Roddy the shepherd looks at a sheep-shaped object in normal daytime lighting across a field. As a shepherd with keen eyesight, Roddy is very reliable at recognising sheep, and fields are where sheep hang out, so his belief is well-justified. Roddy’s eyesight and sheep-recognition abilities are a well-integrated, stable part of his cognitive character, and he was responsibly aiming to form a true belief. Roddy accordingly forms the belief ‘there is a sheep in that part of the field’. But in this instance what he is looking at is not a sheep but a sheep-shaped rock. His reliable belief-forming process this time leads him to a false belief. Unbeknownst to him, behind the rock a sheep is grazing. His belief is therefore both true and formed by a reliable method. It fulfils the conditions laid out by both process reliabilism and agent reliabilism, yet it is not knowledge. The belief is too lucky.53

Recall that Gettier cases have a general structure. The belief is well formed, but there is some bad luck such that ordinarily the belief would be false in this case. But a second piece of luck ‘cancels out’ the first, so that the belief is true after all, in a way disconnected from the belief’s being well formed. Once we realise that this is the general structure of Gettier cases, constructing them becomes easy, in fact for process and agent reliabilism we have a simple recipe: Take a belief that is formed via a method reliable enough to satisfy the reliability requirement for knowledge. Then add some bad luck such that the belief would normally end up false (it’s a rock that Roddy has spotted), but then add some good luck so that the belief is in fact true (there is a sheep behind the rock).54

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53 The sheep case was first introduce by Chisholm (1977:105).
54 A similar recipe can be produced for many theories of justification and knowledge. See Zagzebski (1996: 291f).
This mismatch between theory and intuitive extension in Gettier cases is a problem for process and agent reliabilism. And the fact that the counterexamples can be generated according to a recipe suggests that Gettier cases are getting at a fundamental weakness in the view. In light of Gettier cases, process and agent reliabilism have three paths available. The first is to claim that the subjects in these Gettier cases know, despite our intuitions to the contrary, and so Gettier cases are not a threat to the account of knowledge. This is an unpalatable route, as our intuitions about the intension strongly suggest that the agent doesn’t know in this case. Also, holding that the agent knows in this case is at odds with the anti-luck platitude, as is a paradigmatic case of veritic luck.\textsuperscript{55} An alternative route is to hold that although the agent doesn’t know in these cases, they are unimportant and marginal and so we need not amend the view in the light of the mismatch between theory and intuition. This approach too is costly. Firstly Gettier cases are not merely within the realm of fantasy – Gettier cases do occur.\textsuperscript{56} Secondly although they are often constructed exotically, their systemacity and simplicity suggests that they are tapping into an important and central, rather than a bizarre and so ignorable, feature of knowledge. Thirdly Gettier cases can affect many different kinds of knowledge – knowledge from perception, testimony, memory, reasoning etc – and they afflict many different accounts of knowledge. This suggests that Gettier cases are something to be reckoned with rather than dismissed.

The third route available to reliabilists is to amend the view in light of the Gettier challenge.\textsuperscript{57} They could augment the agent reliabilist conditions with other conditions, such as safety or a brute anti-Gettier condition. This move leads to the modest virtue epistemology mentioned above. Alternatively they can try and stay within the agent reliabilist framework but ‘beef up’ the conditions of agent reliabilism. The aim is to make the conditions less permissive and so rule out cases of Gettier-style double-luck.

\textsuperscript{55} Veritic luck occurs when, given how the belief was formed, it is only by luck that it is true. (See section 1.3).
\textsuperscript{56} My favourite case being my husband’s belief, held on Dec 31\textsuperscript{st} 2009, that he would get married in 2010.
\textsuperscript{57} An alternative option available to the agent reliabilist is to contend that Roddy and other Gettier victims are not producing their beliefs via a reliable method. Thus the cases are not counterexamples to reliabilism because they do not fulfil the conditions. However, this is an unattractive option as it stands, because it claims that a reliable belief-forming process can never generate a false belief. This is because, recall, all that we needed to set up a Gettier case was a small gap in belief-forming process so that it was slightly unreliable.
2.4 A New Account of Knowledge: Robust Virtue Epistemology

One fruitful diagnosis of Gettier cases is that whilst beliefs like Roddy the shepherd’s are both true and formed with ability, they are not true because well-formed. This understanding of Gettier cases suggests an important modification of the view: the addition of a causal relation between the belief’s being formed with ability and the belief’s being true. Here are some typical statements of the position:

Sosa writes:

> Knowledge is true belief out of intellectual virtue, belief that turns out right by reason of virtue and not just by coincidence. 59

Zagzebski writes:

> Knowledge is a state of cognitive contact with reality arising out of acts of intellectual virtue.60

Riggs writes:

> [In cases of knowledge] the person derives epistemic credit… that she would not be due had she only accidentally happened upon a true belief… The difference… here is the variation to which a person’s abilities, powers and skills are causally responsible for the outcome, believing truly that p.61

Greco writes:

> When we say that S knows p, we imply that it is not just an accident that S believes the truth with respect to p. On the contrary, we mean to say that S gets things right with respect to p because S has reasoned in an appropriate way, or perceived things accurately, or remembered things well, etc. We mean to say that getting it right can be

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58 In Greco (2003a: 19-21) Greco makes explicit that change from holding the conjunction (a belief must be true and formed with virtue) to the causal relation (a belief must be true because formed with virtue), allowed the switch from giving a partial account of knowledge to giving a fully fledged account of knowledge in terms of necessary and sufficient conditions.


60 Zagzebski (1996: 298). It is clear from context that by ‘arising’ she means that the cognitive contact is because of the intellectual virtue. Elsewhere Zagzebski writes, ‘It is important that success in reaching the end is due to the other praiseworthy features of the act. The end must be reached because of these other features… [in cases of knowledge the agent] is successful in reaching the truth because of these other features [that make the act virtuous].’ Zagzebski (1999: 107).

put down to S’s own abilities, rather than to dumb luck, or blind chance, or something else. [Emphasis mine] 62

All such views share the idea that in cases of knowledge the belief turns out correct by the manifestation of virtue (rather than by luck), and so in some way the agent caused, or played some appropriate role in producing, the truth of the belief. Furthermore, no other additional conditions are required to capture the nature of knowledge. This view is known as ‘robust virtue epistemology’ and can be summarised thus:

**Robust Virtue Epistemology**: S knows that p iff S’s belief that p is true *because* it was formed with cognitive virtue.

This suggestion holds a great deal of promise. In a standard case of knowledge, when a shepherd looks at a sheep in a field and forms the belief ‘there is a sheep in that field’, his abilities are part of the cause of the belief’s truth. In general what distinguishes knowledge from lesser epistemic standings such as mere lucky guesses or gullibly held beliefs is that in cases of knowledge the agent’s cognitive character ensures that the belief is true. By proposing this causal relation between the agent’s abilities and the fact that the belief is true, this account deals with Gettier cases such as Roddy the shepherd. This is because Roddy does not fulfil the conditions of RVE. His belief is formed with ability, but it isn’t true because it was formed with ability. It was true through luck.

In addition to getting the extension right in such cases, robust virtue epistemology has many other strengths. 63 Firstly it performs well at the ability platitude. By characterising knowledge as true belief through cognitive ability, it vindicates the first strand of the platitude: that knowledge is the product of ability and that knowledge is attributable to the agent. Since in order to know the agent must possess and engage the appropriate abilities, robust virtue epistemology also explains the second strand: why knowledge attributions tend to say something good about the agent.

This suggestion also vindicates the anti-luck platitude. If the agent’s cognitive character causes fact that the belief is true, then belief isn’t true because of luck. We shall be returning

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63 For other advantages of RVE, including that it can handle problems that plague internalist and deontological approaches to epistemic normativity see Greco (2010: especially ch. 2 and 3).
to this claim, as a keystone in the defence of robust virtue epistemology is that its virtue-theoretic conditions rule out cases of luck without recourse to a distinct anti-luck condition.

Similarly robust virtue epistemology bodes well for the anti-sceptical platitude: it makes knowledge the kind of thing we can have. We will need to examine specific variants of RVE before we know that it fulfils the anti-luck platitude, as a virtue theory with a very restrictive account of ability may result in scepticism, but for now the suggestion looks promising as an anti-sceptical account of knowledge.

The thesis also coheres well with some proposed genealogies of the concept of knowledge. Craig suggests, for example, that the purpose of the concept of knowledge is to tag good informants. If this is right then robust virtue epistemology, which focuses on the evaluable properties of agents (rather than the properties of beliefs or belief-forming methods) is a promising suggestion. If Craig is correct then we should expect knowledge-relevant epistemic evaluation to focus on the agent (rather than, say, modal properties of beliefs). By seating epistemic normativity in the agent’s cognitive character, RVE does just that.64

RVE also has the virtue of being an elegant view with a simple structure. It also coheres well with other familiar concepts. True belief through cognitive ability is an instance of success through ability and so RVE construes knowledge as an instance of a more general kind. Success through ability is also an achievement and so according to RVE knowledge is a kind of achievement.65 In section 2.5 I explain in more depth the structure of RVE, by describing the schemas that Sosa and Greco advocate.

By construing knowledge as a kind of achievement, RVE makes available a unique and promising suggestion for the value platitude. If achievements are a kind of thing we value finally (that is, for its own sake) and knowledge is a species of achievement, then knowledge is finally valuable.66

(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 is a cognitive achievement (KA thesis);

64 A similar suggestion is attributed to a Greco 1995 typescript in Kvanvig (2003: 83-86).
65 That knowledge was an achievement in this regard was first suggested in Greco (2009).
66 I have taken this argument from Pritchard (2010: 31).
(P3) achievements are finally valuable (Value of Achievements thesis);
(C2) so, knowledge has final value.

Detractors have questioned all three premises of this argument. In section 5.5 I briefly explore premise one (I suggest that even if premise one is false, robust virtue epistemology has resources to explain the value of knowledge through a related idea). I spend much of chapters four and five defending premise two. In section 2.6 I introduce Pritchard’s attack on premise two, which has the form of an apparent dilemma. The dilemma challenges the robust virtue epistemology thesis that S knows that p iff S’s belief that p is true because of the exercise of S’s cognitive ability.

I argue that whilst this dilemma may succeed in undermining other accounts of robust virtue epistemology, the account I advocate does not fall victim to Pritchard’s dilemma. I thus defend the view that knowledge is success that is through cognitive ability. My defence of RVE against the apparent dilemma focuses largely on the through relation that obtains in cases of knowledge. This relation is of central importance in understanding knowledge; it has been the Achilles’ heel of orthodox RVE accounts. In order to highlight the importance of this through relation, I shall first say more about the structure of RVE.

2.5 Schemas of RVE

The thesis that knowledge is true belief formed through cognitive virtue has been defended prominently by Sosa and Greco.\(^{67}\) I will now explain their versions of the view. These are not complete accounts of knowledge. Different accounts of virtues, success, and the ‘through’ relationship can be applied to the schemas given in the next two sections to yield different accounts of knowledge. These schematic versions will be a useful aid as we explore the through relation, as we can see how the different accounts of through flesh out the position in different ways.

a.) Sosa’s View: AAA

Sosa first suggested that knowledge is a kind of success from ability in 1988, and the most comprehensive explication of his view is found in *A Virtue Epistemology: Apt Belief and*

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\(^{67}\) The most comprehensive formulation of Greco’s view is found in Greco (2010), although he has given a more recent refinement of his view (Greco (m/s)). The most comprehensive recent formulation of Sosa’s view is found in Sosa (2007).
Reflective Knowledge. His advocacy of robust virtue epistemology is motivated by consideration of the value platitude, but he also contends that the RVE structure he advocates can handle many Gettier cases, and that it deals with the sceptic’s challenge. Sosa notes that activities with an aim – performances – can be assessed along three dimensions. Firstly, is it accurate – does it succeed in its aim. Secondly, is it adroit – was it skillfully done; does the performance manifest skill on the part of the agent. Thirdly, is the performance apt – is it successful because it is skillful; accurate because adroit? He calls this the AAA structure of assessing performances.

Sosa illustrates these dimensions of evaluation with the example of an archer taking a shot at a target. He notes that a shot can be accurate without being adroit. The shot could have been fired poorly by an inexperienced archer and so not be directed on course, for example, but a lucky gust of wind could direct the arrow so that it hits the target. In this case the shot doesn’t manifest skill. A shot can also be both accurate (hitting the target) and adroit (skillfully done) without being accurate because adroit. For example, the shot could be fired such that it is on the right course (it is adroit), but then a freak gust of wind knocks it off course. By chance a second freak gust of wind knocks it back on course and it hits a bull’s eye (it is accurate). In this case the shot manifests adroitness and is accurate. The accuracy itself, however, does not manifest adroitness. It is not accurate because it was skillful, rather it is accurate through luck. Finally a shot can be apt, that is accurate because adroit. An example is an arrow which hits the target because it was fired with skill.

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68 See Sosa (2007: especially ch. 2 and 5) for his account of knowledge. See also Sosa (2009).
69 Sosa’s 2007 book is centred around looking at the nature of epistemic evaluation and epistemic normativity as a response to the sceptical challenge. Sosa himself appears to advocate an unusual view of epistemic normativity, where it is hypothetical rather than categorical. He suggests that we evaluate epistemic value relative to epistemic aims, but he says relatively little about whether these aims are actually good, when considered from outside the domain of our epistemic aims. When talking about good beliefs he gives analogies to good coffee and good archery (which are usually taken to be hypothetical goods) rather than to morality (categorical goods). Pritchard has pointed out to me that Sosa’s view amounts to holding that judging something is epistemically valuable does not entail that it is both epistemic and valuable, but only that it has epistemic value. To use Geach’s terms, epistemic value is attributive rather than predicative. Geach (1956:33).
70 Sosa is permissive about what counts as a performance, and includes activities that don’t have an end point. Sosa (2007:23).
73 Note that in section 3.3 I explain that accurate because skilful does not quite amount to the success manifesting the skill. I suggest that the latter is closer to Sosa’s view. However, such details do not need worry us here.
and adroit) fails to be apt is not as valuable as a shot which is apt, for an apt shot is creditable to the agent, and this is a kind of thing that we value. Although not expressed explicitly by Sosa, many have added that when a performance is apt, then it is an achievement.

Having set up this general structure for evaluating performances, he applies the structure to beliefs. Beliefs can be accurate (true), adroit (formed with competence), and apt (true because competently formed). Knowledge, Sosa holds, is apt belief.

Clearly this view needs to be filled in more before it can be properly evaluated, but it is useful to lay out the schematic structure. We shall be returning in more detail to Sosa’s view of the through relation in section 3.3, but for now we turn to an alternative schema of the virtue theory of knowledge, one which provides slightly more detail about the abilities that count towards knowledge-relevant epistemic evaluation.

b.) Greco’s view: true because virtuous

Greco uses as a starting point for his schema of knowledge that virtues have a reliabilist and a motivational component. Using an Aristotelian notion of virtue, he argues that in order to be virtuous one needs to have both responsibility for one’s conduct and reliability in achieving one’s ends. He applies these ideas about virtue to the epistemic domain.

