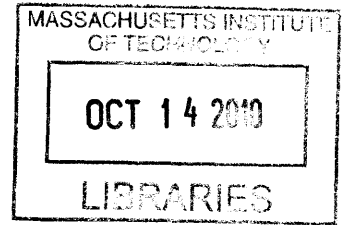


# Rational Humility and Other Epistemic Killjoys

by

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Submitted to the Department of Linguistics and Philosophy in Partial Fulfillment of the Requirements for the Degree of Doctor of Philosophy in Philosophy at the Massachusetts Institute of Technology.

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## **Rational Humility and Other Epistemic Killjoys**

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### **Thesis Abstract**

I consider three ways in which our epistemic situation might be more impoverished than we ordinarily take it to be. I argue that we can save our robust epistemic lives from the skeptic. But only if we accept that they aren't quite as robust as we thought.

In Chapter One, I ask whether the discovery that your belief has been influenced by your background should worry you. I provide a principled way of distinguishing between the kind of influence that is evidence of our own error, and the kind that is not. I argue, contra the dogmatist, that appropriate humility requires us to reduce confidence in response to the former. I conclude by explaining the nature and import of such humility: what it is, what accommodating it rationally amounts to, and why it need not entail skepticism.

In Chapter Two, I ask whether awareness of disagreement calls for a similar sort of humility. Many of those who think it does make a plausible exception for propositions in which we are rationally highly confident. I show that, on the contrary, rational high confidence can make disagreement especially significant. This is because the significance of disagreement is largely shaped by our antecedent expectations, and we should not expect disagreement about propositions in which high confidence is appropriate.

In Chapter Three, I consider whether a deflated theory of knowledge can help negotiate the path between skepticism and dogmatism more generally. I argue that knowing some proposition does not automatically entitle you to reason with it. The good news is that, on this view, we know a lot. The bad news is that most of what we know is *junk*: we cannot reason with it to gain more knowledge. It thus cannot play many of the roles that we typically want knowledge to play.

Thesis supervisor: Roger White  
Title: Associate Professor of Philosophy



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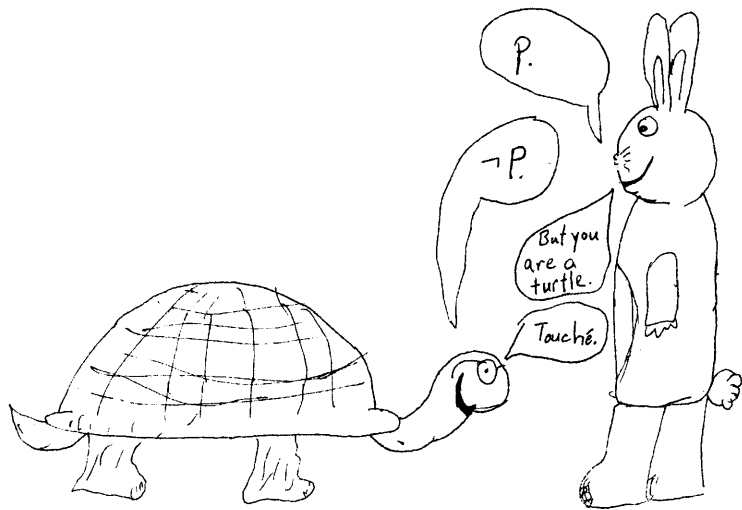


Fig. 1: Disagreement (Walden, 2009)





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<sup>1</sup> What to believe when you believe that if things had been different, you wouldn't have believed what you now believe.



## Chapter 1

### What to believe when you believe that if things had been different, you wouldn't have believed what you now believe

#### 1. Introduction

Conservative neighborhoods, liberal colleges, religious parents—these are all factors that influence our beliefs. Sometimes such factors exert their influence in the following manner: had we chanced upon a different neighborhood, school, et cetera, we would not believe what we now believe. Should the discovery that a belief has been influenced in this way reduce the strength of that belief?

If we say that it should, we open the door to skepticism. Such belief influence is pervasive. Yet we do not want to say that we are always and everywhere unjustified in believing anything. If instead we say that it shouldn't, we open the door to dogmatism. Such belief influence can be detrimental. So we would not want to say that we are always and everywhere justified in believing anything. How then should we respond to evidence that our beliefs have been influenced by our backgrounds?

I argue (contra the dogmatist) that sometimes we *should* reduce confidence in light of such influence. I also argue (contra the skeptic) that we *can* do so without succumbing to mass agnosticism. The trick is to find a way to distinguish between the good and bad cases of belief influence in a precise way: one that explains *why* belief revision is required when it is, and why it isn't when it isn't. I provide a principled way of making this distinction. The upshot is that the discovery that we would have believed otherwise can be evidence that this time, with respect to this particular belief, we made a mistake. Appropriate humility in light of our fallibility requires that we reduce confidence in response to such evidence. I explain the nature and import of such humility: what it is and what rationally accommodating it amounts to. This provides some general insights about the role of rational humility in our epistemic lives.

## 2. Clearing the way

I am about to argue that the discovery that you would have believed otherwise should sometimes lead you to lose confidence in what you believe. You might immediately find this implausible. It can be hard to see how the discovery that, in a different situation, you would have believed differently could be at all relevant to what you should believe now. As Ronald Dworkin puts it, “What new reason would you actually have for abandoning any of your beliefs if the bleak hypothesis [that your belief is influenced by your background] were proved?” Why should you turn your back on all the reasons, all the evidence that inclined you to believe as you do? Why not, he continues, simply “count it as a piece of luck” that your background inclined you to believe the truth?<sup>2</sup>

Dworkin’s rhetorical questions suggest an extreme sort of dogmatism according to which evidence of irrelevant influence on your belief is *never* relevant to what you should believe. In deciding whether to believe some proposition you should weigh the evidence that bears on that proposition. Causal or psychological hypotheses about what you are inclined to believe are not typically relevant to the truth of that proposition. If they were, those perfectly good reasons on which you based your belief would cease being such reasons once you learned that you were inclined to believe it. But that seems wrong, the thought goes. The relations of support that exist between evidence and proposition are surely not so fragile that they can be broken by contingent sociological facts about *why* people believe as they do. You should not, therefore, reduce confidence in your belief when you learn that your upbringing or environment inclined you to believe it.

Appealing as it may be, this line of thought is misguided. It can seem odd that your belief can be undermined by evidence that neither bears on it, nor on the reasons for which you believe it. Yet minimal reflection shows that such situations are not so uncommon. The fact that you were

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<sup>2</sup> Dworkin [1996] pp. 124-5.

brainwashed does not directly bear on the truth of what you believe; yet the discovery that you were brainwashed *should* lead you to lose confidence in your belief. More generally, evidence against your reliability with respect to a subject matter is evidence against particular beliefs about that subject matter. This is so even though facts about your reliability do not typically bear on facts about the relevant subject matter.<sup>3</sup>

Thus, at least sometimes, causal or psychological facts about why you believe what you do can bear on what you are justified in believing. If there is a plausible dogmatist position here, it will have to be less extreme than Dworkin's. The fact that evidence of belief influence can bear on what you believe does not entail that it always should. The crucial questions are when, why, and how accommodating this sort of evidence should affect your belief.

### 3. The cases

Consider the following case.

**Primed.** You participate in an experiment. You are shown a short video and then given some unrelated data on global warming, a topic about which you know nothing. You find the data compelling and leave the lab newly convinced that the polar ice caps are melting at an alarming rate. Weeks later you receive the following letter:

Dear Sir or Madam,

Thank you again for participating in our study. The goal was to determine the effectiveness of priming. Here's what we did. We split the subjects into two groups. We used subliminal visual cues in the introductory video to prime half of the subjects toward a particular interpretation of the data. The other group was not primed; their video contained no subliminal messages. We then presented both groups with the same data. We found a striking correlation: all the primed subjects believed as they were primed to believe and thought that the data provided compelling grounds for their conclusions. The unprimed subjects found the data equally compelling in the opposite direction: they denied what the primed subjects believed. We cannot disclose to which group you, Sir or Madam, were assigned. Nevertheless, we must warn you that your confidence in your belief may well be overrated. If you cannot reduce it, you should at least refrain from acting on it for the time being.

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<sup>3</sup> Following Pollock [1986] we can put the point in terms of defeaters. Evidence that you are brainwashed can be a defeater for whatever you have been brainwashed to believe. Likewise with evidence that you are colorblind or otherwise unreliable. The defeaters here are *undercutting*; they undermine the connection between your evidence and your belief, so that you are no longer justified in believing it. Undercutting defeaters can do this, furthermore, even if your evidence did originally support your belief.

Sincerely,

Dr. So-and-So

Should you reduce confidence in your belief in response to this letter? Surely you should. You believe that the polar ice caps are rapidly melting. If you had been assigned to the other group of subjects, you would deny what you now believe, despite being exposed to the same relevant evidence. Perhaps you were lucky enough to be in the unprimed group—perhaps you did, in fact, respond rationally to the data. But you have some reason to think that you weren't so lucky: half of the subjects were primed, after all, and there is a decent (namely, fifty percent) chance that you were one of them.

The experimenter's letter provides you with evidence that your belief depends on which group you were randomly assigned to. Perhaps we can understand such background dependence as follows:

**Background Dependence.** You believe that  $p$ , but if some bit of your background had been different, you wouldn't have believed that  $p$  (even though you would have been exposed to the same relevant evidence).

This schema fits the primed case, but it applies much too broadly. 'Background' here is a placeholder for something like a detailed personal history and there are many mundane ways that your background might have been different which do not seem to call for belief revision. (Much of what you believe depends on your having a fully functioning human brain, for example. Yet this in no way undermines your confidence, and plausibly, it shouldn't.) Notice, especially, that this schema applies to every character in the primed case—even those who know that they weren't primed:

**Unprimed.** As before, but you are Dr. So-and-So rather than Sir or Madam. You are agnostic about global warming issues. In organizing the experiment, however, you become well acquainted with the data and form a firm opinion on the matter. In an idle moment you think to yourself: "If I were primed, I would deny what I now believe. How strange that I would be so moved to believe differently on the basis of this same data!"

I take it as uncontroversial that you ought not reduce confidence here. True, if you had been one

of the primed subjects, you would deny what you now believe and, in doing so, you would cite the same relevant data. The background dependence schema holds here; yet this hardly seems problematic.

What is the difference between the way in which your belief depends on your background when you are in the subject's position, and the way in which it depends on your background when you are in the doctor's position? A principled way of distinguishing between these toy cases would help us understand the difference between innocuous and problematic instances of the belief dependence schema. It would also help us to handle more realistic and difficult cases such as the following:

**Schooled.** You enroll in an environmental studies class in college. You become convinced that the world is rapidly warming and that the polar ice caps are melting at a catastrophic rate. You later realize that if your family was not so liberally inclined, you would not have taken the data to be so alarming.

There are many ways you might learn that your belief depends on your liberal upbringing. Perhaps the Epistemology Oracle tells you, "Lo! You instantiate the belief dependence schema. If your parents hadn't been such hippies, you would deny what you now believe." More realistically, you might discover the well-known correlation between people's political affiliations and their tendency to take global warming seriously. Or, you might meet a classmate who disagrees with you about the upshot of the data, and whose disagreement is traceable to her conservative upbringing.<sup>4</sup> However you acquire evidence of background dependence, you must accommodate it rationally, and the question, of course, is how to do just that. Does the discovery that your belief depends on your liberal upbringing require you to reduce confidence in your belief? Or can you

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<sup>4</sup> Disagreement with those who share our evidence but not our upbringing suggests that something other than evidence is influencing our beliefs. Often, this is what alerts us to background dependence. But the problem of disagreement is a distinct one. The worry here is not that another with your evidence believes otherwise; nor is it exactly that an alternate *you* would have believed otherwise. Perhaps evolutionary forces inclined us toward certain beliefs not because they were true, but because believing them promotes our survival. The closest possible world in which evolutionary forces work differently may be one in which we have no recognizable counterparts. This doesn't dissolve the worry that evolution as such may have had an adverse affect on our thinking. Street [2006] defends a version of this evolutionary argument. In another context, Watson [2004] defends the thought that cases in which we have no counterparts need not worry us (see especially p. 20).

continue believing as before?

This situation is a familiar one. Both conservatives and liberals may worry whether they aren't unduly influenced by their political commitments. But there is nothing special about our political commitments *per se*. The same questions can be asked about some of our theoretical commitments, as the following case demonstrates.

**Grad Schooled.** G.A. Cohen chose to do his graduate studies at Oxford rather than Harvard. During his time at Oxford, Cohen came to accept the analytic/synthetic distinction. He later realized that if he had gone to Harvard, he would probably have rejected it.<sup>5</sup>

The worry here, as in the Schooled case, is whether Cohen's philosophical upbringing has had an undue effect on his thinking.

Perhaps, in both cases, the thing to do is to re-evaluate the evidence and if that fails, seek an outside option. This sensible advice is not always helpful. You are not always in a position to re-evaluate your evidence. Sometimes you lack access: you cannot revisit the evidence because it was fleeting, or has been taken away. Other times you lack ability: you can revisit the evidence, over and over again, but if you have been primed, you will always find it compelling in exactly the same way. You are also rarely in a position to ask an independent source. (Who should you ask about whether the analytic/synthetic distinction is sound?)

If you are in a position to ask an expert or to re-evaluate the evidence, then you may well remain rationally confident in what you believe—even if you have been primed. But crucially, this does not alter the fact that you might still be required to reduce confidence *at the moment* at which you discover that you have been primed. The central issue here is the epistemic significance of, specifically, that instance of background dependence that you discover. We must therefore ask: what is the rational response to this evidence *at the moment at which* you acquire it, before you have a chance to investigate further?

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<sup>5</sup> The case originally appears in Cohen's own [2000], p. 17. It is also discussed in Elga [ms.] and Schechter's [ms.] response to Elga.



#### 4. The easy verdicts

Return to the easy cases. You are the subject in Primed. You believe that the polar ice caps are rapidly melting. You learn that if you had been assigned to the other group of subjects, you would deny what you now believe despite being exposed to the same relevant data. I claimed that you should respond to this evidence of background dependence by reducing your confidence in your belief. You may well have been lucky enough to be in the unprimed group, but the experimenter's note gives you some evidence that you weren't. Half of the subjects were primed, and, as far as you know, there is a fifty percent chance that you were one of them. To maintain confidence in light of this evidence, you would have to think that you were in the unprimed group. But it is hard to see on what grounds you could do so. It would be question-begging, and a bit absurd, for example, to respond in the following way. "It is true that the polar ice caps are rapidly melting, and I do believe it. Therefore I wasn't primed. If I had been, I wouldn't have believed what I do now, and I would have been wrong. How lucky that I wasn't primed!"

Contrast this with Unprimed. In the doctor's privileged position, you can maintain confidence in your belief. "How lucky that I wasn't primed," you can reasonably think. "If I had been, I would not have believed what I do, and I would have been wrong!" Why can you respond in this way when you are the experimenter, but not when you are the experimented upon? Here is a thought: as the doctor, you have good reason to think that you are in a better position than your primed subjects are with respect to  $p$ . You know that you have not been primed. You also know that priming is like brainwashing or biasing: it makes you irresponsive to evidence. Since you recognize that priming distorts your rational capacities in this way, you need not be bothered by the fact that, if you had been primed, you would deny what you now believe.

This verdict is only plausible insofar as you take priming to be a bad, reason-distorting process. Suppose priming improved, rather than impaired your rational capacities. Call this version of the case **Pro-Primed**. Perhaps pro-priming works by incapacitating your natural

tendencies toward a certain sort of fallacious reasoning. Being pro-primed thus makes you less likely to be in error. Now ask: what is the rational response to evidence of background dependence in Pro-Primed? I take it that once we are in favor of priming, our intuitions about experimenter and experimented upon switch. It is no longer appropriate for the unprimed doctor to shrug off evidence of background dependence, and that same evidence need no longer worry the primed subject. The goal now, is to figure out what changed: what made the same response appropriate in one case but absurd in another?

In Unprimed, the doctor has good reason to think that she is in a better position, in virtue of her actual situation, than she would have been in the counterfactual (primed) situation. Her reason is that priming is bad, and, crucially, this reason has nothing to do with global warming, polar ice caps, or any related matters. The doctor's reason is, in other words, *independent* of both her beliefs about global warming and the data she used to arrive at those beliefs. It is independent of these things because it is not *based* or *grounded* in them, and this is what makes it a good reason for these purposes.

In Pro-Primed, this same doctor has no such reason. She is in a position analogous to that of the subject in the original case (Primed). In that case, the subject knows that priming is bad, but isn't sure whether or not he has been primed. He has some reason to think that he has been, and it seems question-begging to dismiss it by pointing to what he believes. The doctor in Pro-Primed, on the other hand, knows that she hasn't been primed, but thinks that priming is good. She thus takes herself, in virtue of being unprimed, to be in a worse position with respect to *p*. It thus seems similarly question-begging for her to insist that she is right by pointing to what she believes.

## **5. The difficult verdicts**

Return now to the difficult cases: Schooled and Grad Schooled. Most of the literature focuses on

the latter case. It is, in many ways, a less clear and less helpful case than the former. (For one, it is obscure what accepting or rejecting the soundness of the analytic/synthetic distinction amounts to, even to philosophers of language of Cohen's generation. I follow Cohen in assuming that to accept the distinction is to think that it is sound, but I am not entirely sure what that means.)<sup>6</sup> For the sake of brevity and continuity with the current literature I will focus on Grad Schooled as well.

In this case, Cohen realizes that if he had gone to Harvard, he wouldn't have accepted the analytic/synthetic distinction. Worse yet, he would have been convinced by those same arguments of Quine's that he now dismisses. Should Cohen therefore reduce his confidence in the analytic/synthetic distinction? I will consider two ways of filling out the details of the case. On one, Cohen need not reduce confidence in his belief; on the other, he must.

### 5.1 When Cohen shouldn't revise

As Cohen himself points out, "...one thing that I must believe [...] if I stick to my belief in the analytic/synthetic distinction, is that I am *lucky* with respect to the view I have of this matter."<sup>7</sup> Of course, as I suggested earlier, it is not enough for Cohen simply to think that he got lucky in virtue of the fact that the analytic/synthetic distinction is manifestly sound and he believes it. He needs good, *independent* reason to think he was lucky. To be independent, his reason cannot be based on either his acceptance of the analytic/synthetic distinction, or on the arguments and evidence that led him to accept the distinction.

We can fill in Cohen's story so that he has just this sort of reason. Perhaps Cohen knows that Harvard Dining Services sprinkles reason-distorting drugs on their Sunday meatloaf. Or

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<sup>6</sup> I am making a few other simplifying assumptions here. I assume that there is a fact of the matter about the soundness of the analytic/synthetic distinction just as there is a fact of the matter about the rate of global warming. I also assume that there is a uniquely rational response to the relevant evidence. I think this last assumption can be relaxed without much damage to my proposal, but I won't defend that here.

<sup>7</sup> Cohen [2000] p. 18.

perhaps scholars feel tremendous (but unconscious) incentive to adopt the views of their mentors. We might expect this incentive to be magnified at smaller, more concentrated departments like Harvard. In Cohen's time, Harvard was dominated by a prominent figure: Quine. There may have been a guru effect of the sort cult members fall prey to: they lose sight of reason and fact. Under the influence of their charismatic gurus, cultists can become irrational, or downright loony. We can imagine the details of Cohen's story so that this, to a lesser degree of course, is what happened to the philosophers of Quine's Harvard.

Such considerations are appropriately independent of Cohen's beliefs about the analytic/synthetic distinction. Of course, they can only aid Cohen if the same story cannot be told about Oxford—or, at least, if the biasing influence of graduate school was more pronounced at Harvard than at Oxford. And perhaps it was. It is less obvious, for one, who at Oxford would have played the charismatic guru role. Even if there was such a guru, he would probably have a less pronounced effect at a bigger, less centralized community such as Oxford's philosophy department.

If this is how things stand for Cohen, then his situation is like the doctor's in *Unprimed*. Cohen has independent reason to think that his Oxford situation is epistemically superior to his possible Harvard situation.<sup>8</sup> In other words, attending Harvard would have probably made Cohen less likely to rationally evaluate the relevant evidence and arguments. What is crucial here is that Cohen's reason for taking his Oxford situation to be superior has nothing to do with the fact that he would have believed otherwise if he had gone to Harvard. It has nothing to do with either his belief that the analytic/synthetic distinction is sound, or the arguments and evidence on which that belief is based. If it did, Cohen would be guilty of that same sort of question-begging that

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<sup>8</sup> Notice that all of these considerations would still be sufficiently independent even if they, in a sense, depend on Cohen's having studied at Oxford. Perhaps there is a psychology class on the Oxford curriculum that teaches about guru effects, and which Cohen would not have taken if he had gone to Harvard. His beliefs about guru effects are not independent of his Oxford background. Nevertheless, they are independent of the relevant bit of his Oxford background: namely those which led him to accept the analytic/synthetic distinction.

maintaining confidence in the Primed case seems to require.

## 5.2 When Cohen should revise

Notice, now, how Cohen actually describes his situation.<sup>9</sup> He chose Oxford over Harvard on what was essentially a whim: it seemed more exciting to leave Montreal for Europe than to leave Montreal for Massachusetts. In all other respects, he took Oxford and Harvard to be equally good. He had no reason to think that gurus or reason-distorting drugs were in greater supply at Harvard than at Oxford. As far as revealing philosophical truth and training rational philosophers, Cohen took the two schools to be on a par.

Importantly, Cohen's years at Oxford didn't change his mind. Up until 2000 at least, Cohen still took Oxford and Harvard to be on a par in relevant respects.<sup>10</sup> He did not, even after acquiring it, take his Oxford education to provide him with some special skill or insight. He thought such skills and insights were as likely to be gained at Harvard. All of this suggests that, independent of his beliefs and evidence concerning the analytic/synthetic distinction, Cohen had good reason for taking Oxford and Harvard to be on a par. That is, he had reason to think that both backgrounds would put him in an equally good position with respect to the analytic/synthetic distinction. If what I have suggested so far is right, then on this description of the case, Cohen cannot maintain confidence in his belief. To do so, he would have to reason as follows: "I had all the reason in the world to think that I would have been as well placed to determine whether  $p$  if I'd gone to Harvard. But I must have been wrong about that. After all, the analytic/synthetic distinction is sound, and if I'd gone to Harvard, I would have believed that it was unsound."

In this version of the case, Cohen has good reason for taking Oxford and Harvard to be on

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<sup>9</sup> Cohen [2000] p. 17.

<sup>10</sup> Ibid.

a par, but we do not need anything quite this strong to get the confidence reduction verdict. Suppose, instead, that Cohen has good reason to think that the two backgrounds are not on a par. In fact, he knows that one of the backgrounds is significantly better than the other. As long as Cohen has no independent reason for taking *his* background to be the superior one, he must still reduce confidence in his belief. Cohen here is situated just as the subject in Primed is: he knows that one background (namely, the unprimed one) is vastly superior to the other, but he does not know if that superior background is the one he actually has. Awareness of the fact that his belief depends on his background should therefore lead the possibly primed subject to lose confidence in what he believes. The analogous discovery should do the same for Cohen.

### 5.3 Independence

We can now extract a preliminary principle from the previous discussion:

**Independence (First Pass).** If I have no  $p$ -independent reason for thinking that my actual background puts me in an epistemically superior position to that which I would have been in if I'd had the counterfactual background, then I must reduce my confidence in  $p$ .<sup>11</sup>

What is it for a reason to be  $p$ -independent? It is for it to be independent of  $p$  in the aforementioned sense: it is not based on  $p$  or on the arguments and evidence on which my belief that  $p$  is based. What is it for my background to put me in an epistemically superior position? It is for that background to put me in a position in which I am more likely to form an accurate belief about  $p$  (by giving me special reasoning skills or insight into facts, perhaps). The thought here is that your confidence in  $p$  should not exceed your prior probability that your current background would have led you to believe the truth about  $p$ . Your prior attitude acts like a cap on how high your level of confidence can be.

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<sup>11</sup> This principle is most clearly in the tradition of principles proposed by Elga [ms.] and Christensen [ms.]. Cohen [2000] argues for something like this, which he calls “an undeniable principle about reasons for belief” (p. 11). In a different context, Sidgwick defends a similar principle with respect to disagreement (see p. 342 of his [1901]).

There are many ways in which this principle is still rough.<sup>12</sup> It does not provide a detailed recipe for dealing with awareness of background dependence, but it is in the right spirit and it captures the cases at hand. I hope all I have argued above makes a strong case for its plausibility. The next section will strengthen that case.

## 6. Why rejecting independence is bad

You might wonder why independence is so important. What if Cohen has reasoned well? What if his degree of confidence is, in fact, rational given his evidence? Why can't he at least in that situation simply use the original good reasons for which he holds his belief in order to maintain confidence in light of background dependence? If I am wrong and Cohen can maintain belief in this way, then the following familiar response is not, as its name suggests, clearly fishy.

**Clearly Fishy Response.** I have no independent reason to think I am in a better position now than I would have been if I'd had the other background, but I have reason to think I got lucky: after all,  $p$  is true and I believe it! If I'd had that other background, I would not have believed it, and I would have been wrong.

I cringe at hearing this response here and in all its previous incarnations. I hope that you do too. Of course, even if you do, our joint gut reactions do not suffice to discredit it—even if they rightly make us suspicious. We can repeat once again that it is question-begging. Just as our primed subject cannot defend the superiority of her position by citing her “compelling” data, so we cannot defend the superiority of our position simply by citing what we believes. But to say that this response is question-begging is not to say much more than that it is fishy. Fortunately, there is more to say: maintaining belief in this way, in the absence of independent reasons of the relevant sort, leads to bootstrapping.

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<sup>12</sup> Here is just one way in which the principle is still rough: it says that you ought to *reduce* your confidence under such and such conditions. But the *reduction* of confidence here is not relative to where your confidence currently is, but where it would be absent this information about your background. In other words, if you should be 90 percent confident in  $p$  absent the evidence of background dependence, and 70 percent confident in light of that evidence, then you should set your confidence to 70 percent. Once at 70, you need not reduce confidence further if you once again notice that the relevant conditions hold. That would be like reading the same newspaper over and over again in order to become more and more confident in its contents.

## 6.1 Bootstrapping

Suppose that I do not know whether my color vision is reliable. Here's a bad way to try to determine whether it is. I look around the room noting how things appear. Whatever color a given object appears to me, I conclude that it is that color. That is, I think to myself: "The carpet seems blue, and it is; the bookcase seems brown, and it is; the file cabinet seems yellow, and it is; ..." And so forth. Eventually, I look back on this track record I have established and conclude by induction that my color vision is reliable. After all, it was correct each time.

Call this sort of procedure Bootstrapping. There is a substantial consensus that it is silly.<sup>13</sup> Even if things really are as they appear, and my color vision is in fact reliable, going through this exercise does nothing to establish this. Things would be different if the colors of the various objects were, say, written on their undersides. I could then turn each object over in order to check whether my appearances were correct. But absent some such *independent* check, I cannot use this procedure to establish the reliability of my color vision.

In the problematic case of background dependence, we lack exactly this kind of check. Without independent considerations of the relevant sort, maintaining confidence in light of background dependence leads to bootstrapping. In the color vision case I bootstrap my way up to knowledge of the reliability of my color vision. What do I bootstrap my way up to in our case? Knowledge of the superiority of my background. To see how this works, return to Cohen.

Suppose that contrary to what I say, Cohen need not revise his belief upon discovering that it depends on his background. He can maintain his confidence despite the fact that he has substantial, independent reason to take Oxford and Harvard to be on a par. If Cohen can rationally maintain confidence in this way, he acquires a little bit of evidence that his background is superior to the Harvard one: after all, the Harvard people were wrong on this point.