He defines knowledge-relevant responsibility as:

\[ \text{Resp: S's belief that } p \text{ is epistemically responsible iff S's believing that } p \text{ is properly motivated; iff S's believing that } p \text{ results from intellectual dispositions that S manifests when S is motivated to believe the truth.} \]

He defines knowledge-relevant reliability as:

\[ \text{Rel: S is objectively reliable in believing that } p \text{ iff S's believing that } p \text{ results from intellectual dispositions that reliably produce a true belief.} \]

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74 For an argument that we value aptness see (Sosa: 2007: 75-76; 87-88). See also section 5.5.
75 For example Pritchard (2009b).
76 Audi suggests that we should expand what we mean by knowledge-relevant cognitive success to also include disbelief and withholding belief. Audi (2004).
78 The following definitions are from Greco (2010: 43-45).
He then defines epistemic virtue as when the agent possesses the conjunction of the responsibility and the reliability components. He also uses the term ‘able’ to describe an agent satisfying this conjunction.

\[ \text{EV. S’s belief is epistemically virtuous iff both a.) S’s belief that } p \text{ is epistemically responsible; and b.) S is objectively reliable in believing that } p. \]

Greco then notes that whilst epistemic responsibility and reliability in belief formation are good things about an agent, it is even better if these qualities in the agent’s epistemic practises lead to success. It is better if the belief is true because it was reliably and responsibly formed.\(^79\) He thus defines the normativity of knowledge in a similar way to Sosa, where the through relation is key to reaching the epistemic standing of knowledge:\(^80\)

\[ \text{EN. S’s belief that } p \text{ has knowledge-relevant normative status (it has all the normative properties that knowledge requires) iff S’s believes the truth because S’s belief is epistemically virtuous.} \]

He then makes the stronger claim that this account is not merely of the knowledge-relevant normativity, but in fact wholly captures the structure of knowledge:

\[ \text{Greco’s schema: S’s knows that } p \text{ iff S’s believes the truth regarding } p \text{ because S’s belief is epistemically virtuous.} \]

Like Sosa, Greco distinguishes between having the conjunction of ability and success (the belief being formed with ability and the belief being true), and having success because of

\(^79\) Greco (2010: 44). For Greco on the special value engendered by the ‘because’ relation (rather than mere conjunction), see also (Greco: 97-101).

\(^80\) Zagzebski expresses a very similar view of the structure of knowledge, except that in Zagzebski’s account reliability plays a less important role. In Zagzebski’s account knowledge is an act of virtue. Zagzebski (1996: 271). She writes: ‘An act of virtue not only is motivated by the particular virtue and expresses the agent’s possession of the motivational component of the virtue but is successful in reaching both the immediate and the ultimate aim of that virtue, which is to say, it must lead to truth because of the operation of that virtue.’ Zagzebski (1996: 269). Zagzebski believes that an act of virtue (unlike a virtuous act) can emanate from someone who herself is not virtuous, but i.) aspires to be, and ii.) acts as the virtuous person would. What may be lacking is reliability in bringing about the end (reliability being a prerequisite for possessing a virtue and therefore orchestrating a virtuous act; but possessing the virtue (according to Zagzebski) isn’t necessary for performing an act of virtue). This solves puzzles such as how children can know even though they are not yet reliable believers and therefore epistemically virtuous. [Zagzebski (1996:279)]. I believe that for Greco this would correspond to someone having knowledge who was not able (virtuous). Given his schema of RVE I believe that he would not endorse this.
ability (the belief being true because it is formed with ability). The latter, he contends, is knowledge. Thus he endorses the RVE account of knowledge.

3.6 A Dilemma for Robust Virtue Epistemology

Thus we have reached the view that S knows that p if and only if S’s belief that p is true because virtuously formed. The details have yet to be filled in, but even as a schema of knowledge the account is vulnerable to criticism. One takes the form of a dilemma and is pressed (separately) by Lackey and Pritchard. This criticism highlights the importance of the ‘through’ relation that shall be the focus of chapters three and five.

The dilemma is best illustrated with two putative counterexamples, which appear to pull RVE in conflicting directions. Attempts to save the view from one line of objection, hold Pritchard and Lackey, make the view more susceptible to the other line. I refer to the first putative counterexample as the simple testimony case:

Having just arrived at the train station in Chicago, Morris wishes to obtain directions to the Sears Tower. He looks around, approaches the first adult passer-by that he sees, and asks how to get to his desired destination. The passer-by, who happens to be a Chicago resident who knows the city extraordinarily well, provides Morris with impeccable directions to the Sears Tower by telling him that it is located two blocks east of the train station. Morris unhesitatingly forms the corresponding true belief.

This is a fairly mundane case of testimony and we judge that Morris knows in this case. It is certainly costly to deny that Morris knows, because such enquiries and resultant beliefs

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81 Note that Greco’s account makes explicit how virtue epistemology can bring together strands from externalist (the reliability requirement) and internalist (the motivation requirement) thought. See Greco (2010: 42-46).
82 This dilemma can be found in Lackey (2007; 2009); Pritchard (2007b; 2007d; 2008a; 2008b; 2009b; 2010; m/s). A discussion of it is also found in Greco (m/s).
83 Note that this case was originally devised as a counterexample to the Credit Thesis. This is the view, defended most explicitly by Riggs, but also in various guises by Greco, Sosa, and Zagzebski, holds that the difference between knowledge and mere true belief is when the agent deserves some epistemic credit (roughly construed as praise) for the truth of her belief. I shall be using the counterexample here as a counterexample to RVE, not the Credit Thesis. When Lackey posed this dilemma in her 2007 paper she used standard Gettier type cases. Pritchard and Lackey have since pressed the dilemma using BFC-style Gettier cases. This is how I shall formulate the dilemma, because I believe it is a more challenging version of the dilemma for RVE.
85 Some people do take this route. See for example Fricker (1995).
occur all the time, and much of what we usually consider knowledge is gained via such exchanges. Denying that Morris knows would reduce a lot of what we had considered knowledge to some lesser epistemic standing, and would render much of our intuitive knowledge attributions inaccurate and our language use incorrect. It also breaks widely held normative links between knowledge and rational action to claim that Morris doesn’t know: we judge that a tourist is rational to start walking in the direction indicated, but if he doesn’t know then this puts pressure on the knowledge-action norm.

But it is hard to see how this case satisfies the schema of RVE. The true belief is not due to S’s abilities, but rather it is due to someone else’s abilities: the testifier’s. The truth of the belief is attributable to the informant, not to Morris. Insofar as it is an achievement that Morris came to have a true belief, it is not Morris’s.86

One natural response to this counterexample is to make the conditions of robust virtue epistemology more permissive. This amendment holds that in order to fulfil the conditions laid out by the schema of RVE, the agent’s role need not be the most important causal factor in coming to have a true belief; it is enough that the agent’s abilities are one factor of many. The account holds that it is consistent with the agent’s knowing that p that the agent’s role in forming the true belief that p is augmented with other things, such as testimony from other people. This amendment handles the simple testimony case, because even if he does not play the most important role, Morris plays some important role in his coming to have a true belief about the location of the Sears Tower, and so he fulfils these weaker conditions on RVE.

This amendment also has the virtue of capturing that we are frequently aided by other things – testifiers, teachers, books, instruments, calculators etc – and that the presence of such aids doesn’t impede the acquisition of knowledge. Thus it seems that the modified view better reflects our epistemic world.87

But this weakening of RVE creates other problems for the view. In particular, cases which are not intuitively cases of knowledge fulfil the weakened conditions. This is the second horn

86 Different versions of RVE will characterise the problem in slightly different ways. I examine these different accounts later, but for now I hope to describe the terrain using vague or ecumenical expressions.
87 I return to this point (sections 3.2 and 2.5), and argue that such augmenting features not only don’t weaken our epistemic standing, they can also strengthen it, and this strongly suggests that salience accounts and primitivist accounts of the through relation (as described in sections 3.1 and 3.2) will not capture the nature of knowledge.
of the apparent dilemma. Consider the following case, which I shall refer to as the barn façade county case:88

Barney is driving through the countryside and he spots a barn. He forms the corresponding belief, ‘there is a barn in that field’. His eyesight is working fine, the light is clear, and he certainly has the capacity to distinguish barns from, say, houses and combine harvesters. In usual cases we would say that this is a case of knowledge. But unbeknownst to Barney the countryside has recently been used to film a period drama, and is currently dotted with fake barns: objects that resemble the one he is looking at, but are mere two dimensional copies. Had Barney seen any of those, rather than the one real barn, he would also have formed a belief ‘there is a barn in that field’ but his belief would have been false.

In this case we judge that Barney’s belief is too lucky to be knowledge; he could so easily have been wrong. But Barney’s eyesight was functioning well, and he competently formed a true belief that a barn was present as a result of looking at a real barn. The case is not like Roddy the shepherd, who believed he was looking at a sheep but was in fact looking at a rock: Barney didn’t make a mistake about what he was looking at. Unlike standard Gettier cases, where luck intervenes between the belief and the fact, in this case of the luckiness of the belief lies in the nature of the environment. This is a case of environmental luck: given that the environment is so unfriendly, it is only by luck that his belief is true.

Furthermore, Barney’s eyesight and barn-recognition faculties are an important part of the story about how he came to have a true belief about the presence of the barn. Barney thus satisfies the proposed weakened conditions of RVE: his cognitive character and the exercise of his abilities were important in how he came to form a true belief about the presence of the barn.

The theorist might respond that although Barney plays a large role in why his belief is true, the most significant factor in this case is luck: were he to have been looking at any other barn-shaped structures in the area he would have formed a false belief. By chance he was looking at the one real barn. But using this insight to adjust RVE does not hold much promise when we reconsider the testimony case. If in cases of knowledge the agent must play the largest role, thus explaining why Barney doesn’t know, it is not clear how such a view will deal with testimony, where it seems the largest role is the informant’s.

Thus the two cases appear to pull the theory in opposing directions. One can deal with the testimony case by weakening the condition required by the through clause. With this refinement the agent can be one of many causes of her true belief, such as in a case of testimony, but this comes at the expense of making the problem of the barn façade county case more intractable. In this case Barney’s abilities play an important causal role, and so he fulfills the weaker conditions of RVE, yet intuitively Barney doesn’t know.

As I shall argue, it is a mistake for a defender of RVE to accept that this is a genuine dilemma. If this were the right way to view the problem, then a proponent of the view must refine RVE in the same place to deal with the two challenges. I shall argue that such an approach is hopeless, and that the best way to defuse the challenge to RVE is to show that this is a false dilemma. As the Lackey/Pritchard challenge effectively raises the question of the nature of the through relation, and as any account of knowledge along the lines of the schemas in sections 2.5 is incomplete without a thorough account of this relation, I shall now look at various attempts to elucidate it. From my exploration I hope to use the weaknesses and strengths I find in existing views to guide my own theorising about the through relation. Thus I will work towards building my own account of knowledge in chapter five.

Chapter Three: Orthodox Accounts of Robust Virtue Epistemology

3.1 Primitivist

The first suggestion is that the through relation is epistemically primitive. This approach holds that we have a good intuitive access to when the relation obtains, and that it is mistake to try and give further conditions for capturing it. Something’s being because of something else is an everyday occurrence with which we are conceptually fluent. Rather than trying to analyse the nature of the through relation, the most we can do is ask about whether the through relation obtains in specific instances. The view holds that whenever we intuit that the belief is true through the agent’s abilities (whenever we intuit that the RVE through relation holds), it is a case of knowledge.

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89 This claim is importantly different from the claim that we have intuitive access to the nature of the through relation. The primitivist view does not hold that we have this.
90 This position hasn’t been thoroughly staked out in the literature, so I have embellished a view that is inspired by Zagzebski. The following features are explicitly endorsed by Zagzebski: that the through relation is something we have intuitive access to, that we should distinguish between ‘believed because’ and ‘true because’ and that only the latter is knowledge relevant, and that we make judgements about when the through relation obtains in
A theorist might be attracted to this primitivist suggestion if, for example, they think that causal concepts in general are primitive (such that they cannot be analysed without essential use of other causal concepts). If the ‘through’ of RVE is an instance of a causal concept, and we cannot reduce causal concepts to non-causal ones, then this suggests that we cannot give a reductive account of the through relation in RVE.  

Zagzebski develops this sort of primitivist account of the through relation. She notes the distinction between reasons why the belief is true (rather than false) and reasons why the belief is held (rather than not believed or having different content). To see this distinction in play consider the barn façade county case: if we ask why he formed the belief, the answer is his eyesight and barn-recognition abilities. If we ask why the belief that he formed is true, it is more plausible to answer that the belief is true through luck (because if he was looking at any other structure he would have formed a false belief). Zagzebski holds that our access to the through relation is often guided by counterfactual reasoning, and the two questions (why does the agent have the belief, and why is the belief true) lead to different counterfactual results, and hence to different intuitive responses about the through relation. Zagzebski notes that only the latter is relevant to the account of knowledge: in cases of knowledge the belief is true (rather than false) through the abilities of the agent.

Zagzebski holds that although we often arrive at judgements about when the through relation obtains by using modal claims as a heuristic, this is not the same as the through relation being metaphysically reducible to the counterfactuals. That we judge the relation’s obtaining using sensitivity relations is not the same as the through being sensitivity relations. This is important for Zagzebski’s view of knowledge, because if the through relation merely amounts to modal conditions, then it is unclear why her view does not reduce to positing an explicit modal condition on knowledge. If this were her view, then it loses its RVE credentials and no longer construes knowledge as an act of virtue. When Zagzebski defends part by judgements about sensitivity. (See Zagzebski 1999; 1996). However, the part about it being a mistake to try and analyse it further is not a claim she makes explicitly. In Zagzebski (1999: 108, 111-2) she writes ‘the concept of reaching A because of B is a key element of the definition. We all have intuitions about what it means for something to happen because of something else, but this concept is in need of further analysis and I do not know of one that is adequate.’ This suggests that she could not endorse the claim that we ought not to analyse the relation further.

91 Compare Scriven (1966) ‘The concept of cause is fundamental to our conception of the world in much the same way as the concept of number: we cannot define it in terms of other notions without conceptual or ostensive circularity’ Scriven (1966) p.258.

92 This distinction is in Zagzebski (1996 p.297) and Sosa (2007: 96-7).

93 Zagzebski (1999).
the claim that the through relation doesn’t reduce to modal conditions she cites as evidence that through relations among analytic truths cannot be analysed using sensitivity (because analytic truths are true in all possible worlds). But this is not an adequate defence of her thesis because it only deals with such a small range of cases and, as Pritchard notes, the cases that we are interested in do not concern analytic truths. This has prompted Pritchard, and others, to object that her through relation amounts to a modal condition, and so she doesn’t present a distinctly RVE account of knowledge.  

But although Zagzebski’s defence of her position is inadequate, Pritchard’s conclusion comes too fast. Modal relations may be treated as heuristics for when the through relation holds, but other factors also matter when forming our intuitive judgements. In other words, the intuitive through relation doesn’t merely amount to whether sensitivity relations obtain. In particular, we can have two factors that have strong modal correlations but where we do not thereby judge that a through relation holds. Cases of common causes are like this, for example. Suppose that whenever I blow my whistle this causes my keys to beep, and blowing the same whistle also causes my dog to heel. Assuming that nothing else causes my keys to beep or my dog to heel, and they both respond reliably to my whistle, the counterfactual correlations between my dog’s heeling and the keys beeping hold. In nearby worlds where one occurs the other occurs. Yet this does not mean that the dog’s heeling is through the key’s beeping. Additionally in the Rene the Gambler case the agent’s beliefs are safe (he cannot easily form a false belief), and in the Brain Lesion case the agent’s belief are sensitive (whenever the agent has the brain lesion then he believes it), yet in neither case do we thereby intuit that the through relation holds (such that the agent’s belief is true through the exercise of her cognitive character). These two cases serve to drive a wedge between the primitivist’s through relation and the modal conditions. Thus we ought conclude that whilst the through relation may be guided by the modal relations, it does not amount to them. This means that, contra Pritchard, Zagzebski’s view is a form of robust virtue epistemology and does not amount to positing sensitivity conditions on knowledge.