There are two ways to bring out the absurdity of this situation. First, imagine it happening

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<sup>13</sup> See Cohen, S. [2002], Elga [2006], Vogel [2000], and White [2006].



repeatedly. Cohen notices a number of unconnected propositions that he would have believed if he had gone to Harvard. For each one he thinks, “How lucky that Oxford steered me right on that one!” He then looks over this excellent track record he has: every time he would have believed otherwise he would have been wrong! That means that he must be better situated in his actual position than he would have been in the counterfactual one, but, recall: he has no independent reason for thinking that his actual position is superior. And he surely cannot get one simply by noticing all of the beliefs he would have lacked in the counterfactual scenario.

Another less realistic sort of repetition further underscores the absurdity. Imagine that after finishing his degree at Oxford, Cohen decides to get another Ph.D. He realizes that he cannot be a true scholar unless he masters the art of Russian poetry. Once he completes that Ph.D., he realizes that he is a poor excuse for a Renaissance man unless he knows some Anthropology. We can suppose that Cohen completes about a dozen Ph.D.s in a variety of subjects. For each of these, Cohen attends a different university. He chooses those universities on the same sort of whim on which he chose Oxford. (He studies Anthropology in Bangladesh, say, because it seems more exotic than Baltimore.) Cohen later discovers that for every subject he has studied, he has some belief that depends on his having gone to his particular university. (He discovers, for example, that had he studied Anthropology in Baltimore, he would have had different beliefs about the habits of an obscure sort of South American monkey.)

Grant that Cohen has no independent reason to think that the universities he chose are the better ones. He is in the same situation about some of his mathematical, sociological, and anthropological beliefs as he is about his belief in the analytic/synthetic distinction. Now suppose that Cohen maintains belief in each of these cases: every time he discovers that he would have believed otherwise he thinks, “Lucky me that I didn’t go to that other, apparently equally good university. If I had, I would deny what I now believe, and I would be wrong!” His choices were made on the basis of coin flips and whims, yes, but look: he was right every time! If he maintains

confidence in this way, then it seems that Cohen is fortunate indeed. Despite choosing universities on a whim, he always chooses the epistemically superior place to study. Luck comes through every time—he effectively wins the intellectual lottery. I take this result to be at least as absurd as the previous. Together they provide a *reductio* for the claim that one does not need independent reason to rationally maintain confidence in light of background dependence.

## 7. Skepticism?

My goal in this paper was to determine when, why, and how learning that our beliefs depend on our backgrounds should affect our confidence in those beliefs. I began with the thought that sometimes, at least, such evidence should lead us to reduce confidence in what we believe. We are epistemically imperfect creatures, after all. Our beliefs are affected by our environment and upbringing in ways that we recognize are not fully rational. Thus evidence of background dependence can sometimes be evidence of our own irrationality—evidence of our own error.

A skeptical threat immediately arises: there are a great many ways in which our beliefs depend on our backgrounds. If we must reduce confidence whenever we recognize such dependence, we will end up unconfident in everything. To avoid this skeptical conclusion I argued for a principled way to distinguish between the innocuous and problematic sorts of belief dependence. The innocuous ones are those in which we have independent reason for taking our actual background to be superior to the counterfactual background. The problematic cases are the others—they are those in which we have no such reason. Unfortunately, this does not fully eradicate the skeptical threat. The preliminary independence principle fails to make a crucial distinction. It thus knocks out one skeptical worry, only to replace it with another more serious one.

## 7.1 The crucial distinction

There are two ways in which you might fail to have independent reason of the relevant sort: you might fail to have it *in principle* or merely *in practice*. The subject in Primed is in the latter sort of situation. She does not have an independent reason with which to defend her belief that the polar ice caps are rapidly melting, but there are many such reasons she could have had. She might have known that the experts agree with her, or that she was not primed. Perhaps the Epistemology Oracle told her that she was rational with respect to this issue. If the subject had any such reasons with which to defend her belief, she would have been rational in maintaining confidence in her global warming beliefs. These reasons are independent in the crucial sense: they neither rely on her belief that the polar ice caps are melting, nor on the data she used to acquire that belief. The problem is that, as a matter of fact, she doesn't have any such reasons. She lacks independent reasons *in practice*.

To lack such reasons *in principle* is for there to be no reasons, possible or actual, that are independent in the crucial sense. To see what this might look like consider the totality of your beliefs. Suppose that you are lucky enough for that totality to be coherent. Now notice: there are many possible belief states that are coherent and stable. Some of those belief states are inaccurate, although they look fine from the inside. You have no independent reason to think that your coherent belief state is not one of the radically mistaken ones. For a reason to be independent of the relevant beliefs, it would have to be independent of *all* of your beliefs, and it is, by definition, impossible for you to have a belief independent of all your beliefs. It is, thus, *in principle* impossible for you to have an independent reason of the relevant sort. If, as the preliminary independence principle suggests, you need independent reason to think that your actual state is superior to these other possible ones, then you are unjustified in all you believe.<sup>14</sup>

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<sup>14</sup> Elga raises this worry in his [ms.] p. 7. He calls this "Possibility of Error" skepticism. I think he is right in arguing that the independence principle *as stated* leads to skepticism. He gives up on the principle entirely, but he doesn't consider amending the principle as I suggest that we do.

## 6.2 A second pass at independence

The problem for Independence (First Pass) arises because it does not distinguish between lacking an independent reason *in principle* and lacking one *in practice*. Notice, however, that the cases in which we lack independent reason in principle are just the usual skeptical scenarios: you might be radically mistaken, the skeptic says, and you have no independent reason to think you are not. You should, therefore, lose confidence in all you believe. In failing to make this crucial distinction, the independence principle leads straight to skepticism.

The most obvious solution is to add a possibility clause to the principle, so that it only applies to cases in which it is in principle *possible* for me to have an independent reason. The new principle looks something like this:

**Independence (Second Pass).** If it is possible for me to have a *p*-independent reason for thinking that my actual background puts me in an epistemically superior position to that which I would have been in if I'd had the counterfactual background, but I in fact have no such reason, then I must reduce my confidence in *p*.

Isn't this an unmotivated, *ad hoc* tweak on the old principle? No, and here is why.

The question we started with was a question about belief revision—*rational* belief revision. Such revision can only take place against the backdrop of beliefs I take for granted. It is impossible for me to rationally revise my entire body of belief all at once. If I simultaneously question everything, I effectively question nothing. In calling everything I believe into doubt, I have nothing left with which to doubt. In other words: rational revision can only happen locally. It cannot happen globally. If we are concerned with rational belief revision, we'll have nothing to say about global belief revision. Our theory will remain silent on what to do when all our beliefs are simultaneously called into question. It will remain silent, that is, in response to the skeptic.

Recall the distinction between lacking an independent reason *in principle* and lacking one *in practice*. This is the crucial difference between the doubt raised in skeptical scenarios, and that raised in ordinary cases. I claimed that it was possible to accommodate the latter, ordinary sort of

doubt without succumbing to the former, skeptical variety. I also claimed something stronger: that rational humility *requires* us to accommodate ordinary doubt, and that doing so does not push us into skepticism. We can now start to see how that is possible.

In most ordinary cases, evidence of belief dependence is evidence of error. These are cases in which it is at least possible that I have an independent reason with which to dismiss such evidence. I can bracket away the beliefs called into question and ask myself: independent of this, am I likely to be right? In skeptical scenarios, it is not at all obvious what evidence of belief dependence amounts to. Since the skeptic calls my entire body of belief into question, I have no ground to stand on from which to evaluate the supposed evidence that has been laid before me. I have no ground to stand on from which to evaluate anything at all.<sup>15</sup> If I bracket everything, I cannot ask myself: how likely am I to be right? I do not have the resources to do so. This marks the crucial difference between ordinary and skeptical doubt: in the former case, but not in the latter, I am capable of independently evaluating evidence that I might be wrong. Since the central question here is how to evaluate such evidence, it is not *ad hoc* to restrict the proposal to the former, ordinary sort of doubt.

## 8. Conclusion

It can be disturbing to learn that one's beliefs reflect the influence of irrelevant factors. The pervasiveness of such influence has led some to worry that we are not justified in many of our beliefs. That same pervasiveness has led others to doubt whether there is any worry here at all. I

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<sup>15</sup> There is a more general anti-skeptical strategy in this spirit, but my goal is not so ambitious. The strategy is most commonly attributed to Wittgenstein [1969]. Duncan Prichard summarizes it nicely in the following passage:

As [Wittgenstein] argued, to doubt a hinge proposition is not to be more exacting or thorough in one's inquiries, but rather to give up the 'game' of doubting and offering grounds in the first place. [...] (As Wittgenstein (1969: §613) puts it, a doubt about a hinge proposition would 'drag everything with it and plunge it into chaos.') [...] no reason could ever, even *in principle*, be offered in response to this doubt. ([2005] p. 226, my emphasis)

Wright [2004] develops a view in the same spirit.

have argued that evidence of belief influence can sometimes be undermining: we are fallible creatures, after all. At the same time I have also argued that such evidence need not always be undermining: we are not wholly irrational creatures, after all. My independence condition provides a principled way of distinguishing between the innocuous and problematic sorts of belief influence. It picks out ordinary (not skeptical) cases in which we get evidence of our own error. It says that, in those cases, evidence of belief influence is epistemically significant and requires us to reduce confidence in the influenced belief. It also shows how humility, or self-doubt as it is sometimes called, is compatible with the epistemic lives we see ourselves living. We are fallible creatures, yes, but we are also capable and intelligent ones. We can recognize and correct for our own error so as to improve our imperfect, yet nevertheless robust, epistemic lives.

## Chapter 2

### When No News Is Good News

#### 1. Introduction

Disagreements can be disturbing, and not just because they are typically unpleasant affairs.

Disagreements can be *epistemically* disturbing. The discovery that a respected peer disagrees with you can make you lose confidence in, and sometimes altogether abandon, your belief in the disputed proposition—but should it?

This is a terrifically important topic that has only recently garnered the attention that it deserves. It is important, first, because disagreements abound—even amongst equally intelligent, honest, and informed individuals. If we are to accommodate this constant barrage of contrary opinions rationally, we need to know their epistemic significance. But the question about disagreement is not only of practical importance. Nor is to answer it merely to tell a plausible story about puzzling cases. To provide even a partial answer to this question, as I hope to do here, is to shed light on larger and more difficult questions about the nature of rationality, the power of testimony, and the weight of our fallibility.

This is, therefore, a terrifically important question. Yet I think that it is crucially misleading—or, insofar as it isn't, it has an obvious answer. Namely: *it depends*. The rational response to a specific disagreement depends on the details and circumstances of that disagreement. But which details, and how? What we really have to ask, then, is: *on what* does the epistemic significance of disagreement depend? My goal in this paper is to bring out a few crucial factors that affect the epistemic significance of disagreement. It has proven surprisingly difficult to provide a plausible, non-*ad hoc* theory that can deal with different kinds of peer disagreement. What I do here will point the way to just such a theory. My proposal is only very preliminary, but

it handles a variety of cases and provides more general insights into the mechanics and significance of rational self-doubt.

## 2. On why we need a flexible theory

In this section, I will consider three different sorts of disagreements, show how they must be treated differently, and underscore the difficulty in doing so.

### 2.1 A simple perceptual disagreement

**Stoplight.** You and I are traffic cops watching the cars pass on Main Street. We are peers in the relevant sense: we are both equally good, equally attentive cops, with equally reliable eyesight. (In fact, the police optometrist tested us the other day and we both have 20-20 vision.) We see a truck pass through the intersection. I think that it ran the red light. You think it got through on yellow.

What is the rational response to this sort of disagreement? Should I become less confident that the truck ran the red light? There is widespread agreement that a conciliatory verdict is right in this sort of case. The discovery that we disagree in this manner should lead me to reduce confidence in my own opinion. Although there is little agreement on exactly *why* such a response is right, the following sort of reasoning is typically given.

I take you to be my peer: I think that you are as likely as I am to be right about this. I have no more reason to suspect that you misperceived than that I misperceived. Without any further evidence, awareness of disagreement ought, in this case at least, to reduce my confidence significantly.

Even if you agree with this verdict for this case, you might not want to commit yourself to it more generally. On the most extreme conciliatory view, awareness of peer disagreement requires you to reduce confidence *regardless* of the issue or circumstances of disagreement. This seems like it has got to be wrong. Yet the sort of reasoning that points to a conciliatory verdict in Stoplight points to a conciliatory verdict across the board. Henry Sidgwick, in his *Methods of Ethics*, suggested as much when he said:



...if I find *any* of my judgements, intuitive or inferential, in direct conflict with a judgement of some other mind, there must be error somewhere: and if I have no more reason to suspect error in the other mind than in my own, reflective comparison between the two judgements necessarily reduces me temporarily to a state of neutrality. (341-2, my emphasis)

Sidgwick is making a very strong claim here—a claim about *any of my judgments*, be they intuitive, inferential, perceptual, and so forth. He is not suggesting that we should merely “lose confidence” when we discover this disagreement. He says we should (temporarily) enter into a state of neutrality, or agnosticism.<sup>16</sup> Most, probably all, who have thought about the question of disagreement have wanted to resist this strong a view.<sup>17,18</sup> They have especially wanted to resist a conciliatory verdict in the following sorts of cases.

## 2.2 An extreme disagreement about a simple arithmetical question

**Crazy Math.** We are out to lunch. We finish our meals, the check comes, and we decide to split the bill. I look at the bill, divide it in half, calculate the agreed upon tip, and put my portion on the table; you do the same. We compare amounts and it turns out that we disagree: I put down \$19, while you put down \$230.<sup>19</sup>

What is the rational response to this sort of disagreement? Must I reduce my confidence in light of your testimony? Surely not! Yet it is surprisingly difficult to provide a principled treatment of

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<sup>16</sup> Sidgwick is, of course, not working with a degree of belief model, but we can translate this well enough. How much confidence should I lose in the disputed proposition? Enough so that I do not count as believing it anymore.

<sup>17</sup> To be fair to Sidgwick, this is a paragraph in a 500+ page book about ethics. It is doubtful he really thought the issue of disagreement through to the extent that more recent thinkers have. He may have likely weakened his statement if he had.

<sup>18</sup> *Conciliatory* theorists such as Adam Elga and David Christensen have been accused of exactly this sort of extreme view. Jennifer Lackey in particular attributes to them what she calls the *uniformity thesis*, according to which “disagreement with epistemic peers functions the same epistemically [i.e., requires the same response] in all circumstances” (5). A few slips of the pen (or keyboard) in early papers suggest this. (See in particular Elga ([2006] 487), who after proposing a conciliatory verdict for a simple perceptual disagreement writes: “The same goes for other sorts of disagreements.”) But Lackey is wrong on this point. Both Elga and Christensen struggle, in those original papers, to say different things for different sorts of peer disagreements (such as those that I will examine shortly). This is good evidence that Elga and Christensen are after something far more subtle than that which Lackey attributes to them.

<sup>19</sup> This case is originally due to Christensen ([2007] 199).

this case. Once again, everyone agrees that this is the right verdict. This time, however, they disagree on *why* it is the right verdict.

Here's one possible explanation: I can dismiss your opinion in this case because your answer sounds insane to me. But the permissibility of abortion can sound insane to someone who is pro-life (and vice versa). Since the truth can *sometimes* seem insane, it is both *ad hoc* and dangerous to make an exception for disagreements in which your opponent's opinion merely seems insane.<sup>20</sup> But maybe there is a better way of working the insane-seemings angle: maybe it is enough to point out that it seems more likely that you're joking, lying, or drunk than that you would genuinely believe something that would seem so insane to me.<sup>21</sup> That sounds better, but of course, we will have to say more to square this with the simple perceptual case in a non-*ad hoc* way.<sup>22</sup> More on that shortly. For now it is enough to notice what all parties should agree on: that I needn't reduce confidence in this sort of case.

### 2.3 Disagreements about controversial and difficult matters

**Death.** You and I are independently researching whether capital punishment is an effective deterrent. We both consider all the same databases and statistics and make use of the same articles and charts. We write up our reports and compare answers: my report concludes that capital punishment is an effective deterrent; yours concludes that it is not.

What is the rational response to disagreements about difficult empirical matters like this one?

There is little consensus in the literature—and with good reason. These messier and more familiar

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<sup>20</sup> Elga suggests something like the insane-seeming view in his ([2006] 491). I think there is a more subtle position on which the insane-seemingness of your opponent's opinion can be relevant to the epistemic significance of disagreement, and it may be what Elga had in mind. I will come back to this shortly.

<sup>21</sup> Christensen holds this more subtle position ([2007] 200-1). I think it is on the right track and I will come back to it. It is also interestingly in the spirit of a controversial Hume passage on miracles ([1748] 91).

<sup>22</sup> Notice that the difference between the cases cannot be that one involves perceptual beliefs while the other involves mathematical reasoning. Just imagine a version of the Crazy Math case that is not so crazy: one in which I think that we each owe \$19 and you think we each owe \$21. A conciliatory verdict seems right there (and again there is consensus on the point). Similarly we can imagine a crazy version of the Stoplight case in which, say, you don't know what truck I'm talking about, but you think that the elephant got through on yellow. A conciliatory response seems as bad there as it does in Crazy Math.

sorts of disagreements underscore a tension between having an appropriate amount of humility in light of our acknowledged fallibility and having rational beliefs at all.

On the one hand, this can seem like exactly the sort of case in which the opinions of others are less epistemically significant. After all, you have carefully studied and weighed a body of evidence. Academics, politicians, and scientists do not give up their reports and theories when they discover that someone disagrees with them. It would seem, some have said, *spineless* for us to abandon our carefully crafted opinions just because others do not share them.<sup>23</sup> Worse yet, if we are required to reduce confidence with respect to difficult, controversial matters like this, then we are already irrational in believing much of what we believe. That seems implausible, so maybe we are rational in dismissing such disagreements.

On the other hand, if these really are *difficult* matters, then belief revision seems even more warranted here than elsewhere. There are many ways in which we might err in examining death penalty data. We might not only misperceive (as in Stoplight) or miscalculate (as in Math); we might also be subject to bias, be unable to keep track of the huge body of evidence, fail to attend to the right bits of the evidence, and so forth. If I am ever to use my peers as checks on my thinking, it seems most appropriate for me to do so here, with respect to exactly these sorts of difficult and controversial matters.

The tension is perhaps even worse when it comes to disagreements about difficult normative matters, as in this variation of the previous case:

**Just Death.** As before except that the proposition in dispute is whether the death penalty is a just punishment.

Again, it can seem especially spineless to be so influenced by others' testimony about such an important and difficult moral matter, into which one has so carefully researched. On the other

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<sup>23</sup> Pettit [2005] and van Inwagen [1996] consider the spinelessness objection. Elga responds in his ([2006] 492).

hand, maintaining confidence seems to betray an unappealing kind of dogmatism and blindness to the difficulty of the issues.

Despite the lack of consensus about these cases, there is something that we should all agree on. To see what it is, notice that even the most humble of us who recognize the difficulty of moral, political, or philosophical matters think we are often rational in at least *having* opinions about of them—even if we are not rational in having *confident* opinions about them. What this suggests is that a plausible theory of disagreement should allow for at least the most *minimal belief maintenance* in such difficult cases. What does this mean? It means that the theory should not *always* rule us irrational merely for having opinions about difficult matters. Perhaps sometimes it should, as with the most difficult matters. The claim here is merely that there are controversial issues in which we feel justified in having an opinion. Our theory of disagreement should not say that we are massively mistaken about this. (Of course error theories are sometimes right, but should not be our first resort.)

This and Crazy Math motivate what are sometimes called *steadfast* views of disagreement, according to which awareness of disagreement shouldn't affect your confidence. Just as the difficulty for conciliatory views is to accommodate this case (and the next) in a non-*ad hoc* way, so the difficulty for steadfast views is to accommodate simple perceptual disagreements in a plausible and non-*ad hoc* way.

## 2.4 Desiderata

From the foregoing, we can extract three desiderata that any sensible theory of disagreement must meet:

1. It must give a conciliatory verdict to simple, straightforward disagreements such as Stoplight.
2. It must give a steadfast verdict to extreme disagreements such as Crazy Math.

3. It must allow minimal belief maintenance in disagreements about difficult matters like Death.<sup>24</sup>

The trouble, of course, is satisfying all three desiderata at once. The simplest versions of the steadfast and conciliatory views we have on the table cannot easily do that. Can these three desiderata be met all at once, by a cohesive, non-*ad hoc* theory? I think they can, and I will ultimately propose a way to do so. But I will first consider an intuitive and attractive recent proposal that promises more flexibility. I will argue that the flexibility it delivers is not sufficient.

### 3. Rational high confidence

I have shown so far that disagreement is not always epistemically significant. Sometimes, discovering disagreement does not require us to lower our confidence in the disputed matter. One class of cases that you might plausibly want to exempt are those in which you are *rationaly highly confident* in the disputed proposition. What does this mean?

To be **Rationaly Highly Confident** in  $p$  is:

- (a) to be highly confident in  $p$ , and
- (b) for that level of confidence to be the right one to have given the evidence.

Don't worry about the terminology. The intuitive thought is clear enough:

**The Intuitive Thought.** If you are really sure of what you believe (and you're right in being so sure), then you should not revise it just because someone disagrees with you about it.

Something along these lines has recently been proposed by Jennifer Lackey. She writes,

At the heart of my justificationist view is the thesis that the amount of doxastic [that is, belief] revision required in the face of peer disagreement tracks the amount of justified [or, *rational*] confidence present: the more justified and confident a belief is, the less doxastic revision is required, and the less justified and confident a belief is, the more doxastic revision is required. ([forthcoming] 48-49)

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<sup>24</sup> One clarification about this third desideratum. The claim is not that we should always be able to have minimal belief maintenance about all difficult matters. It is, as we will see, independently plausible that we should be agnostic with respect to the most difficult of these. The claim is rather that the theory should leave open the possibility of minimal belief maintenance for all, and rule in favor of it for some of these difficult matters.

In other words: the more rationally confident I am in  $p$ , the less significant evidence of disagreement about  $p$  will be. Notice, crucially, that the proposal here is not just that rational confidence can affect the epistemic significance of disagreement. That is a fairly weak claim we might all agree on. The thesis here is that *high* rational confidence in  $p$  has a *specific* effect on disagreement, namely: it makes it *insignificant*.

One of Lackey's explicit goals is to give a more flexible theory of disagreement.<sup>25</sup> On the face of it, the intuitive proposal looks promising: it can distinguish between ordinary and extreme disagreements (like Stoplight and Crazy Math respectively). In the Crazy Math case, I am *rationally highly confident* in my belief that half of the bill is \$19, or at least something in that ballpark. This is why I can dismiss your crazy suggestion that it is \$230. In Stoplight, on the other hand, I am not so confident that the truck ran the red light. Perhaps this is why I cannot dismiss your suggestion that it got through on yellow.

The Intuitive Thought thus suggests a promising way toward a more flexible theory of disagreement. Unfortunately, there are clear counterexamples. Even if there weren't, however, this view would still only meet two of the three desiderata. Let me explain this first, and then consider the cases that show this proposal to be ultimately untenable.<sup>26</sup>

### 3.1 Failure to meet the third desideratum

The Intuitive Thought seems to do well on the easy cases like Stoplight and Crazy Math. How does it handle the more difficult cases like Death and Just Death? I suppose that it is obvious what such a proposal would say: if we are rationally highly confident in our beliefs about these difficult and complicated matters, then we can rationally maintain confidence despite disagreements. This

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<sup>25</sup> It follows from her rejection of Uniformity ([forthcoming] 3).

<sup>26</sup> I should note that I do not think high rational confidence is irrelevant when it comes to disagreement. On the contrary. I will show, however, that first, it is not the only relevant factor, and second, it is only relevant insofar as it affects whether the testimony I get counts as evidence for me.

has the potential to get us much more than minimal belief maintenance, but it isn't clear that we want that. We need a further story to make it plausible that we are *highly rationally confident* in such matters, if we are (or to explain why we are not, if we are not). Without such a story this proposal can neither explain nor dissolve that familiar tension. The fact that I can maintain confidence in my beliefs about the death penalty *just in case* my confidence is rationally really high does not help me get rid of the thought that this is a paradigm case of the sort in which I should still use peers as checks on my thinking.

Could we, on this proposal, tell a satisfying story to help dissolve this tension? Maybe. Here is one reason to think that we cannot. We don't seem to be rationally highly confident in these difficult cases. (It is no coincidence that we call them "difficult".) The Intuitive Thought thus might run into the same problems as the conciliatory views that rule us massively irrational about most of the complicated matters on which we have opinions. If it does not rule us massively irrational, then it will have to follow that we are rationally highly confident in our beliefs about these matters. But we just said that this seems implausible. So it will be especially difficult for a proponent of the Intuitive Thought to take this most obvious way out. Maybe there is a way to solve this problem. Ultimately, it doesn't matter because the proposal succumbs to the following counterexamples.

### **3.2 Counterexamples**

Recall the Intuitive Thought: if you are rationally highly confident in  $p$ , awareness of disagreement about  $p$  should not lead you to lose confidence in  $p$ . Although it is more flexible than the simple versions of the Steadfast and Conciliatory views we started out with, this proposal is still too crude as a theory of the epistemic significance of disagreement. To show this I will present two variations on the Crazy Math case.

In the first, I am *not* rationally highly confident in my belief, and yet I *can* maintain confidence in the face of disagreement. In the second, I *am* rationally highly confident in my belief, and yet I *cannot* maintain my confidence in the face of disagreement. Together these two cases show that rational high confidence in the disputed proposition is neither necessary nor sufficient for the insignificance of disagreement.

Consider the first case.

**Bad Math.** As before, but I am really bad at math. Especially when it comes to calculating percentages. I also happen to be paranoid about incorrectly tipping servers, so I always get nervous when I have to calculate a restaurant tab. The nervousness makes me even more prone to error than I already am. But we have finished our meal, and I must calculate what I owe. I do so and place my portion on the table; you do the same. We compare amounts and it turns out that we disagree: I put down \$19 and you put down \$230.

As in the original Crazy Math case, I should dismiss your opinion and maintain my confidence. Given how bad I am at math, I shouldn't have much confidence in my answer to begin with, but that little bit of confidence I do have should not be reduced by our disagreement. I hope we are all on board with this verdict. Notice that it seems plausible even if I take you to be better than I am at math. Even in that case, I get to dismiss your opinion. I am bad at math, yes, but isn't it more likely that you are drunk or joking, than that I really owe \$230? What this case shows is that:

Sometimes I can dismiss our disagreement about  $p$  even though my antecedent rational confidence in  $p$  is quite low.

Of course, we could tweak the intuitive thought to accommodate counterexamples. In this case we might say that it is not my own opinion that I have to be rationally highly confident in, but rather that I have to be rationally highly confident in the falsity of *your* opinion. That rejects the letter of the intuitive thought, but it is more promising. Unfortunately, it too isn't quite enough. For reasons that will be explored below, it cannot be *only* rational high confidence doing the work. The epistemic significance of disagreement is a more complicated matter. Before we get to that, consider the second counterexample.



**Super Math.** I am super at math, especially when it comes to calculating percentages. I eat out a lot and I rarely err at figuring out how much to tip and how much I owe. (Same for you; we are peers.) We finish our meal and calculate what we each owe. I look at the bill, divide it in half, add the agreed upon tip, and put my portion on the table; you do the same. We compare amounts and it turns out that we disagree: I put down \$19, while you put down \$23.