The primitivist approach is initially appealing. First it captures something of the phenomenology of the through relation. When we are presented with a case, we have a ‘seeing’, or judging, of something’s being through something else. It is such an everyday occurrence that it seems as though we have a special capacity for it.

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94 Pritchard (2005: 197).
Secondly this approach has the virtue getting a great deal of central cases right, including Gettier cases: we can ‘see’ that the true belief is through luck in the Roddy the shepherd case. We would not, with our basic intuitive judgements about the through relation, judge that it was through skill, eyesight etc that he came to have a true belief. In contrast, when we consider the usual case of when a shepherd looks across a field, sees a sheep and forms the corresponding belief that there is a sheep in the field, we judge that this time it is through the abilities of the agent that he forms a true belief. Thus the primitivist theory matches the intuition in these cases.

The primitivist view performs well at the barn façade county case. When presented with this case we judge that the belief is true through luck, not through the agent’s abilities. And the reason why we judge it is not knowledge accords with the reason why we judge it is not through the abilities of the agent. That is, when we reflect on the luckiness of the truth of the belief this makes us more likely to judge both that it isn’t known, and that through relation, conceived as primitive and intuitive, doesn’t hold. This adds some support for thinking that an ‘intuitive’ basis for this relation is a good way to capture instances of knowledge.

The claim that the through relation is something that defies analysis may accord well with a Craigian approach to knowledge. In contrast to the traditional project of trying to provide an account that renders knowledge in terms of necessary and sufficient constituent conditions, Craig claims that we should instead study the concept of knowledge by looking at the function it has played, and use those insights to guide our theorising about the contemporary concept of knowledge. He argues that such a ‘function first’ approach will recommend abandoning the attempt to analyse the concept into necessary and sufficient conditions that match all its instances: the concept would have evolved with an unanalysable extension because this was the best way for the concept to fulfil its role. Perhaps the through relation is similar – it performs useful functions, but any attempt to analyse it into constituent parts, or to capture its extension with a short list of conditions, will fail because it doesn’t have a neat extension or cogent structure. If this is right about the through relation, this will support a similar view about knowledge as conceived with this RVE structure, and vice versa. The primitivist account fits with a Craigian approach because it refrains from offering full sufficient and necessary conditions, but instead posits only a sketch of the basic structure of knowledge.

95 Craig (1990).
But this primitivist approach faces problems. The approach says that the through relation used in an account of knowledge is an intuitive notion and holds that whenever it *seems* that S’s abilities are the cause of why she has a true belief, then S knows. But there are many cases where our intuitive notion of whether the belief is true through the abilities of the agent doesn’t track whether the agent knows. Examples include when we learn something from a book – particularly when the book is easy to read and so doesn’t require much effort or skill on the part of the agent. Here our intuitive judgement is that the belief formed is true because of the accuracy of the book. Similarly where the agent used a calculator or Cha Cha, or could determine something only by using a telescope or thermometer. In all these cases it seems that we intuit that the belief is true through the aid, and not through the agent. Whilst we may recognise that the agent played a role, it is a stretch of our intuitive notion of through to hold that the belief is true *through* the agent.

This conception of the through relation also doesn’t make any progress on the simple testimony case. The most natural and intuitive response to the testimony case is to report that the agent forms a true belief because of the abilities of the informant. It is a counterintuitive notion of ‘through’ to say that it is through Morris’s abilities that he comes to form a true belief, yet this is clearly a case of knowledge.

As before we can say that the through relation can hold for more than one causal factor for any given event – whilst we cannot intuit that Morris was the cause, perhaps we can intuit that he was a cause. But this again puts pressure on the barn façade county case, as in this case Barney’s abilities were a cause, so the weakened account rules that this is a case of knowledge.

The primitivist approach to the through relation also leads to cases that intuitively are not knowledge yet with our intuitive grasp of the through relation we judge that the truth of the belief is through the abilities of the agent. Consider the following case: Maud the mathematician is working on some complicated theorem. She has been sitting up for weeks, working alone in her study. In fact, her pride and intellectual ambition means that she hasn’t consulted other people; they don’t even know what she is working on. Finally she gets to the end of her working. ‘Bingo’, she thinks. Of course, she realises that she should check over the results and show them to her peers in the maths department before she can be sure, but she is so happy about it and confident in her abilities that she believes the results.

96 Text Cha Cha a question and they text you back the answer.
In this case we *strongly* intuit that the resultant true belief is true through her ability. She was the only person working on the theorem. However, it is not a *clear* case of knowledge. Perhaps, given the difficulty of the project, she needs to check the results or appeal to peer review before it amounts to knowledge. Certainly we will be more inclined to attribute knowledge once she has gone to her colleagues to ask for verification of her results, and the more people and machines who verify it, the more clearly we attribute knowledge. But the more experts who verify the results, then the less the belief’s truth is through her own abilities. This is because more factors enter the causal nexus. Recall that we use sensitivity relations as a heuristic for causal factors, and these other people play a counterfactual role: were she to have had a false belief, this would have been picked up on by the experts. As more people verify the result, her role in why the belief is true stands out less. If her belief had been false, someone would have noticed it and she would have stopped believing falsely.

This correlation is a problem for the primitivist view, which holds that the when the agent stands out in our intuitive ‘through’ attribution, we should intuit it as a case of knowledge. Reflecting on the mathematician case, however, reveals that sometimes when more factors play a causal role in the belief’s truth, the agent’s abilities stand out less, and yet we intuit more strongly that she knows.

Additionally, this view suffers from another weakness, which is its lack of explanatory power. It does not seem to give us a principled way to divide when the true belief is through the agent from when it is through something else. Relying on brute intuitions about cases is not very enlightening.\(^7\)

In light of these weaknesses – that it can’t deal with cases of testimony, that our intuitive through relation doesn’t track knowledge attributions in many other cases, and that it lacks explanatory power – it makes sense to look for a different account of the through relation. But first, we should summarise what we have learnt from exploring the primitivist suggestion.

Firstly, by focusing on whether the through relation holds we capture the intuitive extension of many cases of knowledge. When a shepherd looks at a real sheep, the belief is true through his abilities, and so is knowledge. When Roddy looks at a rock, behind which is a sheep, his belief is true through luck. Focusing on when the through relation holds (rather than, say,

\(^7\) Greco makes a similar point in Greco (m/s: 9).
merely when the abilities are possessed) clearly get lots of cases right. This vindicates RVE’s addition of the causal relation.

A large class of problems for the view occur when more than one thing cause the belief’s truth, especially when the role played by the agent seems insignificant compared to some other role and yet the agent clearly knows. This suggests that whilst it may be a good start to look at when a through relation obtains, it is a mistake to want only one thing to fill the X position of ‘X caused S’s belief regarding p to be true’ or to want the agent to be the most dominant factor in an explanation of the truth of the belief. Another insight, revealed by looking at the mathematician case, is that when more factors are making the belief true rather than false we may be more willing, rather than less willing, to attribute knowledge. I return to this point in section 5.2.

3.2 Explanatory Salience

Given the lack of explanatory power provided by the previous suggestion and the fact that it provides no principled way (apart from mere intuition) to determine when the through relation obtains, we may seek a more informative and systematic view. Greco provides just that. He offers perhaps the most developed account of the through relation in the literature.98 He understands the through relation as an explanatory relation. He holds that in cases of knowledge, the fact that S’s belief about p is true is best explained by the fact that S believes from ability. In other words, in cases of knowledge, S’s abilities are salient in a causal explanation of how S comes to have a true belief that p.99

To understand better the contours of this suggestion, we must look at the nature of causal explanation.100 First, Greco notes, many different factors are in the causal nexus that brings about an effect; and furthermore some causal factors are more important – more salient – than others in an explanation. Next he notes that causal explanations tend to pick out one factor as primary. He illustrates this with the case of the recent financial crisis, where we say

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98 One of his explicit aims in his project is to give a more systematic approach to Gettier cases – ‘a principled rationale’ for dividing up when the conditions of RVE hold and S believes the truth because S believes from an intellectual ability. Greco (2010:74).
99 For details of Greco’s view see Greco (2003a; 2010). Although Greco is the most prominent defender of the explanatory understanding of the through relation, other authors frequently use the notion of explanation in their descriptions of cases. For example Sosa (2007: 96-97); Zagzebski (1996: 270 n.4).
100 Greco’s account is highly influenced by Feinberg’s account of moral blame. See especially ‘Problematic Responsibility in Law and Morals’, ‘Action and Responsibility’ and ‘Causing Voluntary Actions in Feinberg (1970).
that poor lending practices led to the crash. He notes that here, as is typical with causal explanations, we cite just one thing from a complicated causal nexus.\footnote{\textsuperscript{101} For Greco on explanatory salience see Greco (2010: 74-5, 104-8; 2004a: 242-245).}

Greco notes that the mechanisms that determine which factor from a set of causal factors is picked out as primary are poorly understood, and that more work is needed for a full account. He draws our attention to two features of causal explanations.\footnote{\textsuperscript{102} Greco (2010: 74).} Firstly, causal explanations often cite what is atypical about a situation. If we take the case of a fire outbreak in a factory many things are in the causal nexus – the presence of oxygen, the flammable materials, a spark – but our causal explanations pick out the unusual feature. Perhaps the spark is what differed from the normal, so we say that the spark is the cause of the fire. In this case the spark is abnormal and so is the salient factor in our causal explanation. We can imagine an environment in which sparks are normal, however, whilst the presence of oxygen is not (say, a controlled environment within a science lab). In this case, with the same causal nexus, we are inclined to say that the presence of oxygen is the cause of the fire. This is because in this case oxygen is the abnormal feature. Secondly, our aims and interests affect what we judge to be the salient feature of a causal explanation – we pick out what we can adjust or control. To illustrate this he gives the example of a traffic accident: The traffic cop may blame speeding whilst the road planner blames the blindness of the bend.\footnote{\textsuperscript{103} These examples are found in Greco (2007b; 2008a; 2010).} The difference is because each individual homes in on what they can control in their practical environment. The feature that they can manipulate is salient for them.\footnote{\textsuperscript{104} Note that this introduces attributer contextualism into causal explanations, and therefore knowledge attributions. However, it is not the standard ‘standards’ contextualism. See Greco (2008a; 2004a: 243f; 2010: ch. 7). For criticisms of this Greco’s contextualism see (Pritchard 2008a) and section 3.2.} Note that Greco intends his account of salience to be in accord with what naturally seems important to us in causal explanation; he doesn’t intend for his mechanisms of salience to depart radically from an intuitive notion of primary causation.\footnote{\textsuperscript{105} Perhaps the abnormality feature of the mechanisms of salience is best described as epistemic criteria: it is about what can be expected. In contrast the ‘aims and interests’ criteria are pragmatic; they are a function of our practical environment, what we care about and can control, rather than what we know or expect.}

Greco claims that:

\begin{quote}
In cases of knowledge, S believes the truth because S believes from intellectual ability – S’s believing the truth is explained by S’s believing from ability… [This] requires
\end{quote}
more than that ability is involved. It requires that S’s ability has an appropriate level of explanatory salience.\textsuperscript{107}

Greco holds that the agent’s intellectual abilities have ‘default salience’ in explanations of true belief and he contends that this is because of our aims and interests as information-sharing beings. We are interested in tracking reliable epistemic agents so that we can identify who the good informants are, and this makes salient the epistemic performance of other agents.\textsuperscript{108} This means that in standard cases of knowledge, such as the simple testimony case, the agent enjoys a default salience in an explanation of why his belief is true.

Greco’s suggestion is that in cases where something (such as luck) trumps the salience of the abilities in a causal explanation, the agent doesn’t know. But if the agent is the ‘overarching explanation’, or ‘salient enough’, then the agent knows. Greco claims that intuitions about whether S knows tend to vary with intuitions about whether the agent’s abilities are explanatorily salient.\textsuperscript{109}

This account offers a neat solution to standard Gettier problems. Owing to our interests and aims as social epistemic beings, in the straightforward (non-Gettiered) case where a shepherd looks at a sheep and so forms the corresponding true belief, the abilities of the agent are salient enough that the true belief is through the abilities of the shepherd. Thus the case fulfils the conditions, and entails that the shepherd knows. This is in accord with our intuition that he knows. Where Roddy the shepherd is the victim of a Gettier case, however, the double-luck is an unusual feature. Being an unusual feature, the luck is therefore the salient cause, rather than the agent. Roddy is deemed to not fulfil the conditions, and so not know. In Greco’s words,

\begin{quote}
In the case of a deviant causal chain [between agent and her success], salience goes to what is deviant, and away from what is normal or usual… default salience is trumped
\end{quote}

\textsuperscript{107} Greco (2010 73, 75). Note that as stated here it is a necessity claim. It is clear from context he intends it as a sufficiency claim. See, for example, Greco (2010:71), and my section 2.5.
\textsuperscript{108} Greco (2010: 73, 75). This explanation of why we focus on other epistemic agents is inspired by Craig. See Craig (1990).
\textsuperscript{109} Greco (2010: 83-4). ‘We have no precise or systematic understanding of the rules governing explanatory salience… [but] intuitions about whether S knows tend to sway with intuitions about explanatory salience. That is, in cases were it seems that S knows, it seems that it is the case that S’s cognitive abilities are important in an explanation why S believes the truth. And in cases where it seems that S does not know, it seems that S’s abilities are less important in such an explanation. This would indicate that [the salience account] is correct, even if it is neither maximally specific not maximally informative.’
by abnormality in Gettier cases… by the abnormality manifested in the way that S ends up with a true belief\textsuperscript{110}

Similarly it is available to Greco to hold that in the barn façade county case, the unusual environmental luck also trumps the default salient of the agent, so that even though nothing has come betwixt agent and fact in the causal chain, in the explanatory story, the luck takes centre stage. By his account of the mechanisms of salience, salience goes to what is abnormal, and the luck is an abnormal feature of the case.

In fact, this account performs better at barn façade county case than the primitivist account outlined in section 3.1. This is because by employing the mechanisms of salience Greco provides more details about when the through relation obtains, and these mechanisms clearly rule that the environmental luck, being so unusual, is more salient than the agent. In contrast the primitivist account doesn’t provide a further guide about when the through relation obtains, and it is less clear that we brutally intuit that it is through luck rather than through ability that Barney comes to have a true belief in this case. His role is important (he is looking at a real barn, and is correctly identifying it as such), and so it is not clear whether it is more through luck or through ability that his belief is true. But Greco’s account can explain why it is not through the agent – the luck is more salient.\textsuperscript{111}

This approach is also more informative than the primitivist account. It gives us principles for determining when the through relation holds, and tells us more about its nature.

If the through relation of robust virtue epistemology operates as Greco suggests, then the concept of knowledge coheres well with other important concepts. Explanatory relations where one salient factor is picked out are familiar and important. This was one of our criteria for evaluating competing accounts of knowledge. Greco also contends that his understanding of the through relation accommodates our contextualist intuitions.\textsuperscript{112}

\textsuperscript{110} Greco (2010: 75). See Greco (2003a: 21) ‘In cases of knowledge S’s reliable character has salience in an explanation of how S comes to get things right. In Gettier cases, S’s reliable character loses salience in favour of something else’. [emphasis mine].