However reliable I might be in this case, I am still fallible. You are equally reliable (and fallible). As in the previous cases, we are peers in the relevant sense. Christensen, who originally came up with this case fills in the details as follows: we have “long and equally good track records [...] (in the cases where we’ve disagreed, checking with a calculator has shown us right equally frequently); and I have no reason (such as those involving alertness or tiredness, or differential consumption of coffee or wine) for suspecting one of us to be especially good, or bad, at the current reasoning task” ([forthcoming] p. 2).

Antecedent to our disagreement, I reasonably took us to be equally likely to halve the bill correctly. Discovering that you think half of the bill is \$23 rather than \$19 does not, in this case, give me any reason to think either that you are joking or that you are more likely than I to be wrong.

This case is analogous to Stoplight in all respects except my level of confidence. Yet this does not seem to make a difference: maintaining confidence seems wrong in both cases. What this case shows is that:

Sometimes, awareness of peer disagreement about  $p$  should undermine my confidence in  $p$  even though I am rationally highly confident in  $p$ .

Recall the Intuitive Thought. It was that:

If you are really sure of what you believe (and you’re right in being so sure), then you should not revise it just because someone disagrees with you.

If disagreement about  $p$  can be significant despite my high confidence in  $p$ , and if it can be insignificant despite my low confidence in  $p$ , then the Intuitive Thought, at least as presented, cannot be right. There may be some ways of revising the Intuitive Thought so that it avoids these

counterexamples. (I suggested one such way above.) But it is not just the letter of the Intuitive Thought that is wrong. It is also wrong in spirit: the significance of disagreement depends on much more than rational high confidence. To show this, we have to step back a bit and think about evidence in general. This is what I will do in the following section. What I accomplish there will provide the foundations of my own, more flexible, theory of disagreement.

#### 4. Evidence

In this section, I will consider some cases which, at first glance, have little to do with disagreement. I will use them to uncover some factors that affect the epistemic significance of a piece of evidence—any piece of evidence. The ultimate goal is to show what, other than our level of rational confidence, we must pay attention to if we want to know about the epistemic significance of disagreement.

##### 4.1 Marbles

**M.** I have an urn filled with 100 marbles—some white, some black. I have some belief about the proportion of white to black marbles in the urn. I reach in and pick a random marble. It is black.

I want to bring out just a couple of features of a situation that the epistemic significance of this piece of evidence can depend on. To see what they are, we must ask two questions about the case:

*Question 1:* How surprised should I be that I picked a black marble on the first try?

*Question 2:* What effect should picking a black marble have on my belief about the contents of the urn?

Notice that we won't get anywhere on these questions until we fix on some more details of the case. Recall that I have *some* belief about the proportion of white to black marbles in the urn. We might want to know: what is this belief? Suppose that before pulling the black marble out of the urn, I believe that:

**M100.** All of the marbles in the urn are white.

Suppose also that I am *reasonably confident* in this belief. Perhaps a trusted source told me, so while I am not certain that the contents of the urn are such, I have good reason to think that they are. We can now ask the two questions.

First, how surprised should I be that I picked a black marble on the first try? If I was antecedently confident that one hundred percent of the marbles in the urn are white, then I should be *shocked* to pull out a black marble.

Second, what effect should this have on my belief about the contents of the urn? Clearly, it should lead me to revise my opinion. Antecedently to pulling the black marble out of the urn, I was confident that the urn did not contain any black marbles. Now I am, to put it mildly, not at all confident of that.

Suppose instead that antecedent to pulling the black marble, I am, again reasonably, confident that:

**M97.** Exactly 97 of the 100 marbles in the urn are white.

In this case, I certainly shouldn't be *shocked* to pull a black marble randomly on the first try. But I should still be somewhat surprised. After all, there was only a three percent chance that this would happen. What effect should this have on my belief about the contents of the urn? I should not, as in M100, completely abandon my antecedent estimate about the contents of the urn. But perhaps it should make me a little—just a smidge—less confident in my antecedent estimate. After all, there *is* a three percent chance that I would pull a black marble on the first try. Randomly pulling a black marble on the first try is far more likely if there are more than three black marbles in the urn.

I am keeping the stipulation of reasonable confidence constant for these cases. Notice that varying it does affect the verdict. Suppose that rather than being told about the urn's contents, I looked inside and counted the marbles, or watched them go in one by one. That would make me

more confident in my belief and, in general, more reluctant to revise it. This won't hold in the first case: even if I am antecedently highly rationally confident that the urn only contains white marbles, I will, if I am rational, revise that belief as soon as I see a black marble come out of the urn. But it will hold in the rest: if I am rationally highly confident that the urn contains exactly 97 white marbles, I will still be surprised to pull a black one randomly on the first try. It is an unlikely event. But depending on the details of the case, this will make me revise my confidence in my belief by only the smallest amount—perhaps an amount that corresponds to how likely I am to have miscounted or misperceived the marbles going into the urn. Thus, how much and how quickly I need to revise my antecedent belief will depend on just *how confident* I am in that belief. The greater my antecedent confidence that there is a certain percentage of black marbles in the urn, the more I will have to pull before I am forced to revise that estimate. But I will be forced to revise it *eventually*. Even if I was antecedently rationally highly confident in it.

Imagine one final variation of the case. Before reaching in the urn I believe that:

**M50.** Half of the marbles in the urn are white.

I am again reasonably confident in this belief. Yet this time, I should not at all be surprised to pick a black marble: there was a 50 percent chance that I would. My opinion about the contents of the urn should be *at most* affected a very small amount.

(Of course, in all of these cases, if I keep pulling black marbles one after the other without putting them back in the urn, I will eventually start to doubt my prior estimate: it is unusual to randomly draw 25 black marbles in a row out of an urn of 100 marbles that is only half filled with white marbles.)

There are many more factors we might track in these case, but the above suffices for a preliminary take-home lesson:

**Antecedence Matters.** The epistemic significance of a piece of evidence (e.g., of learning that the first marble randomly pulled from the urn is black) depends at least in part on my

antecedent expectations (in particular on my antecedent belief about the contents of the urn).

If I believe that there are few black marbles in the urn, I should be surprised to pull one on my first try. The more confident I am in that belief, the more surprised I should be to see that black marble. And the more surprised I am to see that black marble, the more I will have to revise my antecedent estimate that there are few of them in the urn.

The point here is almost trivial: of course the significance of a piece of evidence depends on my antecedent expectations. Yet it is overlooked—or at least insufficiently attended to—when it comes to disagreement. Here is how keeping it in mind can help.

#### 4.2 Peers

Now we can get a bit closer, but not all the way back, to the question of disagreement. I'll start by making an analogy in which discovering that a peer disagrees with you is like picking a black marble. This will show how your antecedent expectations about the prevalence of disagreement can increase or diminish the epistemic significance of a particular disagreement.

**P.** I believe that  $p$ . On the table in front of me is a list of my epistemic peers with respect to  $p$ . There are exactly 100 of them. The peers are randomly ordered and the list includes my peers' phone numbers. I call a random peer from my list, say that it is you. I ask you whether or not  $p$ . To my surprise, you say not- $p$ .

How significant is this disagreement? Again we have to split the question in two:

*Question 1:* How surprised should I be that we disagree?

*Question 2:* What effect should the discovery of this disagreement have on my antecedent hypothesis about how many of my peers disagree with me?

The answers to these questions will again depend on my antecedent expectations. In particular, they will depend on my antecedent expectations about *the prevalence of disagreement*. Suppose that antecedent to discovering that we disagree, I believe:

**P100.** All 100 of my peers agree with me.

Suppose again that I am reasonably confident in this belief. (Perhaps I got my data from the highly reliable, though not infallible, Peer Survey Group.) If I am reasonably confident that all of my peers agree with me, I will be *shocked* to discover that you, the first person I randomly call, disagrees. I will be shocked here just as I was shocked to pull a black marble out the urn I thought was full of white marbles. And I should revise my belief about the proportion of agreeing and disagreeing peers, just as in the previous case, the discovery of a black marble forced me to revise my antecedent belief about the proportion of black and white marbles in the urn.

Suppose instead that I am reasonably confident that:

**P97.** Exactly 97 of my 100 peers agree with me.

I should not be as surprised if the first peer I call disagrees with me. In this case, the discovery that we disagree will still be a little bit of evidence against my prior hypothesis (that 97 percent of my peers would agree with me). I will then only be forced to become a little less confident in my antecedent estimate.

In the final variation of the case, when I believe that:

**P50.** Exactly 50 of my 100 of my peers agree with me,

I should not at all be surprised to find disagreement on the first call, and I won't have to revise very much, if at all.

Again, in all of these cases, if I keep discovering disagreement with every call, I should eventually start to doubt my prior estimate. And if I am really *very* confident that there is 97 percent agreement, then it will take more phone calls with dissenters to bring down my confidence the same amount. But I will be forced to revise eventually. (Specifically, when I find the fourth disagreeing peer.) Even if, antecedent to making these phone calls, I was rationally highly confident in believing that most of my peers will agree with me.<sup>27</sup>

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<sup>27</sup> In more realistic versions of this case, I will not have such precise beliefs, e.g., that exactly 97 of my 100 peers agree with me. I will probably think that most, few, or many do. This does not affect my overall argument.

We can extract a lesson about disagreement analogous to the lesson about the marbles.

**Antecedence Matters (Here Too).** The epistemic significance of a piece of evidence (e.g., of learning that we disagree) depends at least in part on my antecedent expectations (in particular on my belief about the prevalence of disagreement).

Notice that I have yet to show how awareness of disagreement about  $p$  should affect my *confidence* in  $p$ . All I have shown is how awareness of disagreement can affect my *prior expectations* about the prevalence of disagreement. But there is an important connection between my prior expectations of disagreement about  $p$  and how much awareness of peer disagreement about  $p$  should affect my confidence in  $p$ . I will now set out this lesson and present my own view in light of it.

## 5. My proposal

The proposal so far is this:

**Antecedence Matters:** The epistemic significance of disagreement depends, at least in part, on your antecedent expectations.

In particular, it depends on your antecedent estimate about the proportion of peers who believe that  $p$  and the proportion of peers who believe that not- $p$ . Of course, this is not all that the epistemic significance of disagreement depends on. One other thing it depends on is:

Your evaluation of the *state of the evidence* with respect to  $p$ .

What does this mean? Let me explain.

Say that I have some batch of evidence that bears on  $p$ . Long before I am ever confronted with a disagreeing peer, I study the evidence carefully and form my opinion that  $p$ . I don't stop there, however. I am clever and reflective, so I also think about the *nature* of the evidence itself. Simplify and say that there is only one dimension along which I might evaluate my evidence: its *clarity* or its *murkiness*. If I think that my evidence is *clear*, then I think that whatever it supports,  $p$  or not- $p$ , it does so clearly, or obviously. If, instead, I find the evidence to be murky, then I don't

think that it clearly supports whatever it is that it supports. The evidence seems to point this way, but, really, it isn't clear.

Now suppose that my reflections lead me to conclude that my evidence is clear. If I decide that my evidence is *clear*, then *ceteris paribus* I can be fairly confident in whatever I conclude on its basis. After all, when the evidence is clear, it is typically quite easy to evaluate it and to come to the right conclusion. Crucially, if my evidence is clear, I should expect there to be quite a bit of agreement amongst epistemic peers. If it is easy to draw the right conclusion, and we are all equally good at drawing that conclusion, then we should all come to the same conclusion. If I instead look at the evidence and determine that it is rather murky, I will not be as confident in whatever I conclude on its basis. I am, after all, less likely to conclude correctly. I will, furthermore, expect there to be quite a bit of disagreement—even amongst intelligent and informed peers.

This suggests a **correlation** amongst the following three factors:

1. My evaluation of the state of evidence with respect to *p*.
2. My belief about the proportion of peers who believe that *p*.
3. The appropriate confidence with which to believe that *p*.

If, for example, I discover that there is more disagreement than I expected, and am forced to revise my estimate of the proportion of peer disagreement, then I will also have to revise my opinion about the state of the evidence. (Probably, I overestimated how clear it was.) And if I have to revise my opinion about the state of the evidence, I will also have to revise the level of confidence I have in *p*. Similarly, if I first get evidence that I am overconfident in *p*, I will have to revise my evaluation of the evidence as well as my antecedent estimate.

This crucial correlation maps out some of that on which the epistemic significance of disagreement depends. Armed with this correlation, we can now go back to the original cases and see how the minimal desiderata might be met.



## 5.1 Revisiting the desiderata

Recall what we want out of a minimally acceptable theory of disagreement:

1. It should give a conciliatory verdict to simple, straightforward disagreements such as Stoplight.
2. It should give a steadfast verdict to extreme disagreements such as Crazy Math.
3. It should allow for minimal belief maintenance in disagreements about difficult matters like Death.

Now consider what the first sorts of cases are usually like. In Stoplight, for example, it is typically clear what the evidence is: at the moment the truck passes through the light, your evidence is the visual input you get—once it is gone, your evidence is your memory.<sup>28</sup> It is also clear how to evaluate the evidence and it is easy to do so: we just attend to the intersection and see how things look to us. Once the moment is passed, we reflect on our memory. Finally, it is relatively easy to assess the abilities one needs in order to respond to such evidence; we can run tests on our memory and vision to determine their reliability. Cases like Stoplight are, thus, *easy* in the following ways:

1. It is clear what the evidence is,
2. It is clear how to evaluate the evidence,
3. It is clear how to assess the abilities required to respond to the evidence, and
4. It is easy to evaluate the evidence.

Contrast this with more difficult cases in which fewer of these conditions hold.

In Death, for example, the question is whether the death penalty has deterrent effects. It may be clear (1) what the evidence is. Perhaps it is statistical: graphs and charts of crime rates in states that have the death penalty versus those that do not. It may even be clear (2) how to evaluate the evidence (you just do whatever it is that statisticians do) as well as (3) the abilities required to respond to the evidence rationally (we can tell better statisticians from worse ones).