\textsuperscript{111} One might, however, argue that it is actually a virtue of the account if rules with less certainty on cases that are ‘peripheral’, as our intuitions about whether they are instances of knowledge waver in these cases.

\textsuperscript{112} Greco (2007b; 2008a).
But this view faces problems. Firstly, understanding the through relation as explanatory salience makes no progress on the dilemma posed by the simple testimony and barn façade county cases. As we saw in section 3.1, reflecting on knowledge from testimony, books and apparatus suggests that any view where in cases of knowledge the agent must be the most important factor in why their belief is true is, for that reason, misguided. To solve this problem by reducing the requisite importance of the agent’s role, so that the agent can be just one factor of many opens the possibility that the victims of some Gettier cases fulfil the proposed conditions. The account is still being pulled in these two different directions.

Secondly it is not clear that Greco adequately explains why the recipient of testimony is salient. Greco hopes to account for the testimony cases by saying that an agent being a reliable receiver of testimony has default salience in our explanations because of our epistemic interests. This is because our practical reasoning context makes it important that people have testimony-recipient skills, Greco claims, and so it is salient to us when people like Morris receive testimony well. But for a number of reasons this contention is unsatisfying.

Recall that our aims and interests make salient causal factors we can control and manipulate. It makes sense that we would focus on what we can control in a causal nexus, as doing so suits our interests and purposes. But why does caring about something in general make it salient when it features in a causal nexus? It seems that once we introduce the claim that people have default salience, the account no longer tracks the natural picture of salience that was painted with the first two criteria, and it no longer accords with salience being an intuitive everyday notion that picks out what is intuitively ‘important enough’ in a causal explanation. That we generally value good recipients of testimony isn’t sufficient to make

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113 One problem for the account that I don’t explore is Sosa’s criticism that it can be a salient feature of an explanation of a success that the agent is in a position to possess the abilities at all. [Sosa 2007 p. 80-82, p.86-87] In cases where she could easily have been drugged, or easily have been in an unfriendly environment, then what is salient in an explanation is how it is that the agent has the abilities and can perform well, rather than that the agent has the abilities. However as she does have the abilities, Sosa argues, then she can get the success through ability, and so be a knower. In Sosa’s terms, she can have accuracy through adroitness; she can be apt. (“That it is apt by luck makes it no less apt.”) Yet, Sosa continues, given that the agent’s abilities themselves weren’t salient it is unclear why she fulfils Greco’s salience conditions.

114 Greco 2010 (2010: 73, 75).

115 If a life boat sinks because it has ten people and ten goats on it, I do not think ‘it sank through the weight of the people’ because I care about people more than goats. This is true about the mechanisms of salience in causal explanation even though my thoughts will always be more with the people (in fact, I will be more inclined to say it is because of the goats because I don’t care about goats).
them salient in causal explanations. More work needs to be done to establish that agents have default salience in this way.

I think that the greatest problem for the salience account of the through relation is simply this: Greco claims that intuitions about whether S knows that p vary with intuitions about whether the agent’s abilities are salient in a causal explanation of why the agent has a true belief that p. Call this the covariance claim. The covariance claim is key to the plausibility of his view that explanatory salience captures the through relation. But salience does not home in on epistemically relevant features, thus whether the agent is a salient casual feature of a case and whether the agent knows can radically diverge. As I will show in the following sections, the covariance claim is false.

Firstly I look at some cases that put pressure on an account of knowledge that employs a more intuitive notion of salience (one where the explanatory salient cause is that which ‘stands out’, or ‘seems important’). I then look at cases that put pressure on Greco’s account of salience more specifically. The cases may not be fatal to the account, as the notion of salience can be revised. But if it is revised too much, whether from our intuitive judgements of what is salient, or from Greco’s account of salience described above, then it is unclear if it is still our everyday notion of salience in play and it suggests that we might be better off seeking a different account of the through relation.

Take the following two pairs of cases:

**Maths puzzles.** Average math student Markus works on a math puzzle. It is a really simple puzzle: he wants to know 13×13. He types this in his calculator, and sure enough, gains a true belief that the answer is 169. This is a clear case of knowledge, but his abilities aren’t very salient. If anything the calculator is salient. It is the kind of thing anyone could do, so his abilities don’t ‘stand out’ in a causal explanation of why he comes to form a true belief. Even if we grant that agents enjoy a default salience it is not clear that he is salient enough to fulfil the conditions. But it is clear that he knows.

116 Recall that tracking intuitive importance is what Greco was intending his account of salience to be like. salience is when ‘S’s cognitive abilities are important in an explanation of why S believes the truth’ (emphasis mine). Greco 2010: 83-84. Find more evidence 117 As we are here dealing with an intuitive notion of salience, we don’t need to grant that the agent has a default salience. But even if we do, recall that an agent’s default salience can be overridden by abnormal factors – this is the key to Greco’s solution to the Gettier cases. So if we make the calculator unusually powerful, or add that he only came across the calculator by luck, then the agent’s default salience would be overridden.
If we take away the calculator, or make the puzzle harder, this makes Markus’s abilities more salient. But then it is less clear that we intuit he knows. Thus whether Markus’ abilities are salient and whether he knows come apart.

Compare Markus to Maud. Recall that Maud is a math professor who tackles a hard math puzzle, and she has spent weeks in her office, drinking Red Bull and scribbling away. Eventually she thinks she has solved it. She writes the answer, and believes it. In this case Maud’s abilities are clearly salient in how she formed a true belief. No one else could have done the puzzle; she has highly honed math skills, a lot of training and excellent concentration. But it is less clear that Maud has knowledge. She needs first to publish it in peer-reviewed journals and ask her colleagues to check her working before we unhesitatingly attribute knowledge. Once she has done these things we will tend to intuit that she knows, but it is precisely these things that move salience away from her, and towards the math community and her epistemic environment.

This pair of cases puts pressure on his covariance claim, and with it the idea that salience is the right way to pick out when the agent knows. Here are a second pair of cases:

**Physics Fact.** Sally attends the International Physics Convention. All the best scientists are there. She asks a question at the reception desk and as the receptionist happens to know that there is a world expert on that question in the room. She asks the expert her question, and the expert tells her the answer.

In this case Sally’s abilities are not at all salient in an explanation of how she formed the true belief, especially compared to all the physics experts, technological advances, and the helpful assistant who points out the expert. But my intuition that she knows is strong.

Compare this to Simon. Simon sits in his physics class. The teacher is late and he is desperately trying to complete his homework. He asks his classmates ‘what is the nearest other star to the sun?’ His classmates mock him, telling him all different answers, and riddles. Eventually he manages to tentatively figure it out (perhaps a combination of catching glimpses of someone’s notes, discerning who is lying, employing a process of elimination etc), and forms a true belief. Simon’s abilities are salient in the explanatory story in this case. Yet our intuition that he knows is weak.
The epistemically friendlier Simon’s class is, the less salient his abilities are in a causal explanation of how he comes to have a true belief, and yet the more inclined I am to intuit that he knows. Again, the covariance claim is in trouble.

These cases illustrates a rift between whether S’s cognitive abilities are salient in an explanation of why S believes the truth and whether S knows. Instead what our knowledge attributions are tracking is whether the agent possesses the right abilities to ensure the truth for beliefs of this type and whether the environment is friendly for forming these beliefs.

If lots of other scientists are standing around the expert physicist when she tells Sally the answer, then I am even more inclined to attribute knowledge – because if the physicist told a falsehood or made an error one of her colleagues would correct her. But this, if anything, makes Sally’s abilities even less salient. She doesn’t even need to monitor for obvious falsehood because the other scientists would do it for her.

So much for salience as what tends to stand out or seem important; what about the features of the ‘mechanisms of salience’ that Greco draws our attention to? Greco contends that what is salient in a causal explanation are those causal conditions that are abnormal and those that can be manipulated. They are sensitive to the attributor’s context.

What is unusual: A team of secret agents is trying to crack a code. They have been working on the decryption for months. Finally they decide to ask the big shot. They fork over thousands of pounds and the great genius comes to the office for the day. His genius is mighty, and by the end of the day the code is cracked. One of the technicians, Bill, looks at the decryption and thereby forms a true belief about the content. ‘The Swiss are assembling an army in Davos.’ Bill did nothing unusual and so isn’t salient in an explanation of Bill’s true belief that the Swiss are assembling an army in Davos. In fact, the unusualness of the mighty mathematician’s abilities and presence trumps the default salience of the agent (recall that the default salience of an agent can be trumped by highly unusual occurrences, as this is Greco’s solution to the Gettier case. If salience is determined in part by what is unusual, then Bill isn’t salient. And so according to Greco’s account he doesn’t have a true belief through his own abilities.

Later that day a spy breaks in. Breaking into the office required great skill, especially in cracking security systems (using epistemic abilities). He too looks over the sought-after decryption. He is unusual in a causal explanation of his true belief (he has both an unusual level of ability to break in, and it is unusual that he is there), and so he is salient. He forms a
true belief that ‘the Swiss are assembling an army in Davos’ through his own abilities. And so he fulfils the conditions of knowledge.

So if we are to take Greco’s ‘abnormal features’ aspect of salience here, then the spy knows, but Bill doesn’t, even though there appear to be no relevant epistemic difference between them.

**What can be controlled:** Imagine a thief hacks into a computer system to steal data. Techie One tries to stop the thief by putting up security walls in the system. But he failed because the thief was too clever. Meanwhile Techie Two tries to thwart the thief by removing the data from the system. But he doesn’t manage in time either. The thief forms a true belief about the information on the system: he discovers that Apple is planning to buy Google. If what is salient in a causal explanation is in part determined by what one can control, and this is a function of attributer context, then this is some reason to think that Techie One and Techie Two will have different explanations of why the thief came to form the true belief. Techie One will think that the thief has formed true belief because he was able to crack through the security walls, as this is something that he had control over. Techie Two will judge that the thief formed a true belief because the data was still on the computer, as this is something that he could have controlled. The thief’s abilities are the salient factor for Techie Two. This is isomorphic to the road traffic accident example that Greco described. Given Greco’s account of knowledge, Techie One should rule that the thief knows—the thief’s belief is true through the thief’s abilities. Techie Two has a different result: the thief has a true belief because the data was still on the computer, and so from this perspective the thief doesn’t meet the conditions of knowledge. But there appears to be no epistemically relevant difference between them.

These cases are not intended as knockdown arguments against Greco’s account. Perhaps each case can be dealt with by employing the right understanding of salience, since (for simplicity of exposition) each example tackled only one aspect of salience at a time. But I am sceptical about this because, as we have seen, salience does not isolate epistemically relevant features of a case. For any offered account of salience we can make changes in what is salient without changes in whether the agent knows, or changes in whether the agent knows without a change in salience.

In addition to illustrating that Greco’s view captures the intuitive extension poorly, these cases highlight a further problem for Greco’s account. If what can be controlled and what is abnormal feature in our mechanisms of salience, then this entails attributer contextualism.
about knowledge attributions. Knowledge attributions might be true in some contexts of utterance, but not in others. This is not new to epistemology. Standards contextualism deems that I can tell a person conducting a telephone poll about disability that I know I have hands, but I can’t assert it in the sceptical context of the philosophy class. I can say I know I won’t be going on holiday next year, but not if you have just mentioned, and so made salient, the lottery ticket I just bought. I can say I know my friend Sarah is in Edinburgh right now, but not in the high-stakes context of a murder trial. What makes Greco’s attributor contextualism new and problematic is that it is neither stakes nor anything plausibly epistemic that makes knowledge attributions vary with context of attribution. Instead it is something that is epistemically irrelevant: what the speaker can control, or what they deem to be unusual about a case. Given these problems for Greco’s view, we should seek a different account of the through relation.

It is worth seeing what we have learnt from exploring the salience account. Our explorations reinforced the conclusion from exploring the primitivist account, that whether an agent knows doesn’t co-vary with the importance of their role in forming a true belief; sometimes the agent plays very little role and knows, sometimes the agent plays a large role and doesn’t. For this reason attempts to tweak how important the agent’s role must be to handle the barn façade county and simple testimony cases will fail. It may be more fruitful to abandon the idea that in cases of knowledge the agent must be main cause, salient enough etc, and find another way to meet the ability platitude. The agent’s abilities must play some role, and a virtue-theoretic account should recognise this. One strength of virtue epistemology is that it holds such promise for the ability platitude, explains conversational functions of knowledge attributions, and fits with Craig’s proposed teleology for the concept of knowledge. An account of knowledge must emphasise the role that the agent plays, and that she must believe well, e.g. non-gullibly. However, all this is consistent with the size of the agent’s role not being relevant to knowledge.

Additionally, reflecting on these cases reinforces the insight that the agent need not be as good where the environment is friendly, but needs more skill if the environment is unfriendly. I present my own proposal, that builds on this insight, in chapter five.

But first we should explore a different view, one that (unlike the previous two) doesn’t suggest that the agent should be of particular significance as a cause.
3.3 Manifestation of Disposition

Sosa holds that we should see the through relation of RVE as a manifestation of powers rather than as causal salience relation. To illustrate this distinction, imagine a vase is knocked off a table and breaks.\textsuperscript{118} We can say that it broke because it was knocked, and that the table was high, the floor was hard, and no one caught it. All of these are picking out causal factors. Alternatively we might say that it broke because it was fragile. This second kind of explanation, whilst being a causal explanation, doesn’t pick out a salient feature, trigger or other pertinent part of a causal chain. In fact, whilst it is causally efficacious, the fragility is not best understood as part of a causal chain that broke the vase. Citing fragility as the reason why it broke instead picks out a disposition of the vase. We can call this disposition a causal power.\textsuperscript{119} When we say that the vase broke because it was fragile we mean that the vase had a certain disposition and it manifested that disposition when it broke: the vase breaking manifested its fragility.

Sosa holds that disposition manifestation suggests a promising way to understand the role of the agent in knowledge: In cases of knowledge the truth of the belief manifests the agent’s disposition to believe truly. Dispositions to believe truly are epistemic competences. Epistemic competences are how we make cognitive contact with the world. They are dispositions to form beliefs in certain conditions, and a disposition only counts as a competence if it is reliably truth conducive in those conditions.\textsuperscript{120} As dispositions, we possess them even when they are not manifesting. Sosa contends this manifestation relation is why epistemic normative evaluations home in on the agent’s character: in cases of knowledge the success is caused by the agent in the sense of manifesting her competence.

**Manifestation RVE:** \( S \text{ knows that } p \text{ iff } S's \text{ true belief that } p \text{ manifests the cognitive dispositions constituting the agent’s cognitive character.} \)

In section 2.5 we saw that Sosa characterises knowledge as apt belief, and holds that a belief is apt when its correctness is caused by the exercise of a competence.\textsuperscript{121} Turri claims this is a weakness in Sosa’s account: the two characterisations of knowledge that he advocates are not coextensive. As Turri sees it, this is because a belief’s being true \emph{because} it was formed competently does not entail that the truth of the belief \emph{manifests} the competence. There are

\textsuperscript{118} This example is from Pritchard (2010: 44; 2009a :64).
\textsuperscript{119} Pritchard (2009a: 65).
\textsuperscript{120} Sosa (2007:106). For more on how abilities are environment relative, see section 5.3
\textsuperscript{121} Sosa (2007: 108).
cases where the belief is true because it was competently formed, even though the truth does not thereby manifest the competence.\textsuperscript{122} To illustrate this distinction, consider the following case.\textsuperscript{123} Watson reasons carefully and competently and forms the belief that the perpetrator of a crime walks with a limp. This belief is false, but Holmes, observing how carefully and ably Watson formed the belief, and eager for Watson to not feel dejected when he realises that his conscientiously formed belief is false, makes the belief Watson formed true by kicking the criminal in the leg. The belief is now true because it was formed with competence, but the truth doesn’t manifest the competence.

Turri notes that this isn’t a case of knowledge because Watson’s skills don’t stand in the right relation to why his belief was true, and that we should be careful to distinguish mere causation from the manifestation relation. Only the latter picks out knowledge, and so the latter is a more charitable understanding of Sosa’s position.\textsuperscript{124}

Turri gives many examples of when the manifestation relation obtains compared to when it doesn’t, claiming that ‘we excel at applying this distinction in a wide range of cases.’ For example, ‘Federer regularly smashes wicked forearms because of his skill; he is also lauded regularly because of his skill; his skill manifests itself in the former case, but not the latter.’\textsuperscript{125} Turri holds that the manifestation relation is primitive,\textsuperscript{126} and doesn’t analyse it further, claiming that we have a conceptual competence with the idea and can tell when it obtains.

Thus both Sosa and Turri claim we have an answer to the Gettier problem: in these cases the cognitive success (the fact that belief is true) does not manifest the cognitive competence of the agent. In standard cases of knowledge, however, the success does manifest the agent’s skill.

This view has much appeal. Firstly it doesn’t inherit the attributer contextualism of Greco’s explanatory salience account. Recall that whilst contextualism as such is not a problem for a

\textsuperscript{122} Turri (forthcoming: 11-12).
\textsuperscript{123} From Turri (forthcoming).
\textsuperscript{124} Note that this case seems peripheral to the analysis of knowledge. Whilst Gettier cases seems to be getting at some structural point at the heart of our concept of knowledge, perhaps tapping into the anti-luck platitude, this case seems less significant. It is merely exploiting a quirk whereby competence can cause truth by a deviant chain, but not revealing anything fundamental about knowledge. Therefore the case it less costly to ignore.
\textsuperscript{125} Turri (forthcoming: 14).
\textsuperscript{126} Turri (forthcoming: 15-16).
view, Greco’s contextualism is problematic since it entails that many things that are epistemically irrelevant about the attributer’s context can bear on whether the agent fulfils the of knowledge. Manifestation, in contrast, is independent of any particular standpoint. Thus, whilst the view may be altered to deliver standards contextualism (what it takes to virtuously believe a proposition, for example, may depend on what is at stake), the through relation doesn’t itself entail contextualism. Since contextualism is controversial, this is a merit of the view.

Secondly, insofar as manifestation is a robust, familiar and useful aspect of the world, the view construes knowledge an instance of a more general kind, and so helps fulfil the criterion of making intelligible why we have the concept.

Thirdly, the view captures the idea that the agent must play a role in getting to the truth, and it brings theoretical focus onto the agent without the problematic burden of saying that the agent must play a salient or ‘important enough’ role. Thus the view makes good on some of the leading motivations for virtue epistemology, such as recognising the importance of agents in our socio-cognitive world, satisfying the ability platitude and its associated solution to the value problem without the troubling counterexamples of the salience and the primitivist view.

If in cases of knowledge the agent’s cognitive success manifests ability, this can help explain the special value of knowledge. Sosa contends that manifestation of ability can confer value in part because of what it reveals about the agent, and he suggests that in some domains of evaluation what we care about is whether a product was created with competence. These ideas about the value of knowledge are independent from the achievement thesis. I return to this idea in section 5.5.

Finally, this view performs well in the simple testimony case. Although in ordinary cases recipients of testimony do not play a central role in an explanation of why their belief is true, they do manifest competence (they believe adroitly), and the truth of the belief manifests this competence (they believe aptly). Unlike in Greco’s salience account and Zagzebski’s

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127 Indeed many theorists will consider it a criterion of adequacy that a view can make sense of our apparent contextualist intuitions and language use.

128 Note that when we evaluate these three accounts of the through relation among each other according to the criteria of making it intelligible why we have the concept of knowledge and why it is the shape that it is, an important aspect of that debate is whether each of these views about the through relation are plausible independent from their role in the concept of knowledge. If, for example, our primitivist notion turns out to be inconsistent, or the idea of manifestation incoherent, then this will be a strike against those views respectively.

primitivism, factors are not ‘vying for position’ in the manifestation relation. The vase breaking may manifest both the vase’s fragility and the floor’s hardness, for example, but there is no competition or tension between these claims. Similarly Morris’s true belief manifests both his and his informant’s abilities.

This account holds a lot of promise. But as it stands it is still somewhat underdeveloped: Sosa himself doesn’t discuss in detail what manifestation amounts to, and Turri holds that it is primitive. One general challenge facing the account is to explain why some true beliefs manifest the competence of the agent, but not others. A proponent of the view might reply, for example, that in Gettier cases agents have make errors in their belief-formation (Roddy thought the rock), and that is why the belief’s truth does not manifest their competence. But knowledge is compatible with reasoning from some error. A scientist may have made a few mistakes here and there in her reasoning, for example, but this need not render her final belief unknown. A teacher may get one or two facts wrong in her class on the Russian Revolution, but the students can still come to know the other facts.

How are we to determine how much error is compatible with a belief’s truth manifesting the agent’s competence? If a belief fails to manifest the agent’s abilities whenever the belief is only luckily true, or error or double-luck is salient, or the through relation doesn’t intuitively hold, then the account is in danger of collapsing into the previous accounts, or importing a separate anti-luck condition. Thus the view needs to be developed to explain what manifestation consists in.

Another problem for the ‘manifestation of disposition’ understanding of the through relation is the barn façade county case. Barney’s abilities to recognise barns are, after all, a factor in why the belief he formed was true. They may not have been the largest factor, but that isn’t required in order to fulfil the conditions.

In light of the barn façade county case, there are three options available to proponents of the disposition manifestation account. Firstly they can hold that agents do know in this case. This is the route taken by Sosa and Turri.130 The palatability of this approach depends, among other factors, on whether intuitions that Barney lacks knowledge are widespread and resolute. A second route is to hold that Barney doesn’t know, but that this is a peripheral case and so the mismatch between theory and intuition can be disregarded. But this route seems not to do justice to the anti-luck desiderata for theorising about knowledge. After all, Barney could so

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130 Sosa (2007: 96); Turri (forthcoming: 20).
easily have been wrong – had he have been looking at any other barns in the environment, he would have formed a false belief. And the case seems to be tapping into a significant aspect of our concept of knowledge – the immunity from environmental luck – which suggests that it is not a quirky case, but instead is fruitfully seen as a way of tapping into the contours of the anti-luck intuition.

Chapter Four: Anti-Luck Virtue Epistemology

Pritchard suggests that reflecting on cases such as the barn façade county cases motivate the thought that mere virtue-theoretic conditions – conditions focusing on the agent’s cognitive capacities – can’t eliminate all knowledge-undermining luck. He therefore recommends abandoning RVE and instead augmenting virtue-theoretic conditions with a separate anti-luck condition. The anti-luck condition he advocates is safety:

\textbf{Safety}: If S’s true belief that p is safe, then S’s belief that p could not easily have been false.\textsuperscript{131}

Pritchard employs a possible worlds framework, and so holds that:

\textbf{Safety}: If S’s true belief is safe, then in most nearby possible worlds where the agent believes p, p is true.

Pritchard thus advocates a form of modest virtue epistemology, rejecting the claim that knowledge can be understood fully in terms of the notions of true belief, cognitive faculties, and the relationship between them. Pritchard notes that once we have a separate anti-luck condition in our account of knowledge we can weaken the virtue-theoretic condition. The virtue-theoretic condition in virtue epistemology was beefed up to deal with some putative counterexamples, such as Gettier cases: The refinement held that the agent must not only believe with competence, but the competence must cause or partially explain why the belief is true. Pritchard notes that since the anti-luck condition may deal with many such cases, we can allow a more permissive account of the role of the agent. Pritchard suggests that for an agent to fulfil the virtue condition, the cognitive success need only ‘be to a significant degree

\textsuperscript{131} For accounts of safety, see Sosa (1999; 2000) and Pritchard (2002; 2003; 2005 (esp chapter 6); 2007a).

\textsuperscript{132} For further refinements of the safety principle, see Pritchard (2009e: 35; m/s: 6-9).
creditable to one’s cognitive character’ or ‘partly creditable’ to her, but need not be ‘primarily creditable’ to her.¹³³

He thus suggests the following account of knowledge, which he calls anti-luck virtue epistemology (ALVE):

**ALVE:** Knowledge is safe belief that arises out of the reliable cognitive traits that make up one’s cognitive character, such that one’s cognitive success is to a significant degree creditable to one’s cognitive character.¹³⁴

It should be noted that ‘cognitive success’ refers to true belief, not to safe true belief. The condition holds that in cases of knowledge the true belief is (at least in part) creditable to the agent, and furthermore the belief is safe. This is not to be confused with the view that the agent must also play a role in why the belief is safe. For a defence of latter more stringent account of knowledge see Turri (forthcoming).¹³⁵ ¹³⁶

Pritchard contends we should give the virtue-theoretic condition and the anti-luck condition equal theoretic weight, rather than viewing one as a codicil to the other.¹³⁷ Anti-luck virtue epistemology is thus not virtue epistemology with augmented a condition to deal with some problem cases. His proposal is instead that knowledge has a bipartite structure. This is because, he claims, the two conditions arise from two distinct ‘master intuitions’ about the nature of knowledge: the ability intuition and the anti-luck intuition.¹³⁸

This account has many virtues. By maintaining that the agent must play some role in the cognitive success, anti-luck virtue epistemology promises to vindicate the ability platitude.

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¹³³ Pritchard (2010:55). He advocates this weakening of the condition in part because he thinks that a causal condition will have trouble with the testimony case. As yet it remains what Pritchard’s ‘partial credit’ will amount to. Once we see that only the primitivist and the salience accounts of the through relation, and not the manifestation account of through, will have trouble with the testimony case, then perhaps Pritchard will unpack the role that the agent must play to fulfil the conditions of RVE in a way similar to Sosa’s. (See Pritchard (2010: 41, 44; 2009b: 413).

¹³⁴ Pritchard (2010: 54).

¹³⁵ See especially Turri (forthcoming: 22-23).

¹³⁶ Pritchard has recently drawn to my attention that he now defends this more stringent reading. See Pritchard (m/s: 20).

¹³⁷ Some hold that Sosa’s early view was a kind of virtue-theoretic condition, with a safety constraint as a codicil (conversation with Greco, March 2009). This is never clear from Sosa’s writing, but even if true is a distinct view from Pritchard’s, as Pritchard is offering a bipartite structure of knowledge, rather than a virtue theory with a safety condition added.

¹³⁸ Pritchard (2010: ch. 3).
The safety condition rules out knowledge in a wide array of Gettier cases, including challenging cases such as barn façade county. This account can also explain why we cannot know whether lottery tickets will win.\footnote{Pritchard holds that we cannot know that a given ticket will not win the lottery, no matter how unlikely the win nor how well calculated the belief. We also cannot know beliefs entailed by the belief it will lose (such as that the possessor will not have enough money for a foreign holiday next month). He holds that this is because such beliefs fail to be safe. There are nearby worlds the ticket wins the lottery.}

But the position has some difficulties. In section 5.4 I argue that the safety condition as it stands read the anti-luck platitude too strongly, and so rules out bone fide cases of knowledge. Secondly it is not clear why the view doesn’t rule that Watson knows in the Sherlock Holmes case. Recall that in this case Watson believes with ability, and the exercise of his cognitive ability partially explains why he forms a true belief about the suspect (Holmes was responding to Watson’s efforts and abilities when he made the belief true). Furthermore we have no reason to think that his belief is unsafe. Sosa’s view (and arguably also the previous two accounts) can explain how Watson did not play the right kind of role for the belief to fulfil the conditions of knowledge, but it is hard to see why the case doesn’t fulfil Pritchard’s anti-luck virtue epistemology conditions.

I think the main problem for anti-luck virtue epistemology is that by invoking an explicit modal condition, and thereby advocating a bipartite structure for knowledge, Pritchard sacrifices the elegant structure of the robust virtue epistemology schema. On Pritchard’s view knowledge is no longer held to be a kind of success from ability, achievement, or even an instance of causation or manifestation. This has two ramifications. One is that it makes it less intelligible why a concept evolved with this structure. The other is that we lose the potential for explaining the value of knowledge that is associated with the RVE schema.

4.1 The Bipartite Structure

Recall that it is a criterion of adequacy that an account of knowledge make intelligible why we have the concept that we do. RVE made progress on this criterion by construing knowledge as an instance of a more general kind. But the structure of anti-luck virtue epistemology is not shared by other common phenomena.

Pritchard claims that he can make more plausible that knowledge has this bipartite structure by reflecting on the work of Craig.\footnote{Recall that Craig holds that we can fruitfully illuminate...}
the nature of knowledge by examining the function it fulfils. Craig contends that our contemporary concept of knowledge evolved from the concept proto-knowledge, which was used to pick out reliable informants. Examining the nature of reliable informants should, Craig holds, shed light on the nature of knowledge.

Pritchard asserts that examining the concept of reliable informant reveals that it is ambiguous between someone who possesses a reliable cognitive ability with regard to the subject matter and an informant on which we can rely. He argues that these two aspects can come apart, and that the former corresponds to a virtue-theoretic condition on the concept of reliable informant whilst the latter corresponds to a modal condition. On his view if the potential informant fails to satisfy either one of these two conjuncts then she doesn’t properly fall under the extension of the concept of ‘reliable informant’. He holds that we should accordingly expect knowledge to have these two aspects.

Recall that the keystone in a defence of robust virtue epistemology is arguing that ability conditions can rule out all cases of knowledge-undermining luck without recourse to a separate anti-luck condition. If Pritchard can establish a case where a potential informant possesses the relevant ability and yet is not a reliable informant because he does not satisfy the modal condition, then this would be evidence that the concept of reliable informant has a modal aspect whose obtaining is not guaranteed by the obtaining of the ability aspect. If the concept of knowledge were shaped by the concept of reliable informant and the concept of reliable informant has these two distinct aspects, then we should expect the concept of knowledge to have two separate conditions. This would be strong evidence that knowledge has a bipartite structure rather than the structure proposed by RVE.

The following, adapted from Pritchard, is intended to be a case where the agent possesses the relevant abilities yet fails to be a reliable informant because the agent does not satisfy the modal condition: (I have given the characters names)

Consider an agent, Fred, who possesses a reliable cognitive ability as regards a certain subject matter but who is in an environment in which there exists a misleading defeater, Ginger has heard about, but which Fred (the prospective informant) does not, and one which moreover, Ginger is unable to defeat. An example might be where Fred

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140 Pritchard’s diagnostic about the bipartite structure of knowledge can be found in Pritchard (2010) 59-62 and Pritchard (m/s) 21-24
141 Pritchard (2010: 60-61).
142 Pritchard (2010: 61; m/s: 23)
is a reliable barn-detector but where Ginger has been given a misleading ground for supposing that Fred is in barn façade county (e.g., false testimony from a good source). So Fred is in fact a reliable informant about the relevant subject matter. But given that Ginger knows about the misleading defeater, and that she is unable to defeat that defeater, would she be able to rely on this informant (Fred)? Surely not.