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<sup>28</sup> It may be controversial exactly what the evidence is in perceptual cases, but this is not significant for my purposes. However controversial this sort of evidence may be, the sort required for difficult moral issues will be even more controversial. All I need to establish here is that these cases are on a spectrum from clearest to murkiest.

What can make a case like Death more difficult than a case like Stoplight is (4) the difficulty of evaluating the evidence itself. There are many ways in which this difficulty might manifest itself. There may just be too much data: too many charts and graphs with too many numbers to crunch. The data may be so overwhelming or convoluted that even the best statisticians struggle to understand it. The death penalty issue is also a tense one. People tend to get worked up so that even if they have the prerequisite skills to crunch all of the numbers, we might still worry that their biases or political leanings might somehow distort their reasoning or influence their conclusions.

The situation is worse in cases like Just Death, where the dispute is over an issue that is not only empirically difficult but also *normatively* difficult. If our question is whether the death penalty is a just punishment, it can be much harder to tell what the evidence is (1). Even if we can tell that, it can still be difficult to know how to evaluate such evidence (2) or how to assess the abilities required to evaluate the evidence (3). (Who the moral experts are, or even if there are any, is almost as controversial as the death penalty question itself.<sup>29</sup>) And whatever worries we have about biases or politics warping our opinions in Death, they are only magnified in Just Death.

Notice that the *easy* cases are the ones in which the evidence will typically be *clear*, so we should expect to have both a high level of confidence and considerable peer agreement. The *hard* cases, on the other hand, are ones in which the evidence will typically be *murky*, so we should expect to have a lower level of confidence and less agreement.

Crucially, then, disagreement will typically be *old news* in the difficult cases. Those who are well aware of the murky evidential situations, and have appropriately revised their confidence, need not revise further upon meeting a disagreeing peer. They have, in a way, rationally accommodated the disagreement before it occurred. There is thus nothing left for the

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<sup>29</sup> See McGrath [2007].

appropriately humble agent to do once she learns of a disagreement that she already knew was likely. In the easy cases, on the other hand, disagreement will typically be newsworthy. These are cases in which even the appropriately humble agent will not expect disagreement. This is why, in easy cases like Stoplight, awareness of peer disagreement requires even the most humble of us to revise.

These considerations nearly entail the fulfillment of the first and third desiderata. To see how the first is fulfilled, notice that we will typically have to be *conciliatory* in *easy cases* like Stoplight because there, the disagreement is newsworthy. Why won't we have to be as conciliatory in cases like Death? Reflection on such cases highlights their difficulty. A minimally humble agent should see them as veritable minefields of error. She should thus expect disagreement, even amongst those she takes to be equally likely to be right. To accommodate this expectation appropriately is just to antecedently accommodate the disagreement. Once the appropriately humble agent is actually faced with an anticipated disagreement, there is thus nothing left for her to do epistemically. This is why, when disagreement is not newsworthy, there is good news: you don't need to revise.

## 5.2 Upshot So Far

The rough proposal so far is:

**No News Is Good News.** The significance of the evidence I acquire when I become aware of a peer disagreement depends on whether this evidence is *news* or *old news*.

If I have properly taken into account the evidential situation, then this piece of evidence will be old news for me. My credence will already reflect the expectation that a peer disagrees with me, so no further revision will be required. And that looks like good news.

Notice that this is contrary to the very spirit of the Intuitive Thought we saw earlier: the thought was that the more rationally confident you are, the less significant the disagreement will

be. But I have shown that the less rationally confident you are, the less newsworthy, and therefore the less significant, the disagreement will be. I have shown one way in which weakly justified beliefs are less threatened by disagreement than strongly justified ones.

### 5.3 Counterexample? (Meeting the 2<sup>nd</sup> desideratum)

I have shown how this theory deals with the easy and difficult cases—and thus how it meets two of the desiderata. I have also shown how it dislodges what I called the Intuitive Thought. But what about the Crazy Math case? That case was the main motivation for moving toward something like the Intuitive Thought.

The claim, so far, has been that the more surprised you are to discover a disagreeing peer, the more significant the disagreement will be. But in the Crazy Math case you are *shocked* to hear your peer claim that you each owe \$230. Shouldn't my theory therefore rule that, contrary to common sense, I *should* reduce confidence in this case? This looks like a straightforward counterexample to my theory. Fortunately, it isn't.

To see why, recall the lesson I started with:

**The Lesson:** The epistemic significance of disagreement depends, at least in part, on your antecedent expectations.

This is more general than the *no news is good news* slogan. That slogan encompasses just one sort of antecedent expectation you might have: namely, the expectation of disagreement. But you have other relevant expectations as well. Crucially for the Crazy Math case, you have certain expectations about what sort of peer disagreement is likely or unlikely. For one, you expect that an extreme disagreement, where I think we owe \$19 and you think we owe \$230 (or perhaps our lives), is highly unlikely.

Notice that if you do have this expectation (and if you take us to be peers then you should), you do not have it because you are oh-so-confident in your own answer. If our

disagreement is this extreme, then it is more likely that one of us is joking or lying, drunk or drugged.<sup>30</sup> (Notice that any of these possibilities can be what best explains our disagreement, even if my confidence in my own answer is quite low.) Suppose that the latter hypotheses are most likely. If you think that the best explanation for our disagreement is that someone is drugged or drunk, you will quickly be able to resolve it. You know you didn't drink too much; you know you didn't take acid in the restaurant bathroom. You think these scenarios are unlikely for me as well, but, crucially, you have more information about yourself. So you are reasonably more confident that you didn't drink or take drugs than you are that I didn't. If my opinion is insane enough, that can make the hypothesis that I had one too many shots of tequila while you weren't looking more plausible.

Now, consider the other hypotheses. If one of us is joking or lying, then it seems that we do not really have a disagreement. Rather, one of us is pulling the other's leg—and you know it is not you. After all, you again have pretty good access to whether you are joking. Thus although on your antecedent expectations, our extreme disagreement is highly surprising, and therefore newsworthy, it is not *epistemically significant*. Why not? Because, in a nutshell: it is not really a disagreement, or, at least, it is not rational for you to treat it as such. Given your antecedent expectations, a disagreement like this one is unlikely to be a genuine disagreement. More likely, it is a joke.

Hearing a respected peer say something so crazy is like reading a *New York Times* article on Bat Boy—the sort of article that you would expect to see in the *Weekly World News*. The best explanation for this is that it is April Fools' Day, or that the *Times*' staff is pulling a prank. We can thus (at least initially) dismiss the article despite our antecedently taking the *Times* to be a reliable news source. For although we had this antecedent expectation of reliability, we also had this other

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<sup>30</sup> See Christensen ([2007] 203) on this point.

antecedent expectation of plausibility. And it has not been met. So we can maintain confidence in our beliefs.

The lesson here is that my antecedent expectations about the nature and extent of our disagreement largely shape the way I am rationally required to respond to it. My expectations about *what sorts* of disagreement are likely shape the appropriate response to a disagreement just as much as my expectations about *how much* disagreement is likely.

## 7. Upshots & benefits

I have argued that this is the crucial insight we need to construct a better, more flexible theory of disagreement:

**The Lesson:** The epistemic significance of disagreement depends, at least in part, on your antecedent expectations.

The Lesson is quite general as stated. I have brought out a couple of the relevant sort of antecedent expectations upon which the epistemic significance of disagreement depends. Of course, there are many others and much work left to be done. But notice how much the little that I have done here does get us.

First, it shows how we can get a theory that gives the right verdicts for the right cases without resorting to *ad hocery*. Unlike its rivals, then, my proposal easily meets all three desiderata. No special acrobatics are needed to handle apparent counterexamples. It is enough to notice that our antecedent expectations about disagreement—its likelihood, prevalence, and nature—shape its significance.

I intend my story to give us a slew of somewhat sensible points that any plausible theory of disagreement should be able to accommodate. This is, I hope, compatible with some of the more sophisticated views of disagreement, such as the later Christensen and Elga. Thus, I intend my

story as both a check on any acceptable theory as well as the beginnings of a particularly plausible one.

But my story does more than get the right verdicts for the right cases. It also *explains* why those are the right verdicts in a psychologically accurate way. Recall why disagreement is significant in *easy cases* like Stoplight. The discovery that a peer disagrees with you about this comes as a surprise. This unexpected information requires accommodation, and hence, revision.<sup>31</sup> The discovery that a peer disagrees with me about the efficacy or moral significance of the death penalty is not surprising in the same way. We know that disagreement abounds on this issue—or if it doesn't, it should. (It is a difficult issue, after all.) If we have already accommodated this then we needn't revise further. Of course, many of us haven't already accommodated the fact that there is significant disagreement about many difficult matters. And if we haven't, disagreement will be significant and we will have to revise. A word on this.

It is crucial to notice that the considerations that allow disagreement to be less epistemically significant, and thus allow for the possibility of confidence maintenance, are the same considerations that mandate that the belief in question can only be maintained very weakly. A theory of disagreement that appropriately takes into account these insights is one that involves being *already* humble with respect to the *difficult cases*. It mandates a kind of *humility* about many difficult questions and it does so antecedent to any actual disagreement.

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<sup>31</sup> The accommodation needn't be downward, as Christensen points out:

...such mechanical difference-splitting with peers is not in the end true to the motivation for Conciliationism. Suppose, for example, that I am a doctor determining what dosage of a drug to give my patient. I'm initially inclined to be very confident in my conclusion, but knowing my own fallibility in calculation, I pull back a bit, say, to 0.97. I also decide to ask my equally qualified colleague for an independent opinion. I do so in the Conciliatory spirit of using her reasoning as a check on my own. Now suppose I find out that she has arrived – presumably in a way that also takes into account her fallibility – at 0.96 credence in the same dosage. Here, it seems that the rational thing to do is for me to increase my confidence that this is the correct dosage, not decrease it as difference-splitting would require ([2009] 4).

This makes me think that *conciliatory* views should really be called *revisionary*, since the revisions we are required to make won't always be conciliatory, downward ones.

I am not therefore arguing for a view that allows you to maintain a *high* degree of confidence about difficult moral questions in the face of peer disagreement about the issue. I am arguing for a view that allows you to sometimes have low confidence about such difficult cases even in the face of some peer disagreement. That says nothing about whether we are allowed anything but agnosticism about these issues to begin with. The result is that:

**Humility.** We should be far less confident in our beliefs about the *difficult cases* than we are in our beliefs about the *easy cases*.

Often, when we are excessively confident in our beliefs, awareness of peer disagreement will make the possibility that we are wrong salient and will lead us to reconsider the status of the evidence and revise accordingly. But—and this is crucial—disagreement itself does not *directly* mandate our lowered confidence. It brings our attention to the evidential situation and hints that it may be murky—murkier than it initially seemed. In doing so, disagreement lends weight to—or at least shows the weight of—our peers’ testimony.

I do not take *Humility* to be a negative result of my account. In fact, I think that it has significant independent plausibility. Most of us are irrationally overconfident in our beliefs about difficult factual, political, moral, and philosophical issues—in other words, about issues with *murky* evidential situations. There is epistemic work for disagreement in those areas where we are overconfident. There, disagreement is newsworthy, and there, it can indirectly lead us to revise our beliefs. But it need not do so for the already humble. For them, disagreement is not news.



## Chapter 3

### Unreasonable Knowledge

#### 1. A familiar dilemma

Do I need to know that my olfactory sense is working properly before I can know that you stink? More generally, must I have antecedent knowledge of a belief-source's reliability before I can use that source to gain knowledge? If we say that I must, we make knowledge too difficult. Children, non-human animals, and others who struggle with reflective, higher-order beliefs turn out never to know anything. There is a more general skeptical threat as well. To know that our senses are reliable we must know something about the workings of the world. Our knowledge about the world is acquired in part through the senses. So "we are in the impossible situation of needing sensory knowledge prior to acquiring it. Similar considerations apply to other sources of knowledge like memory and induction" (Cohen [202], 309).<sup>32</sup>

The antecedent knowledge requirement makes knowledge at best difficult and at worst impossible. Yet if we reject it, we make knowledge much too easy. If we can gain knowledge through sources of whose reliability we are ignorant, then we can end up knowing what we have no reason to believe.<sup>33</sup> Worse yet, our ability to acquire knowledge *just like that* allows us to bootstrap to knowledge of our own reliability. If I can use my, unbeknownst to me, reliable color vision to learn that the carpet is blue, then I can combine this with my knowledge that the carpet *seems* to me to be blue, and gain evidence for the reliability of my color vision. After all, if the carpet seemed blue and it is blue, then my vision was accurate in this instance. That is some evidence for its general reliability. But it is absurd that I could gain knowledge of my own reliability *just like that*. Abandoning the antecedent knowledge requirement makes knowledge easier, but risks making it absurdly easy.

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<sup>32</sup> This is sometimes called the Problem of the Criterion. See Chisholm [1973].

<sup>33</sup> I am thinking here of Bonjour's [1980] clairvoyant case, which I will discuss in section 2.21.

How to negotiate this dilemma? One option is to embrace bootstrapping. (Better that knowledge be easy than that it be impossible.<sup>34</sup>) Another is to try to make bootstrapping more palatable. (Perhaps not all ways in which I might bootstrap are equally objectionable.<sup>35</sup>) A third is to embrace skepticism. (Bootstrapping is just too absurd.) A fourth option is to try to avoid both by arguing that, in a way, there is nowhere to bootstrap to. We already somehow (automatically, a priori, immediately,...) know that our faculties are reliable.<sup>36</sup> I won't evaluate these options here. Some are more promising than others, but none are uncontroversial.

Instead, I want to suggest a novel way out. I will make two moves. I will first separate knowledge and justification, rationality, and the like.<sup>37</sup> I will deny that the latter is a component of the former (as per the standard justified-true-belief-plus account of knowledge<sup>38</sup>). I will also deny that the latter is to be explained in terms of the former (as per more recent knowledge-first

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<sup>34</sup> van Cleve [2003] argues for this option. Kornblith ([2009] 263) summarizes van Cleve's position nicely as follows:

Bootstrapping may seem unattractive, van Cleve claims, but only when we fail to consider the alternative. Any epistemological view which does not legitimate bootstrapping, he argues, will inevitably lead to scepticism. And if the choice is between bootstrapping and scepticism, van Cleve will happily accept bootstrapping.