In order to drive a wedge between the modal aspect and the ability aspect of the concepts of reliable informant, and thereby of knowledge, Fred must satisfy the latter yet fail to satisfy the former condition. Pritchard claims that in this case Ginger should withhold the knowledge attribution because of the presence of knowledge-undermining luck, even though Fred possesses the relevant ability, and goes on to claim that the case supports the second conjunct below:

The concept of knowledge that results will both (i) disallow cases of true belief as knowledge where the belief isn’t appropriately due to a substantive degree to the relevant cognitive ability, and (ii) disallow cases of true belief as knowledge where the truth of the belief is substantively due to luck and hence unsafe [even though the true belief is appropriately due to a substantive degree to the relevant cognitive ability].

It is far from clear, however, that Ginger should withhold the attribution because of a modal condition on knowledge or good informant. After all, Ginger believes that Fred is in Barn Façade County, and so believes that he is unable to distinguish real barns from mere facades. If you were to ask Ginger in virtue of what she withholds a knowledge attribution, she is likely to say ‘Fred can’t discriminate barns from fake barns’. This is a reason that homes in on his cognitive character, and so seems more in line with virtue epistemology. It is less likely that she would say something like ‘he could easily be wrong’, which would be a modal condition. Pritchard thus hasn’t established that her withholding of the knowledge attributing is evidence for a separate modal condition.

In this case, furthermore, the ability condition and the modal condition do not come apart. This is because from Ginger’s perspective Fred’s true beliefs don’t fulfil the modal condition (he could easily have been wrong), but from her perspective he doesn’t fulfil the ability condition either: she believes that he can’t reliably detect barns in his environment. Meanwhile, from the external perspective we know that Ginger is mistaken and Fred is not in barn facade county. We know that his beliefs enjoy modal stability, but we also know that he

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143 Pritchard (2010: 62)
has the right abilities for the environment. Thus the case fails to separate the two aspects of
good informant in the way Pritchard must if he is to establish the bipartite structure of
knowledge. The relative elegance of robust virtue epistemology places the burden of
argument on the proponent of anti-luck virtue epistemology.

4.2 ALVE and Value

The second weakness of anti-luck virtue epistemology is that it abandons the view that
knowledge has the distinctive value of success through ability or achievements. Pritchard
concedes that as robust virtue epistemology (and its associated explanation of the value of
knowledge) was the most promising explanation of the final value of knowledge, we should
abandon the idea that knowledge has a distinctive final value and provide an error theory for
our intuition that knowledge is finally valuable.\footnote{Pritchard (2010: Esp. 62-65, 86-88).} He does so by suggesting that some
classes of knowledge and understanding-why (which is a close cousin of knowledge) \textit{do} have
distinctive value, and it is this that we are thinking about when we value knowledge.\footnote{Pritchard (2010: 66).} Thus
we are mistaken to hold knowledge as distinctively valuable, but related epistemic standings
do enjoy such value.

This is a somewhat radical suggestion since both epistemologists and lay people tend to treat
knowledge as valuable. If knowledge does not have distinctive value it makes it puzzling as
to why it is the focus of so much of our attention. Pritchard’s diagnosis for why we think that
knowledge is distinctively valuable is also suspect. He holds that when we think of
knowledge we tend to think of cases which are also achievements, and hence enjoy this
distinctive final value possessed by achievements.\footnote{Pritchard (2010: 63, 73).} When we think of knowledge, that is,
we think not of simple testimonial cases, but of cases where the agent overcomes a
significant obstacle or exercises great skill. But what Pritchard suggests are paradigmatic
cases of knowledge are far more rare than those cases of knowledge which are not an
achievement by Pritchard’s lights. He holds that knowledge is not an achievement, and
therefore is not finally valuable, in usual cases of perception and testimony. By comparison
knowledge which is also an achievement is rare. It is thus curious that when we think of
paradigmatic cases of knowledge it should be the rarer kind that spring to mind. It seems
more likely that our paradigmatic cases of knowledge coincide with everyday knowledge, the
kind that helps us navigate our daily lives. This is a weakness in his error theory.
Furthermore, an even greater problem afflicts anti-luck virtue epistemology. Recall that it is a problem for a theory if it renders knowledge into constituents, which do not each contribute value to the whole. Such an account leaves puzzling why we focus on knowledge, rather than the axiologically identical subset of its constituents.

Pritchard holds that knowledge is true belief which is to a significant degree creditable to one’s cognitive character and which is also safe. As we have seen, the virtue-theoretic aspect of this account explains why knowledge is more valuable than mere true belief. But the safety condition on knowledge does not. Safe true belief, I argue in another work,\(^{147}\) is no more valuable than mere true belief, and so by Pritchard’s account knowledge is not more valuable than a proper subset of its parts.\(^{148}\)

Given the difficulty of establishing that safety adds value to a true belief, this licenses us to think that anti-luck virtue epistemology cannot vindicate either of the stronger value claims on knowledge. An alternative route available to Pritchard is to agree that safety does not add value to true belief, and so to bite the bullet that knowledge is not more valuable than a proper subset of its parts, but maintain that safety is nevertheless needed in an account of knowledge. He could hold that it is required to capture the intuitive extension and to do justice to the anti-luck platitude. But I hope to show that virtue-theoretic conditions by themselves can do these things, and that therefore the safety condition is redundant. In particular I show how my proposed robust virtue epistemology can account for the various ways that knowledge is immune from knowledge-undermining luck without introducing an explicit modal condition.

Chapter Five: A New Proposal for Robust Virtue Epistemology

Having explored three robust virtue epistemology accounts of knowledge and a modest virtue epistemology, I shall now introduce my own account, which seeks to address the weaknesses in the other accounts. One insight that we have made from examining knowledge from testimony, books, and apparatus is that more than one thing can play a role in gaining

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\(^{147}\) For arguments for this claim see Gardiner (unpublished: esp. 6-12).

\(^{148}\) Pritchard, of course, could maintain that safety does add value to a true belief, and so hold that this curious axiology does not occur. If safety does add value to the whole, then anti-luck virtue epistemology entails that knowledge is more valuable than a proper subset of its parts, and so vindicates the value platitude. Alas I do not have the space here to explore the ways that we might try to establish the value that safety adds to true belief, and it would take us too far a field to do so. See Gardiner (unpublished).
knowledge. From looking at the salience and primitivist accounts of RVE’s through relation we have learnt that the importance or salience of the agent’s role is not a good strategy for accounting for the nature of knowledge, because what is important about a case and what is epistemically relevant about a case can come apart. This suggests we need a theory of knowledge that respects the plurality of factors contributing to true belief-formation without cherry-picking some features as uniquely important.

5.1 Mackie’s INUS account of causation

We find resources for completing this task in the work of J.L. Mackie’s account of our concept of causation, the relevant features of which descend from J.S. Mill. Mill was hoping to improve on a Humean regularity theory of causation. Mill first notes that regular sequences of events (constant conjunctions) are not between an outcome and a single cause, but rather between the outcome and ‘the sum of several antecedents; the concurrence of all of them being requisite to produce… the consequent’. In other words, the regularities are between the outcome and a cluster of causing conditions, all of which were necessary in the circumstances to bring about the effect. As a corollary to this observation, Mill claims that although we tend to call the most recent factor – ‘the one condition which came last into existence’ – the cause, strictly we ought not to. This is because as each of the conditions was ‘equally indispensable to the production of the consequent’ we shouldn’t give the name of cause to one causal condition to the exclusivity of the others.

Secondly Mill notes that:

It is not true that one effect must be connected with only one cause, or assemblage of conditions; that each phenomenon can be produced only one way. There are often several independent modes in which the same phenomenon could have originated. One fact … may follow any one of several antecedents, or collections of antecedents. A

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150 Mill, J. S. (1911: 214)
151 ‘Necessary in the circumstances’ means that if the condition were to have not obtained in those circumstances, the effect would not have occurred. However the condition may not be strictly necessary for the effect, as a different set of conditions could have caused the same outcomes. We will be returning to these ideas throughout this section. See Mackie (1974: 31, 64-65).
153 Mill (1911: 214).
given effect may really be produced by a certain cause, and yet be perfectly capable of being reproduced without it.\textsuperscript{154}

In other words, a given outcome may have a plurality of different causes; different sets of antecedent conditions could have brought about the same result.

Mackie develops these two ideas further and it is Mackie’s systemisation and refinement of Mill’s insights that I shall focus on.\textsuperscript{155} I do not intend to give a thorough account of his full view of causation, however, but rather only the parts relevant for my proposed account of through relation in robust virtue epistemology.

There are three initially relevant features of Mackie’s account. Firstly, Mackie is aiming to give an account of our concept of causation, as distinct from causation ‘as it is in the objects’\textsuperscript{156}. Secondly he doesn’t purport to capture all of causal language. His project is less ambitious; he intends to capture the meaning of a great many uses, and describe what it is ‘typically called a cause’.\textsuperscript{157} Thirdly Mackie, like Mill, is ecumenical about the ontology of causal relata. For Mackie causes (and effects) can be events, states or properties.\textsuperscript{158} This flexibility fits well with epistemology because we often talk as though events, properties of the agents, or states of the world can variously be the reason why someone came to know something. ‘He found out because she told him’ cites an event, for example, whilst ‘he’ll get to the bottom of this because he is so thorough’ cites a trait or property of a person, as does ‘she’ll see it, she has eyes like a hawk’. ‘She got the right answer because she put in the time’ cites a fact. I will refer to ‘causal conditions’ or simple ‘causes’ when I describe causal relata in order to preserve this pluralism about what can be a cause.\textsuperscript{159}

\textsuperscript{154} Mill (1911: ch. 10 section 1).
\textsuperscript{155} Note though that, unlike Mill, Mackie was not an advocate of Humean regularity views of causation. In particular he thought that it failed to capture a key aspect of our concept of causation, namely the counterfactual relationships that hold between effects and their causes. Mackie holds that ‘A caused B’ often means something like ‘if A hadn’t happened (in the circumstances) then B wouldn’t have happened’, and that regularity views of causation cannot do justice to this aspect of the concept. See. Mackie (1974: Ch. 2 and page 60, 77).
\textsuperscript{156} This distinction is between the questions ‘what do causal statements mean’ and ‘what constitutes causation as it is in the objects’, see Mackie (1974: 77).
\textsuperscript{157} Mackie (1974: 64; 1965: 37).
\textsuperscript{158} Mackie (1974: 62 and chapter 10).
\textsuperscript{159} Some people hold that only events, properties or facts can be causal relata. I hope to avoid this debate, but I expect that Mackie’s account of causation can be refined to be amendable to such (more restrictive) views.
To illustrate Mackie’s account, take a set of conditions that caused a particular window to break. Such a list might include: Sally threw the ball with a window breaking speed and direction; Billy was too distracted to catch the ball; Billy was the only person between Sally and the window. The list may also include absences, such as the absence of any object that would block ball’s trajectory. There are many things to note about this list of conditions. Firstly, the conjunction of the conditions was sufficient for the effect. This means that whenever that set of conditions occurs, the effect occurs. And each of the conditions in the set are non-redundant in the causal nexus for bringing about the effect. This means that they were necessary in the circumstances for the effect: if the condition didn’t obtain then the effect wouldn’t occur. (If the condition is irrelevant to the effect, such as that Maradona had signed the ball, then it wouldn’t have been in the list of causes). Mackie calls such a set a ‘minimally sufficient condition’, or ‘MSC’: ‘minimal’ because there are no redundant parts, ‘sufficient’ because it is sufficient for bringing about the effect. The minimally sufficient condition amounts to the ‘assemblage of antecedent conditions’ that Mill refers to in his observation that causal relata are usually between an effect and a cluster of causes.

But note that a different set of conditions could have brought about the same effect. Something else could have caused the window to break. Perhaps Billy threw the ball, and Sally failed to catch it, or Sally threw a rock instead of a ball. There may be many different sets of minimally sufficient conditions that could have brought about the effect. This corresponds to Mill’s second observation: that different antecedent conditions can bring about the same outcome. Mackie calls the ‘full cause’ the disjunction of all of these MSCs.160

Mackie holds that when we cite a cause we often mean to refer to one of the individual conditions (one of the conjuncts in the minimally sufficient condition). For example, the window broke because Sally threw the ball, or the window broke because Billy was too distracted to catch the ball. He calls these individual conjuncts ‘inus conditions’. They are so called because they are ‘an insufficient but non-redundant part of an unnecessary but sufficient condition’ to bring about the effect (emphasis in original).162

Note that Mackie’s ‘full cause’ is different from Mill’s ‘total cause’. Mill’s total cause refers to one MSC (the one which obtained) [Mill (1911: 214). In contrast Mackie’s ‘full cause’ refers to the disjunction of all the conjuncts. Mackie (1974: 64).

The obtaining of this disjunction of MSCs is both sufficient and necessary for the effect. Mackie holds that were someone to defend RVC, it would be constant conjunctions between effects and these complex disjunctions (the ‘total cause’) that would be the most plausible account. See for example Mackie (1974: 64).

are insufficient because they alone will not bring about the effect; they need the other members of the MSC to be present. Billy not catching the ball isn’t sufficient for causing the window to break, Sally had to throw it; similarly, Sally’s throwing it isn’t enough to bring about the effect, the absence of objects that would block the trajectory is also needed. Inus conditions are non-redundant because they are necessary-in-the-circumstances. The other conditions in the MSC do not bring about the effect if an inus condition is absent (if one of conditions in the list didn’t not obtain, the window would not have broken). The minimally sufficient condition is unnecessary because a different set of conditions could have brought about the effect (such where Billy throws the ball and Sally doesn’t catch it), but it is sufficient, because whenever the minimally sufficient condition obtains, the effect occurs.

Mackie continues that something is a cause if it is ‘at least an inus condition’ for the effect. A condition might be ‘more than an inus condition’ if, for example, it is a sufficient and necessary part of an unnecessary but sufficient condition. In such cases the single condition alone is sufficient to guarantee the effect. Or it might be an insufficient but non-redundant part of a necessary and sufficient condition. That is, it is a condition in the only set of conditions that can bring the effect about. In this case the cause is necessary for the effect. A condition can be even stronger: it can be the only condition in the only set of conditions that can bring about the effect. Such a condition is necessary and sufficient for the effect.

Mackie develops this account because he recognised that claims about necessity and sufficiency were important in our concept of causation, but he recognised also that naïve accounts (such as ‘A caused P’ means ‘A is necessary for P’ or ‘A caused P’ means ‘A is sufficient for P’) have many counterexamples. In contrast, the inus account captures many of our intuitive notions of cause.163

Mackie notes that ‘if two factors are necessary in the circumstances, then they are equally necessary; one inus condition cannot be more of an inus condition than the other.’164 Thus we should consider them all equally as causes. Each causal factor ‘is clearly related to [the effect] in an important way’: they are necessary in the circumstances.165 Like Mill, Mackie

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163 As Mackie says, ‘the proof of this suggestion would be that in many cases the falsifying of any of [the claims in his account of knowledge] would rebut the assertion that A caused P’. Mackie (1965: p.37).
notes that we have a tendency to pick out one inus condition and label it ‘the cause’, and asserts that this is a function of pragmatics and not the concept of causation. 166

Mackie also notes that some inus conditions will be less replaceable than others. He cites the example of a fire (negligently begun) that was about to flicker out, until an arsonist poured paraffin on the embers. The fire thus rejuvenated then destroys a nearby house. 167 Mackie holds that as it was the same fire, the original starting of the fire was a non-redundant factor that lead to the effect in the actual course of events, but he observes that this factor ‘could have easily been replaced’: if the arsonist had not found the embers, he would have instead struck a match to burn the house. Mackie argues that ‘very natural and widespread human purposes will lead us to pin the cost upon an act which, if it had not occurred, would not have been likely to be replaced in the causal network rather than upon one for which a substitute would have almost certainly been found’. 168 This means that although two inus conditions might be equally necessary in the circumstances, and so both be causes, it usually serves our interests to focus our praise and blame behaviour on the factor whose absence would have been less likely to be replaced. 169

Mackie provides further conditions for something to be a cause: the inus condition condition, along with all the other conditions in the MSC, must be present on the occasion. He also contends that for something to qualify as a cause the other MSCs must not be present on the occasion. 170 A further refinement of his view is a distinction between the causes and the causal field, the latter being the backdrop on which the causing takes place. 171 These details of Mackie’s account need not concern us here, however, as for our purposes in epistemology the details I have provided ought suffice. Note too that if Mackie’s account of causation fails, then another similar view might serve as well. For this reason I will not defend Mackie’s inus account more generally against criticisms here. 172

167 Mackie (1974: ch. 5).
170 This is a condition in his 1965 account Mackie (1965: 37). However in Mackie (1974: 128) he says that when two minimal sufficient conditions both occur the conjuncts in both of them will still count as causes. These two claims are in conflict. I do not know which his considered view is, but such details do not matter for our purposes.
172 For critical responses to Mackie see Scriven (1966); Kim (1791; 1973).
5.2 INUS and RVE

We can now apply Mackie’s theory of causation to robust virtue epistemology’s through relation. Recall that RVE holds that:

**RVE**: S knows that p iff S’s cognitive success is through the exercise of her own cognitive abilities.

Orthodox understandings of RVE had problems with cases such as testimony and knowledge from books and apparatus. This is because in such cases the agent is not playing the largest or most important role, and so it seems that the truth is reached through something else, rather than the agent’s epistemic abilities. I argued that as such cases unequivocally involve knowledge we must look for an account of the through relation. We need an account of knowledge that vindicates how a belief can be true through the abilities of the informant and through the abilities of the agent, without these causal factors being in competition with each other. In Mackie’s inus analysis we have found a promising suggestion: an account of causation that reflects the plurality of factors that bring about an outcome whilst respecting the importance (understood as necessity in the circumstances) of those factors.

I thus suggest the through relation should be understood with Mackie’s inus conditions account of our concept of cause: in all and only cases of knowledge the agent’s cognitive abilities were (at least) an inus condition for the cognitive success.

Recall also that when we are analysing knowledge the relevant cognitive success is that the belief is true, rather than that the belief is held. This means that the relevant inus conditions are the conditions that cause the fact that the belief is true rather than false. Thus the account can be formulated:

**New Proposal RVE**: S knows that p iff S’s epistemic abilities are at least an inus condition for why S’s belief that p is true.

This account explains why in many cases of true belief, such as Morris’s finding out the location of Sears Tower, many factors can be easily switched for something else. Morris could have asked a different informant, for example, or consulted a map. They are easily replaceable inus conditions. But in cases of knowledge Morris’s abilities will be an inus condition in every minimally sufficient condition for bringing about the effect of his having a true belief. If Morris’s abilities aren’t playing a role in why his belief is true then it isn’t a
case of knowledge. Thus the proposed view does justice to the ability platitude: in cases of knowledge the agent’s abilities must be involved in bringing about the cognitive success. Which of the agent’s abilities are in play might differ in different MSCs. Perhaps he used his eyesight to discover the location of the Sears Tower in one MSC, his map reading skills in another, his testimony-receiving skills in another. The key thing is that at least one of his abilities is an inus condition.

In fact, I think that this account performs better at capturing the demands of the ability platitude than Greco’s salience account. It is unintuitive to think that the ability platitude is so that in cases of knowledge the agent is salient in why her belief is true; it accords better with the ability platitude to say that they must play some role.

The agent therefore is not ‘replaceable’ in Mackie’s sense, and this may be why we tend to praise or blame the agent for her knowledge. This puts the agent at the centre of epistemological evaluation. (In some recondite cases of knowledge, the ideas are so esoteric that the informants are not easily replaceable, but in these cases we tend to praise the informants to a higher degree than when the ideas are more accessible. Perhaps this too is best understood using Mackie’s insight that our general practical interests are best satisfied when our praise and blame behaviour focuses on those inus conditions that cannot be easily replaced.)

Thus the proposed account of knowledge shows how agents such as Morris can know in cases of testimony and in all the other such cases where the agent’s belief is aided by other factors. That there were other inus conditions in the causal nexus doesn’t remove the status of ‘cause’ from the agent’s abilities. So Morris was a cause. The belief was true through Morris’s abilities, and so Morris fulfils the conditions of robust virtue epistemology.

This account also explains why an agent doesn’t know in Gettier cases. To illustrate how, first consider a standard case of perceptual knowledge: a woman looks through her window and spots her husband sitting in his armchair. She forms the corresponding belief that her husband is in their living room. In this case her abilities at recognising her husband are an inus condition for why her belief is true. When we explain why her belief is true, her abilities play a non-redundant role. A counterfactual relationship also obtains between her believing

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173 Or to put the point a little differently, we do not intuitively judge that Rene the Gambler or Roddy the Shepherd don’t know based on the fact that they are not salient in a causal explanation of their successes. Rather the reason behind our intuitive judgement is that their abilities aren’t involved at all.
with ability and her belief’s being true. If we go to the nearest possible worlds where she has that belief, but didn’t believe with ability, and we hold other features the same, then in most of those worlds she doesn’t believe truly. Her ability was necessary in the circumstances for the truth of her belief and thus it was a success through ability according to this account.

We can contrast this case with Zagzebski’s husband Gettier case: A woman looks through the window and spots a person who looks like her husband in his armchair. She correspondingly forms the belief ‘my husband is in our living room’. In this case, however, the person she is looking at is her husband’s brother. Unbeknown to the wife her husband is in another chair in the living room out of sight. The belief is thus true. In this case although the wife’s belief is held with ability, it is not true because of ability. Her abilities are not an inus condition for why her belief is true. They are redundant in the set of conditions prior to her true belief. To see this consider that if she had believed without ability, she saw a cat, say, and on this basis believed that her husband was in the room then in the same number of nearby worlds her belief would have been true. There is no counterfactual relationship between her belief being held with ability and her belief being true.

Similarly where a shepherd is looking at a sheep in a field and comes to form a true belief, the shepherd’s abilities are an inus condition in why his belief is true. We can see this because the relevant counterfactual conditions obtain. If we remove that inus condition – if the shepherd didn’t believe with ability and instead guessed or looked at a tractor whilst mistaking it for a sheep – then in nearby worlds the shepherd does not form a true belief. This illustrates that there is a counterfactual dependence between his believing with ability and his gaining the success, so he is an inus condition for the truth of his belief.

Here again we can contrast this with a Gettier case: Roddy looks at a sheep-shaped object and so forms the belief that there is a sheep in that field. Roddy’s abilities cause him to have this belief, but his abilities do not cause his belief to be true. They are not an inus condition for his knowledge-relevant success. We can see this because if we go to the nearest worlds where his abilities are not engaged, perhaps the rock is bright blue and not sheep-shaped, then the belief that he forms is true in many of these worlds. He believes irrationally, but there is still a sheep there. Again this illustrates that there is no counterfactual dependence in Gettier cases between the belief being formed with ability and the belief being true. Roddy’s abilities are redundant in a causal explanation of why his belief is true – if he had believed without ability he would still have formed a true belief.
On most understandings cases where the agent doesn’t believe with ability do not count as Gettier cases. This is because the beliefs are not justified. This does not affect the point I am illustrating, however, which is that once we have distinguished between the outcomes of a belief’s being held and a belief’s being true, we can see that only the latter is a success relevant to knowledge. And so we can see that in standard Gettier cases the agent’s abilities are not an inus condition for the knowledge-relevant cognitive success.

By employing Mackie’s framework and looking at whether the truth of the belief is sensitive to whether the agent believes with ability, this account does justice to the anti-luck platitude. But it does so without employing an additional modal condition. We can see how the agent must have a kind of sensitivity to the facts, but this is accounted for by the inus conditions. Thus the robust virtue epistemology proposed here rules out intervening luck without recourse to a separate anti-luck condition.

As well as handling cases of knowledge from testimony, books, and instruments and explaining why the agent doesn’t fulfil the conditions of knowledge in Gettier cases, this account has other virtues. It puts the focus of epistemological theorising in the right places: it highlights the importance of the role of the agent and which abilities she used. It also emphasises the role of the environment and other factors that aid the agent. Applying Mackie’s analysis of causation to robust virtue epistemology shows us why the agent is so essential in our epistemological theorising – her abilities are necessary in every MSC where her true beliefs are knowledge. And if an inus analysis best captures many of our uses of causal language, as Mackie holds, then this proposal of applying Mackie’s inus account to robust virtue epistemology has the virtue of making knowledge cohere well with other familiar concepts.

Thus rather than being a problem for robust virtue epistemology, the simple testimony case should be seen as indicating that we need an account of the through relation that respects that a plurality of conditions can be working together to cause a true belief. We should take it as a guiding case for finding the correct through relation for virtue epistemology.

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174 Zagzebski holds that a theory of knowledge should not only tell us what knowledge is, but also how to get more of it. It should have a practical guiding role. [Zagzebski (1996: 267; 1999)] I do not weigh-in on whether this is a good criterion for knowledge, but we should note that the proposed account performs well at satisfying this criterion it by homing in on what to improve in order to gain knowledge: the agent’s abilities and other factors that can play a role in an MSC.
But what about the barn façade county case? In this case the fact that the belief is true is not divorced from the abilities of the agent. Some luck is involved (he was lucky that he was looking at the one real barn when he formed his belief), but the agent’s abilities also play a non-redundant role in why the belief is true. He recognises a barn and so forms the appropriate belief. As the abilities are playing some role, they are an inus condition for the fact that the belief is true. When we look at the counterfactuals we see a dependency relationship between the fact that the belief was formed with some ability and the fact that the belief is true. In most nearby worlds where he didn’t form the belief with ability, he forms a false belief.

Even when we distinguish between causes for why he has that belief with causes for why his belief his true, Barney is still an inus condition. His eyesight and barn-recognition played a non-redundant role in why his belief is true. Should we conclude that this inus-account of RVE cannot deal with such cases? One option is to bite this bullet and allow that Barney knows there is a barn. But I think that there is more to say about the barn façade county case.

5.3 Abilities and Barn Facades

I hope I have given reason to think that altering the same aspect of the through relation to try and capture a ‘sweet spot’ that deals with both horns of the Lackey/Pritchard dilemma is not a promising strategy. I doubt, for example, that it will work to try to figure out how salient an agent must be to qualify for knowledge in the testimony case yet not fulfil the conditions in the Barn Façade County case. A new approach, such as refining two different aspects of the account, holds more promise. The testimony case revealed that proponents of robust virtue epistemology were using the wrong notion of the through relation and we have amended the view accordingly. But what does the barn façade county case teach us?

As we have already seen in section 3.3, abilities are relative to environments. Sosa explains that ‘a disposition can be a competence only if it’s sufficiently reliable, at least in its distinctively appropriate conditions,’\textsuperscript{175} Developing this point, Greco notes that:\textsuperscript{176}

\textsuperscript{175} Sosa (2007:106). See also Sosa (2007: 82-84).
\textsuperscript{176} Greco (m/s: 29). Greco also explains that ‘different abilities require different degrees of reliability. Thus Kobe Bryant is a great free-throw shooter because he is successful around 85% of the time. Jeter is a great hitter because he is successful around 30% of the time.’ There is a further potential development of this view, which holds that different practical stakes may require different degrees of reliability in order to qualify as ‘abled’. This would allow us to accommodate contextualist intuitions. I do not explore this possibility here, but it is an avenue for further inquiry.
An ability in general is a disposition to achieve some relevant success, in relevant circumstances, relative to some environment, with a sufficient degree of reliability. We need to say “in relevant circumstances,” because failing in some circumstances does not count against ability. For example, it does not count against Derek Jeter’s ability to hit baseballs that he would fail in poor lighting conditions. We need to say “relative to an environment”, because an agent might have an ability relative to one environment but not another. For example, Jeter has the ability to hit baseballs in typical baseball environments, but presumably not in an active war zone, where he would be too distracted.

These theorists recognise that when we talk about an ability that an agent possesses, we have in mind that the agent can manifest the ability with reliable success in certain characteristic environments. The fact that the agent cannot succeed at the task in abnormal conditions need not mean that they do not possess the ability.

To see how this applies to the barn façade county case, recall that when we looked at the case of Fred and Ginger we judged that Ginger would not consider Fred a good informant because, whilst he can normally identify barns, he doesn’t have the ability to identify barns in the environment that she believed he was in. (See section 4.1.) The ability relevant to barn beliefs and barn knowledge is the ability to identify barns. This requires distinguishing barns from other things that might be in the environment. If an agent cannot distinguish barns from other things, perhaps because they have bad eyesight or it is dark, we would not attribute knowledge to the m, even where they form a true belief. This is, I submit, precisely because they do not have the ability to distinguish barns from other things in their environment. What is crucial for possessing the relevant ability is not that you can discriminate barns from any other thing, but only that you can discriminate them from other things in the relevant environment.

Pritchard might hold that the reason that such people don’t know is because they could easily have been wrong. Firstly I think that this is less natural to our everyday thought to focus on the modal conditions of beliefs. We more naturally think about people and abilities, which although modal are not explicitly modal, and are more familiar concepts. Secondly, I submit that ‘they could easily be wrong’ may amount in our folk thinking to ‘the agent doesn’t have the skills to ensure he gets to the truth’. This is because ‘could easily be wrong’ entails that the agent wouldn’t detect if they weren’t looking at a barn in that environment, which is an ability-level thing. Often ‘we could be…’ amounts to ‘we don’t have the ability to know otherwise’, e.g. ‘we could be dead next week’, or ‘we could be brains in vats’.

Thus, to explain the robots example in (Pritchard 2008b: 23,35), knowing that the objects in front of you are your children doesn’t require that you are able to distinguish your children from extremely life-like robots unless there are robot makers acting in environment (so that they might deceive you).
One this version of my proposal in the barn façade county case the agent doesn’t know because in the environment that he is in he does not have the ability to distinguish barns from other things. He doesn’t know that he is in this environment, so he will continue to form barn-beliefs, but he will do so unreliably. An environment can rob you of your reliability, and therefore your ability to believe well and to know, without your being aware that you are in the environment.

That an environment can block knowledge should be no surprise. Recall that the worse an environment is, the more an agent must do, and the more skilled an agents needs to be, in order to know. Correspondingly, the more epistemically friendly an environment is the easier it is for the agent to gain knowledge. This is illustrated by, among others, the physics fact case. At the physics convention the environment was excellent for Sally’s belief-forming: she was surrounded by experts. She didn’t need a high level of ability in order to know. In fact the environment was so friendly that she barely needed to even filter for truth. Meanwhile in the physics classroom, Simon’s environment made reliable belief-forming much more difficult. He needed a high level of ability to discriminate truth from falsehood, to interpret riddles in order to deduce the truth. He could only obtain knowledge in this environment if he had fairly advanced cognitive abilities. This illustrates how an agent’s epistemic environment can be knowledge undermining, because some environments require more skill to reliably believe, and to know, the same things.