The most obvious qualm about van Cleve's position is that bootstrapping is just too absurd. If this is the best we can do, then we had better either accept that we do not know anything or keep looking for a better solution to skepticism.

<sup>35</sup> Kornblith [2009] distinguishes between better and worse sorts of bootstrapping. Bootstrapping is not so bad, he argues, if the agent only bootstraps when the relevant faculty is reliable. Suppose she is somehow, unbeknownst to her, sensitive to reliability facts. When that is so, then bootstrapping is a reliable process, and thus a perfectly legitimate way to gain knowledge (on a reliabilist picture). The qualm here is that the absurdity we see in bootstrapping does not dissipate when we learn that the relevant process is reliable. Bootstrapping seems to be a bad way to gain knowledge, period.

<sup>36</sup> Reid [1764] is supposed to have held this sort of view. Wright [2004] also argues for something like it. It is not entirely unproblematic. That I am a reliable perceiver is a contingent fact; so is the fact that I am not a brain in a vat. If I have *a priori* knowledge of or justification for these facts, then I have *a priori* contingent knowledge. That seems odd. For criticisms, see Cohen's [2002]. For a more in depth discussion, see Hawthorne [2002]. The most immediate worry I have about this view is that it is seriously mysterious. Why on earth should we think that we are *a priori* justified in thinking that we are reliable?

<sup>37</sup> I will talk just in terms of justification from now on. What I say can be extended to rationality and other epistemic goods.

<sup>38</sup> Plato suggests this in his *Theatetus* 201 and *Meno* 98. Gettier [1963] attacked it, and most of the post-Gettier epistemology until Williamson [2002] tried to defend it.

epistemology<sup>39</sup>). Others have suggested severing the connection between knowledge and justification, but not, as far as I know, to the extent that I suggest.<sup>40</sup> I reject the antecedent knowledge requirement, so that you can know the colors of things simply in virtue of having the right sort of connection to them. However, I maintain an analogous antecedence requirement for justification. So although you can know that the carpet is blue just by looking at it, that does not automatically allow you to reason with the proposition that it is blue—at least not in a way that can produce more knowledge, justification, or other epistemic goods. This second move, the claim that knowledge is not something we are automatically entitled to reason with, is the crucial and original point upon which everything here depends.

Let me start by explaining the benefits and drawbacks of rejecting the antecedent knowledge requirement. I will then present my view and show how it negotiates the drawbacks in a satisfactory way.

## 2. Rejecting the Antecedent Knowledge Requirement

Consider a paradigm example of the sort of view that rejects the antecedent knowledge requirement:

**Reliabilism.** *S* knows that *p* if and only if *p* is true and *S*'s belief that *p* results from a reliable process (one that typically produces true beliefs)<sup>41</sup>

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<sup>39</sup> Williamson [2002].

<sup>40</sup> Foley argues for a position like this in his [2002], [forthcoming], and [ms.]. Foley's own position does not go as far as my second move, but the considerations he presents make a good case for doing so. Others have suggested that knowledge does not have a justification component; see Dretske [1983], Armstrong [1973] and Goldman [1967]. (Goldman changed his mind in his [1979].) See Kornblith [2008] for a nice discussion of the literature.

<sup>41</sup> Reliabilism has been proposed and defended by Armstrong [1973], Goldman [1963], and others. The view has its problems, but I will gloss over them for now. I am using reliabilism as a paradigm of a particular sort of theory, one that does not in general face these problems. In particular, other views that deny the antecedent knowledge requirement won't automatically succumb to the notorious Generality Problem for reliabilists. (For a good discussion see Conee and Feldman [1998].) The problem is that the same process specified in more or less generality can seem reliable on one specification but unreliable on another. Consider: perception is typically thought of as a reliable process. But what about perception in a darkened room? For any given case, there seem to be no principled reasons for specifying the process one way rather than another.

On this view, my belief counts as knowledge just in case it is true and reliably produced. I can thus gain knowledge through reliable belief-forming processes even if I have no reason to think that these processes are reliable. Reliabilism allows me to acquire a whole lot of first-order knowledge about the colors of various objects in my office, while at the same time knowing nothing about the reliability of my color perception. In rejecting the antecedent knowledge requirement, reliabilism thus allows for *basic knowledge*:

S has **basic knowledge** that *p* just in case S knows that *p* prior to knowing that the source of S's belief that *p* is reliable.<sup>42</sup>

How plausible is it that we have basic knowledge? Opinion is split.

Many [...] have no intuitive qualms about basic knowledge whatsoever. And those that might have intuitive reservations—How can I know *P* on the basis of *S* if I don't know that *S* is reliable?—have learned to live with basic knowledge, mainly because they can see no other way.... (Cohen [2002] 310)

The next two sections will show why basic knowledge can seem both indispensable and problematic. This will help underscore the tension of the original dilemma.

## 2.1 Benefits to the puppies, the babies, and the anti-skeptics

Reliabilism gets many of its benefits from the fact that one needn't have a clue about the reliability of one's faculties, sources, or cognitive processes before one can use them to acquire knowledge. It gains its benefits, in other words, from the rejection of the antecedent knowledge requirement, which is explicitly as follows:

**Antecedent Knowledge Requirement.** A potential knowledge source *K* can yield knowledge for *S*, only if *S* first knows that *K* is reliable.

This can be weakened by requiring antecedent *reason to believe* that *K* is reliable or *evidence for* *K*'s reliability, rather than knowledge. It can also be put entirely in terms of evidence, justification, and the like. I will argue, however, that not all formulations are equally plausible.

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<sup>42</sup> Cohen [2002] and [2005].

If knowledge of  $p$  doesn't require knowledge or any reason to think that the source of that knowledge is reliable, then we can say, as many want to, that infants and non-human animals really can know. It is much more plausible that the dog knows where its food bowl is, than that it knows (or ever could know) that its olfactory sense is reliable. And though a young child might not know much, she probably knows that *this is red* or *that is home*. More generally, it is plausible that infants and non-human animals can possess all sorts of ordinary, first-order knowledge, even if it is implausible that they can possess any reflective, higher-order knowledge, or knowledge of their own reliability.<sup>43</sup>

But notice that it is not just the babies and the puppies that sometimes know what they cannot ground or justify. We are often in this position ourselves.

**Quiz Show.** You are participant on a quiz show. The host asks you a question. An answer immediately comes to you, you punch the buzzer, call out, and... you are correct! Upon reflection, you realize you have no idea where that answer came from.

Sometimes we do know that  $p$  even though we can neither remember where we got the belief that  $p$  nor come up with any reason at all to justify it. Perhaps we have none—or at least no reason of the usual justifying sort. Yet in the context of game shows and the like, it still seems that we know. If we do, we have what has been called “quiz show knowledge” (Feldman [2005], 113). Rejecting the antecedent knowledge requirement opens the door for us to have this kind of knowledge.<sup>44, 45</sup>

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<sup>43</sup> Kornblith [2002] argues, “the kind of knowledge philosophers have talked about all along just is the kind of knowledge that cognitive ethologists are currently studying” (30). He adds, correctly I think, that these cognitive ethologists aren't simply “wooly-minded pet owners” (31), but respectable scientists studying animal behavior. (Kornblith himself is not a wooly-minded pet owner, though he is a pet owner.)

<sup>44</sup> You might worry, as Feldman does (on p. 114), the quiz show participant doesn't *know* because it isn't even clear that they *believe*. I deal with this worry in section 3.4.

<sup>45</sup> Here is another worry. Perhaps children and animals do not have the concepts of knowledge or reliability. But perhaps we can still make sense of them knowing that they are reliable even if they cannot articulate it. Likewise with the quiz show participant: maybe she has her reasons, though she cannot articulate them. I think this is sometimes what happens—but not always. And all I need for now is that there are some plausible cases in which we do not have reasons or higher-order knowledge.

## 2.2 Drawbacks

The benefits of externalist views like reliabilism come from their rejection of the antecedent knowledge requirement. Likewise with their drawbacks. In fact, one common intuition underlying most of the major anti-externalist arguments looks just to be a restatement of the antecedent knowledge requirement. The problem of bootstrapping is just one way to bring out the absurdity that results from rejecting this requirement. Let me first bring out the intuitive problems, and then explain bootstrapping.

### 2.21 An anti-externalist intuition

One common anti-externalist (and thus anti-reliabilist) intuition is that epistemic goods must be somehow *accessible* to the subject. She must be aware of them, if they are to be of any use at all.<sup>46</sup> By making mere reliability suffice for knowledge, externalists put the conditions of knowledge out of the agent's reach. Whether the agent fulfills these conditions depends on facts that the agent might not have any clue about—facts that might be inaccessible to the agent. Thus the intuition is that *mere* reliability does not suffice for knowledge—*knowledge of* reliability is also required. The thought is that:

**Anti-Externalist Intuition.** It does you no good that an external (albeit reliable) connection between the world and your beliefs obtains, if you are not aware of the fact of its obtaining.

BonJour's famous case brings out the worry most clearly:

**Norman the Clairvoyant.** Norman is reliably clairvoyant but has no evidence for or against either the power of clairvoyance, or his own possession of that power. "One day Norman comes to believe that the President is in New York City, though he has no evidence either for or against this belief. In fact the belief is true and results from his [reliable] clairvoyant power" (BonJour [1980] 21).

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<sup>46</sup> Not all internalists share this intuition. Some deny any sort of access requirement (see, e.g., Conee and Feldman [2004]). This intuition is, however, one major motivation for rejecting externalist theories of knowledge.

It seems strange that Norman could know or be justified in believing that the President is in New York City, while from his own perspective he has no evidence for either (a) the reliability of the process that produced his belief or (b) the belief itself. If Norman continues to hold the belief about the President's whereabouts despite this lack of evidence, he is acting in what looks like an epistemically irresponsible manner. Yet reliabilism rules that Norman is justified.

The intuition BonJour is pumping here is that epistemic responsibility is necessary for epistemic justification, and thus knowledge (since justification is necessary for knowledge). According to the reliabilist, the mere fact that a reliable external process obtains justifies Norman's belief—yet it does not seem as if Norman has taken, or is even capable of taking, the epistemically responsible steps required to be justified.

What would it take for Norman to be in a position to take these steps? *Access*. If Norman had access to the fact that his process is reliable, he would be in a position to be epistemically responsible and thus justified. Thus, according to some internalists like BonJour, access is a necessary condition of justification. This can seem especially plausible if you think that epistemology is meant to “lead” us toward knowledge or justified belief. If we seek guidance, then perhaps the “justifiability of [the agent’s] belief should be judged from [the agent’s] own perspective, rather than from one that is unavailable to him” (BonJour, [1980] p. 23).

This accessibility constraint appears in many objections to externalism. Some of these objections directly focus on the idea that we need access in order to expect any sort of epistemic *guidance*, while others rely on the access intuition indirectly by claiming that externalism cannot capture what it is to *have a good reason*.

The guidance issue is as follows. By placing justifiers beyond agents' ken, externalists are unable to guarantee access and therefore guidance. Reliable processes may be truth-conducive, so reliabilists may be able to guarantee the probable truth of a belief. They cannot, however, guarantee my own justification of that belief and therefore my own knowledge of the truth of that

belief. Without the guarantee, it seems that externalism cannot guide me toward truth and knowledge. If this is so, perhaps externalism is not a very useful epistemological theory. This is implicit in Stroud's argument that an agent must see herself as having good reason "in some sense of 'having good reason' that cannot be fully captured by an 'externalist' account" (Stroud [1989] 143). The sense that I think Stroud is appealing to is a sense that requires *access* to that reason. And as Foley says, if I want to answer the question about what I should believe, I am seeking action-guiding advice. Externalism, he says, is bound to be unsatisfying because:

I am not likely to be content with telling myself that I am to use reliable methods of inquiry. Nor will I be content with telling myself to believe only that which is likely to be true given my evidence. It is not as if such advice is mistaken. It is just unhelpful... Besides, I cannot simply read off from the world what methods are reliable ones, nor can I read off when something is likely to be true given my evidence. (Foley [1993], 163)

Foley's point here is that in rejecting the antecedent knowledge requirement, we lose guidance and access.

Given the benefits of rejecting the antecedent knowledge requirement, it can be tempting to dismiss this internalist intuition as a mere intuition. But there is a deeper problem with disposing of the antecedent knowledge requirement—one that is continuous with the internalist complaints. In fact, one way of understanding this problem is as the explicit showcasing of the absurdity latent in the externalist's position.

## **2.22 Bootstrapping**

Here is a bad way to try to determine if your color vision is reliable: look around the room noting how things appear to you. Go through the following (admittedly idiosyncratic) thought process: "The carpet is blue, and it seems blue; the bookcase is brown, and it seems brown; the file cabinet is yellow, and it seems yellow..." and so forth. Look back on this track record you have established and conclude that your color vision is reliable. After all, it was correct each time.



Call this procedure *bootstrapping*. Consensus has it that bootstrapping is bad and no reasonable epistemological theory should allow for it.<sup>47</sup> It is absurd that you could come to know that your color vision is reliable just by noting how things seem to you. Without some *independent* check on what colors things are, it seems that you cannot use the fact that the carpet is blue to reason your way to the reliability of your color vision. Perhaps this is what is wrong with bootstrapping, then:

**Diagnosis.** You are reasoning with propositions with which you are not entitled to reason.<sup>48</sup>

Reliabilism is one view that allows for just such illegitimate reasoning.

Here are the commitments that get reliabilists in trouble. First, of course, is the thesis of reliabilism:

**Reliabilism.** *S* knows that *p* if and only if *p* is true and *S*'s belief that *p* results from a reliable process (one that typically produces true beliefs).