Compare the barn façade county case to a case of standard perceptual knowledge where an agent sees a barn in a field and forms the corresponding belief ‘there is a barn’. In both cases the agent sees a barn and thereby forms a belief. In neither case is the agent mistaken about what he saw. In neither case does the agent come to believe via an abnormal causal chain. In neither case is the agent believing irresponsibly, such as in the face of known defeaters, or knowingly without sufficient evidence. In fact, the only things that change between the cases is the agent’s environment and whether the agent knows. This suggests that the environment plays a role in the intuitive assessment of whether the agent knows, and thus the environment should play a role in our theory of knowledge.

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179 I intentionally made this a very epistemically friendly environment. In most cases of testimony the agent needs to be far more discriminating about what they believe in order for their belief to qualify as knowledge. They need to be scanning for whether the testifier seems trustworthy and reliable, and whether the proposition seems plausible, before their belief counts as knowledge.
Whilst it is a virtue of a theory of knowledge to get the intuitive extension right, it is even better if the theory of knowledge determines the cases for the same reasons that underlie these intuitions. A theory that does this vindicates not only the intuitive extension, but also our ordinary thinking and reasoning about knowledge.

When she thought that Fred was in barn façade county, Ginger judged that Fred didn’t know because she believed he lacked the relevant abilities. Because nothing changed except the environment, this suggests that the environment is what undermined Fred’s ability. He didn’t have the high-grade competences demanded by the environment. This, I suggest, is our pre-theoretic reason behind the judgement that agents in barn façade county don’t know, and so our account of knowledge should reflect these reasons.

At this juncture it may be useful to introduce some terminology. When talking about ‘what an agent can do’ there are many different interrelated terms: abilities, competences, capacities, skills, virtues… Even within the virtue epistemology literature these terms are used in various ways. When we are thinking about ‘what an agent can do’ there is a sense of ‘ability’ that is not relative to the environment that the agent is in. A good judge of character is still a good judge of character even when she is in an environment full of talented deceivers. She is in unfortunate circumstances, but she is still the same person, and she hasn’t become any less skilful. In this sense ‘what a person can do’ is not relative to environments. This captures something about our thinking about abilities.

In another sense what an agent can do is relative to environments. In an environment full of talented deceivers, she can no longer do what she can usually do, namely reliably judge people’s characters. I believe it is helpful to capture this by stipulating that what is fixed regardless of environment is the ‘cognitive character’ of the agent. What is dependent on the agent’s environment is the agent’s ‘cognitive ability’. Whether an agent possesses the relevant cognitive ability is dependent on the environment she is in.

In this terminology, S knows that p iff S’s belief that p is true through cognitive ability. We have previously understood the through relation with an inus account, and thus the account holds that:

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180 This reason can be held in contrast to, say, an agent in barn façade county not being salient in an explanation of the truth of her belief, or that it wasn’t intuitively through the agent that the belief was true. See also footnote 177.
**New Proposal RVE:** S knows that p iff S’s epistemic abilities are at least an inus condition for why S’s belief that p is true.

The suggestion is thus that although Barney has the cognitive character to believe with ability in usual environments, and so has barn knowledge in usual environments, in the barn facade county environment he does not have the requisite cognitive ability. Thus Barney does not fulfil the conditions of RVE, and hence does not know.

There is still much to be said, of course, about what having the abilities required by the environment amounts to. One approach is that the agent’s abilities are ‘good enough’ for the environment only if the agent knows in that environment. But this would fail to be a reductive account of knowledge. It defines knowledge in terms of abilities, but then says that an agent has the relevant abilities only when they have knowledge. In other words it aims to give an account of knowledge in terms of necessary and sufficient conditions, but one of those conditions cannot be understood without reference to knowledge itself.\(^{181}\) It is still an informative account of knowledge, and so has some value but it is not fully illuminating. Perhaps we can do more?

Recall that what we care about is whether the agent can be relied upon in the environment that they are in.\(^{182}\) One way to cash out an agent having the right abilities for an environment is if they can reliably form beliefs about that subject matter in the environment. The resembles Sosa’s 1992 suggestion that intellectual virtue is relativised to an environment and to the field of propositions that one is forming beliefs about. Sosa says an intellectual virtue is a faculty enabling one to ‘mostly attain the truth and avoid error in a certain field of propositions F, when in conditions C.’\(^{183}\) So we can think of virtues as FC pairs (fields of propositions matching the conditions).\(^{184}\)

This suggestion amounts to analysing the agent’s beliefs on a case-by-case basis. If there is something in her environment or conditions that means she can’t be reliable about beliefs in that field of propositions, then her belief is not formed with ability. Such an approach handles

\(^{181}\) For more on reductive and non-reductive account of knowledge Pritchard (2010: 33-34 and 58-59).

\(^{182}\) See also Sosa (2007: 83-84). He discusses how given our interests what we care about is whether an agent can be relied upon in the environment he is in. He talks about how our concept of ability reflects this.

\(^{183}\) Sosa (1992: 85).

\(^{184}\) For development and refinements of this view see Sosa (1992: 88-89).
barn façade county style cases, as in these cases the agent does not have the abilities required to believe with reliability in that environment.

Lackey raises a concern about this kind of response to the barn façade county case. She argues that it is poorly motivated to say that Barney’s abilities aren’t reliable in the environment he is in. She writes:185

By way of response to [barn façade county style cases], Greco argues that “S’s belief is the result of perception, and normally S’s perception would constitute a cognitive virtue, i.e., a reliable ability or power. However, reliability is relative to an environment, and S’s perception is not reliable relative to the environment in the example” (Greco, 2003, p. 130). While Greco may be right that reliability is relative to an environment, it is unclear why he thinks that Barney’s perception is not reliable in the example under consideration. For surely Barney would form mostly true beliefs by relying on perception in the environment in question, e.g., he would form true beliefs about farmers, horses, pigs, trees, grass and so on. The only sense in which his perception is not reliable in the relevant environment is with respect to distinguishing real barns from barn façades while driving in his car past them.

Lackey’s concern is that it is problematic to say that Barney doesn’t have the abilities to detect barns, because he does have the abilities to detect other objects in the area, and so the required notion of ability is too fine-grained.

But now we can see a response to this concern is available. The view that we are presently exploring holds that whether the agent has the ability depends, in part, on the content of the proposition being believed (the ‘f’ denotes the field of propositions). If this is right then he is still reliable with respect to cars and trees in his environment, because there are no façade cars and trees around. But this has no bearing on whether he is reliable with respect to barns. In contrast, the presence of fake barns is relevant to whether he knows about barns in the area. This does seem motivated because if we care about reliability, then we need to look at the proposition being believed.

Whilst reliability in the circumstances helps constitute an agent’s having the requisite competences for an environment, there may be other constituents of ability. This idea needs further development. But for now I wish to note that it is both plausible and well-motivated

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that Barney doesn’t know because he doesn’t have the abilities required by the environment, and so when we are analysing knowledge we should be thinking about the influence of the environment on whether an agent knows.

5.4 Ability versus Safety

One may think that the suggestion offered here – that the agent doesn’t have the ability required by the environment, at least in part because the agent can’t reliably form beliefs about the field of propositions in the environment – amounts to a safety condition on knowledge. This is because my proposal holds that if the agent could easily have been wrong, then she doesn’t know. But this suggestion is importantly different from a safety condition. Firstly, by making the agent’s virtue central we satisfy more than merely the modal constraints on knowledge, we also build in that the agent needs to value the truth, be motivated towards the truth, or in other ways believe well. By making agent’s abilities central there are more resources to understand the agent’s role in generating knowledge.

A brute safety condition may also be too strong and so rule out cases of bona fide knowledge. Consider a case where an agent is not in barn façade county, but could easily have been. Joe randomly chooses where he will take his Sunday drive, say. There are many different directions he could have travelled. Unbeknownst to him, some of these locales have fake barns rather than real barns. But if he is in a real-barn county, then there are no nearby fake barns. By chance he drives to a county that has only real barns. He sees one of these barns and forms the corresponding belief. In his environment he could not easily have formed a false belief, but he could easily have been in an environment where he would have formed many false beliefs.

A safety condition appears to rule that Joe doesn’t know because his belief is unsafe (he could easily have formed a false belief). This is because the safety condition doesn’t distinguish between i.) that an agent could easily be wrong in his environment, and ii.) that an agent could easily have been in an environment such that he would (or could easily) form false beliefs were he to be in it. These are two different senses of ‘could easily be wrong’, and we have reason to think that only the former notion is knowledge-undermining (because, as we have seen, we care about what agents can do in the environments that actually obtain). Ruling out the second notion of ‘could easily have been wrong’ is a stronger condition on knowledge.
The virtue-theoretic condition offered here has resources to explain why we might instead hold that Joe knows in this case. If what we care about is being able to rely on the agent (say, because a function of knowledge is to tag good informants), then it is crucial to this case that in the environment that Joe is in he will form only true beliefs about barns. In the environment that obtains we can rely on him. In other words, only the friendliness of the obtaining conditions, not that of modally nearby conditions, bears on whether an agent knows. And this is something that the proposed account explains well.

The appeal of the account does not rest on this aspect of knowledge, however, so if it proves to be misguided, because Joe doesn’t know in this case, or Joe’s beliefs are safe, this will not ramify broadly within my account.

5.5 RVE and Value

Recall that robust virtue epistemology construes knowledge as a species of achievement, and so holds that knowledge has the special final value of achievements, as the following argument indicates.

(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 is a cognitive achievement (KA thesis);
(P3) achievements are finally valuable (Value of Achievements thesis);
(C2) so, knowledge has final value.

Pritchard has argued that premise two is implausible. I have defended it by suggesting two key refinements for RVE: that we understand the through relation using Mackie’s inus conditions and that we understand abilities as environment relative. A second problem pressed by Pritchard is that some successes because of ability are too easy to qualify as achievements, especially as the kind of achievements that have final value. He argues instead that achievements, at least those that have final value, involve the overcoming of some obstacle or the exercise of some great skill.186

But we may have some weaker notion of achievement where all that is required is success through the exercise of ability. And even if not, perhaps success through ability corresponds

186 Pritchard (2010).
to another thing of value: a person bringing about a state of affairs in the right sort of way, the agent getting what she intended, or her character working appropriately for her in the environment.\textsuperscript{187} Alas I cannot explore this idea fully here, but I want to emphasise that this second approach to the value problem remains plausible even if premise one incorrectly characterises achievement.

\textbf{Chapter Six: Summary}

I have defended the view that knowledge can be fruitfully understood using a virtue-theoretic framework. More specifically I have defended the RVE thesis that:

\textbf{RVE}: S knows that p iff S’s cognitive success is through the exercise of her own cognitive abilities.

I have understood this attribution relation, this through relation, using inus Mackie’s account of causation. My proposed RVE thesis can thus be expressed:

\textbf{New Proposal RVE}: S knows that p iff S’s epistemic abilities are at least an inus condition for why S’s belief that p is true.

I have further suggested that abilities should be understood as relative to environments. Although I have not offered a full account of abilities, I have suggested that if an agent cannot reliably form true beliefs in that environment then she does not have the abilities required by that environment.

This view gets the intuitive extension right for a broad range of cases. By respecting that a plurality of factors can contribute to a belief’s being true, we have shown why agents possess knowledge in testimony cases and other cases of a similar structure (such as knowledge from books and apparatus). By explaining how in cases of knowledge the agent’s abilities must

\footnote{Sosa notes that when an agent bringing about an effect with her agency (rather than by luck or in a way not under their control) has a special kind of value. See Sosa (2007: 75-77) for examples in the realms of performance and art. He applies this insight to epistemology in the following chapter. Sosa also makes this point when he writes, ‘We prefer truth whose presence is the work of our intellect, truth that derives from our own virtuous performance. We do not want just truth that is given to us by happenstance, or by some alien agency, where we are given a belief that hits the mark of truth not through our own performance, not through any accomplishment creditable to us.’ (2003, p. 174).}
play a non-redundant role in getting to the truth, the account shows why agents do not know in Gettier cases. I have also provided an account of why the agent doesn’t know in the barn façade county case.

By paying attention to why we withhold knowledge attributions in these cases, I hope I have vindicated not only the intuitive extension but also the impetus behind this extension. In Gettier cases the agent doesn’t know because their cognitive agency isn’t playing a role in why their belief is true. In barn façade county the agents don’t know because they don’t have the ability required by the environment.

By defending the view that knowledge is an instance of success through ability, I have provided resources to explain the special value of knowledge. In particular my defence of premise two of the recently articulated argument defends the view that the distinctive value of knowledge is that of achievements. This suggestion can explain even the strongest formulations of the value platitude described in section 1.3: that knowledge is more valuable than a proper subset of its parts, and that when knowledge obtains a distinctive kind of value emerges, different in kind from the value of other epistemic standings. As I have explained, we should be sceptical that anti-luck virtue epistemology, a close rival of robust virtue epistemology, can explain these stronger value claims.

By construing knowledge as an instance of a more familiar kind – as an achievement or success through ability – and by using an account of the through relation that tracks and explains our causal concepts, I have met the criteria of making it intelligible why we have the concept that we do.

This view has the virtue of elegance. It doesn’t require a separate condition to deal with Gettier cases, for example, but instead employs virtue-theoretic apparatus to reveal which aspect of knowledge Gettier cases exploit (namely the disconnect between the agent and the truth, such that the agent does not gain the truth through the exercise of her own epistemic abilities.)

By explaining the agent’s role in getting to the truth the view vindicates the ability platitude. It explains how knowledge is the product of ability without having an overly narrow conception of what this entails (compared to Greco’s salience account, for example). By explaining that in cases of knowledge the agent’s abilities are necessary in the circumstances, the view underscores the importance of the agent in knowledge. By explaining how in cases of knowledge the agent must possess the abilities required by the environment and field of
proposition, this may help to explain why knowledge attributions typically have the illocutionary force of praise and that knowledge is something that we usually credit an agent for having.

The proposed view also vindicates the anti-luck platitude without a separate anti-luck condition. It holds that known beliefs are non-accidentally true because the agent produced the true belief through the exercise of a competence. In particular, the account rules out intervening luck (such as that found in standard Gettier cases) because if the agent is getting to the truth by luck then the agent’s ability is not an inus condition for the belief’s truth. The account rules out environmental luck because if the agent doesn’t have the abilities required by the environment (such that her belief would be only luckily true) then she doesn’t believe with ability, and so don’t fulfil the conditions on knowledge, even when her belief is true.

The proposed view also has the resources to explain how some proponents of anti-luck epistemology read the anti-luck platitude too strongly. This is because the view articulates a difference between cases where an agent could easily be wrong in the actual environment, compared to where an agent could easily have been in an environment such that they could easily have been wrong.

By construing knowledge as something that we can have, the view accords with the anti-sceptical platitude. Its conditions are not excessively demanding. This account rules that we know a lot of what we take ourselves to know.

There are still many aspects of this view to develop – such as the relation between know how, knowledge by acquaintance and propositional knowledge, and exploring how the view fits with various normative roles we often take knowledge to have. Most importantly, this view can be developed with more work on the nature of the cognitive virtues. The view offered here has developed the structure of RVE, and in particular the nature of the through relation. My next stage would be to investigate what kinds of capacities or character traits count as knowledge-conducive.

Thus I hope to have shown that RVE and its associated account of the value of knowledge is a promising account, and one that we should take seriously. I hope too to have made plausible that my version of RVE captures the nature of knowledge better than other available accounts. Finally I hope I have defended the view from the apparent dilemma pressed by Lackey and Pritchard, and thereby shown more generally that RVE is a plausible view of the nature and value of knowledge.
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