The second troublesome commitment follows from Reliabilism. It is the rejection of the Antecedent Knowledge Requirement:

**No Antecedent Knowledge Required.** You do not need to know that a process is reliable before you can use that process to gain knowledge.

The third stipulation needed is that I, the subject, am in fact a reliable perceiver. In particular, my color vision is reliable. We also need to assume that, like Norman, I do not know that my color vision is reliable. I have no reason to think it is not, but I have no reason to think that it is either. Perhaps I haven't really stopped to think about it. In short, we must assume that I am:

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<sup>47</sup> See Cohen [2002], Elga [2006], Fumerton [1995], Vogel [2000], and White [2006].

<sup>48</sup> This is the diagnosis I will stick with for the remainder of the paper. But it is not the only one. Another, more popular diagnosis is that you are reasoning in *ways* in which you are not entitled to reason with. This has been explored in a number of ways by, e.g., Vogel [2008], Weisberg [forthcoming], Kornblith [2009]. It is a plausible diagnosis. The difficulty is providing principled ways to distinguish the sort of reasoning that goes on in bootstrapping from legitimate ways of reasoning. What I want to do here is to put these suggestions aside and explore another option—one that has not been, as far as I know, previously proposed. The goal is to try something that has not been tried before and see where it might lead. (Even if it is ultimately untenable, I think it will provide some insights into the nature of knowledge, rationality, and bootstrapping.)

**Unbeknownst To Me Reliable.** My color vision is reliable but I do not know this.

When I bootstrap, then, it looks something like this:

*Step 1:* I take a look around the room and note that the carpet is blue, the bookshelf is brown, the chair is black, and so forth. [Call these the **colors premises**.]

*Step 2:* I reflect on my seemings and note that the carpet seems blue, the bookshelf seems brown, the chair seems black, and so forth. [Call these the **seemings premises**.]

*Step 3:* I notice that the carpet is blue and it seems blue, the bookshelf is brown and it seems brown, the chair is black and it seems black, and so forth.  
[This is a **conjunction of the premises in step 1 and those in step 2**]

*Step 4:* I congratulate myself on my excellent track record and conclude (on its basis) that my color vision is reliable. [Call this conclusion **reliability**.]

I get the colors premises in step one (that such-and-such object is this-or-that color) because I know them. This just follows from the thesis of reliabilism plus the fact that I am reliable. I get the seemings premises in step two by reflection: I can (typically) tell how things seem to me. (Perhaps then I also get them directly from the fact that I am reliable with respect to my seemings.) The premise in step three follows deductively: it is just the conjunction of all of the premises in step one and all of the premises in step two. This track record data is good inductive evidence for the reliability of my color vision. That is how I get to conclude that my color vision is reliable.

My reasoning seems flawless: I conjoin premises I know (about colors and seemings), and then reasonably interpret the deductively valid conclusion that follows. Yet clearly something has gone wrong. I managed to learn that my color vision is reliable by merely looking around the room. It is uncontroversial that I can typically know what colors things *seem* to me to be. But if I do not know whether my color vision is reliable, how can I come to know that the carpet is blue by merely looking at it and having a blue-seeming? “You can know it because you reliably perceive it,” the reliabilist answers, “that is just what my theory predicts.”

Maybe that is right. And maybe reliabilism is the right theory of knowledge. Yet even if we grant that, it still seems fishy for me to use these colors premises in reasoning in order to get to the reliability conclusion. Things would, of course, be different if the colors of the various objects were, say, written on their bottoms. I could then turn each object over in order to check whether I

was correct. But absent some such *independent* check, I cannot use this procedure to establish the reliability of my color vision. Typically, we need some sorts of grounds for our premises.<sup>49</sup> The reliabilist picture of knowledge, however plausible it may be, doesn't seem to give us any. Why not? Because in rejecting the antecedent knowledge requirement, reliabilism divorces what I know from what I have any reason at all to believe. But if we are not rejecting Reliabilism, then we have to accept that we have such knowledge. And if we do, then it seems that we can reason our way to our reliability, for:

**Reason.** If S knows that P, then S is entitled to reason with P.

It is quite plausible that we can reason with what we know—that we can use our knowledge to extend our knowledge through good inferential processes. This is, if not an explicit stipulation, certainly an assumption underlying much of our epistemological theorizing. It is also the one as of yet unquestioned premise of the bootstrapping argument. I will now argue that we should reject it.<sup>50</sup>

### 3. The position

Why reject Reason rather than the Antecedent Knowledge Requirement (and Reliabilism)? Isn't the former far more independently plausible than the latter? There are a couple of ways to motivate the position I will argue for here. First, I am trying to resolve a dilemma—to negotiate a way between skepticism and bootstrapping. If we accept the antecedent knowledge requirement, we succumb to one side; if we reject it, we succumb to the other. The benefits of rejecting the

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<sup>49</sup> Sometimes we do not, like when we are assuming something for *reductio* or when the premise or assumption is in some sense *basic*. But 'the carpet is blue' doesn't seem like that.

<sup>50</sup> You might worry that rejecting Reason is incompatible with reliabilism. Isn't reasoning with known premises a reliable process? If it is, then reasoning with what I know should be a perfectly legitimate way to gain knowledge. This may be a barrier to the reliabilist accepting my proposal. Whether it is depends on whether the reliabilist has a response to the generality problem (see fn. 6). While reasoning from known premises looks like a reliable process, reasoning from premises you have no reason to believe looks like an unreliable process. How to restrict reliabilism so that it avoids these problems is beyond the scope of the paper, for my purpose here is to argue for rejecting Reason. This is a move that will be open to many others. Reliabilism is just one example of the sort of view for which rejecting Reason might be beneficial.

requirement are great: we secure knowledge for the babies, the puppies, and ultimately ourselves. I want to hold on to those benefits while avoiding the drawbacks. In particular, I want to avoid the illegitimate sort of reasoning characterized by bootstrapping.

To save No Antecedent Knowledge, I will motivate a position in logical space that separates knowledge and justification and denies Reason. I will not be arguing for the uncontroversial claim that we can have justified beliefs that do not amount to knowledge. I will rather argue that, sometimes, we can know that  $p$  without having a justified belief that  $p$ . When we do have this sort of knowledge, it is somewhat impotent: it cannot be used in reasoning to produce more knowledge, justification, or the like.

This will have some controversial results. We will not be able to use knowledge in all of the ways and for all of the purposes that we always thought we could. If we can know something without being justified in believing it, then we will not always be able to defend our beliefs, and we will not always be able to use them to reason and gain further beliefs. Knowledge will be, in a way, less powerful than we currently take it to be. But it will also be less problematic.

I will also argue for a *particular* way of understanding knowledge and justification. I will argue that antecedence requirements are plausible with respect to the latter but not the former. An imperfect but helpful way of seeing the position is that I will argue for externalism about knowledge and internalism about justification. This is a surprisingly motivated and formidable position that has not yet had its due attention.

I do not know why it has not. It seems to me to be a more natural—or at least more thoroughly externalist, externalist position.<sup>51</sup> Furthermore, externalism seems to me to be a much more plausible view of knowledge than of justification or rationality, just given our everyday understandings of the concepts. We associate knowledge with truth and accuracy, justification with reasons and arguments. But the crucial and original move here is not the separation of

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<sup>51</sup> It is at least a more *badass* form of knowledge externalism. (I mean ‘badass’ in the technical, and not merely profane sense. See Wallace [2003]).

knowledge and justification. That has been proposed.<sup>52</sup> The crucial and original move is rather the rejection of Reason.

One big idea of this paper then is that there is space, at least logical space, between the rules of reason and the conditions of knowledge: they come apart. Merely having met the conditions of knowledge (e.g., having a reliably-formed true belief) need not suffice for being entitled to reason with what you know. Of course, you could build it into your analysis of knowledge that knowing something entitles you to reason with it. But I will argue that this is exactly what externalists need not, and perhaps ought not to do. Objections to such theories that rely on Reason are therefore much too quick. One smaller idea in this paper is that this is exactly what is going on in the bootstrapping debate.

To defend this position, I will consider some objections to it. It will be instructive to see why the objections fail. In responding to them, I will show how this position is surprisingly plausible and motivated.

### **3.1 A devastating structural difficulty**

The first, and perhaps most urgent objection that must be disposed of is that this position does not make structural sense. Williamson argues that there is a devastating difficulty to a position that separates knowledge and justification in the way that I suggest.<sup>53</sup> He is responding to a proposal by Robert Audi. In his [2001] and elsewhere, Audi combines externalism about knowledge with internalism about justification so that knowledge has to do with truth tracking, and justification has to do with normative belief appraisal in the following way:

...justified beliefs are those one is in some sense in the right in holding: holding them is normatively appropriate given one's sensory impressions, rational intuitions and other *internal* materials. In the language of desert, one does not deserve criticism (from the

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<sup>52</sup> See fn. 8.

<sup>53</sup> All references to Williamson in this section are from his [2007].

point of view of the effort to reach truth and avoid falsehood) for holding them. (Audi [2001], p. 29, my emphasis)

Williamson argues that this position “misalign[es] the concepts of knowledge and justification [...] and makes them] look more independent of each other than they really are” (112).

Williamson asks us to consider the following situation:

S knows (but does not have a justified belief in)  $p$ .  
S (does not know but) has a justified belief in  $p \rightarrow q$ .  
S deduces  $q$  from  $p$  and  $p \rightarrow q$  via *modus ponens*.

Now ask: What is the status of S’s belief in  $q$ ?

Does S know  $q$ ? Is she justified in believing it? It is not clear. “[S’s belief  $q$ ] seems to be good in some way, since it is held on the basis of competent deduction from premises each of which was either known or believed with justification” (12). But Williamson argues that S cannot know  $q$  because “S does not know one of the premises on which her belief in  $q$  is essentially based. Indeed,  $q$  may even be false, for S may have a justified false belief in the conditional” (ibid.).

Williamson is suggesting that S cannot know  $q$  via competent deduction unless she *knows* all of the premises from which she is deducing it. He gives a similar reason for supposing that S’s belief in  $q$  is not justified either. He points out, “S lacks justification for one of the premises on which her belief in  $q$  is essentially based” (ibid.). Williamson thus also suggests that S cannot justifiably believe  $q$  via competent deduction unless she justifiably believes all of the premises from which she is deducing it.

All of that seems right. If I am justified in believing  $p \rightarrow q$ , but I am not justified in believing  $p$ , then I cannot, even by valid deduction, become justified in believing  $q$ . The analogous claim about knowledge seems right as well: I cannot gain knowledge by deduction from premises, one of which I do not know. The problem, then, is that in separating knowledge and justification, we allow for this awkward situation in which I reason with what it is permissible for me to reason

with (known premises or justified premises) and get conclusions that are neither known nor justified.

Williamson's worry here looks serious. I am sure it is for most views that try to separate knowledge and justification. But recall that the separation I suggested was really quite drastic. One result of it is a denial of Reason:

**Reason.** If S knows that P, then S is entitled to reason with P.

In other words, on my view, knowing something does not automatically entitle you to use it as a premise in your reasoning. The view thus won't allow me to gain knowledge via competent deduction from one merely known premise and another merely justified one. This is why the argument Williamson presents fails—why S can neither know nor be justified in believing in *q*, even on my way of separating knowledge and justification. There is, therefore, no “devastating structural difficulty” here.<sup>54</sup>

### **3.2 Objection: This proposal misses the point of knowledge**

Perhaps there is a more fundamental worry, however. I am proposing that we separate knowledge and justification so that, crucially, to meet the conditions of the former is not to automatically meet the conditions of the latter. This allows us to hang on to the antecedence requirement for justification while rejecting it for knowledge. It is not immediately clear how this is supposed to help. The worries about access and guidance will remain in an even more magnified form. If I cannot reason with what I know, I cannot use what I know to guide my actions and my beliefs.

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<sup>54</sup> One of Williamson's points is that though we neither want to call it known nor justified, the resulting belief does seem somehow epistemically good. If that is right, then my response is missing the point. However, I am not really sure that there is something good about a deductively valid conclusion from a *merely* known premise and a *merely* justified one, other than, of course, the fact that it is deductively valid.

And isn't the point of knowledge to guide action?<sup>55</sup> How could knowledge do this if it cannot entitle me to reason with what I know? There are at least two plausible lines of response.

### 3.21 Two kinds of guidance

There are at least two ways in which we might be guided by what we know: reflectively or unconsciously. *Reflective* guidance is the sort that the above objector has in mind. It involves conscious reflection and inference from one's beliefs. *Unconscious* guidance is quicker and more automatic. When we are unconsciously guided by what we know, we do not think, "The cup is about six inches away from me so I should move my hand *just like that* to get it." We just move and get it.

If we can credit animals with knowledge at all, we should be able to make sense of their knowledge guiding them—toward the food bowl, for example. It is not as if animals *reason* their way toward food, safety, shelter, and sex. They have certain instincts—a kind of programming. But they are also sensitive to their environment. They are connected to the world in a way that leads to successful action.

When we are unconsciously guided, we are not always aware of being guided. We may not even be able to reflect on our experience and realize that we are being guided. Unconscious guidance has a causal and non-reflective role. It is a non-cognitive sort of guidance, the sort that happens when I am compelled to do something I cannot explain.

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<sup>55</sup> Sorensen [2002] initially suggests that "The point of knowledge is to guide action and produce new knowledge", and again, "The normal point of acquiring knowledge is to gain further knowledge through inference," (556). He later steps away from this by arguing for what he calls *junk knowledge*: knowledge that cannot be used to gain further knowledge through inference. "If one associates knowledge too intimately with these roles," he says, "then one will rule our junk knowledge as a contradiction in terms" (556-7), and he does not think that it is. Another way of putting my proposal, then, is that *mere* knowledge is *junky*: it cannot be used to gain more knowledge, justification, or other epistemic goods.



Consider the case of the fire chief who, for no apparent reason, called his firefighters out of the house just before it collapsed.<sup>56</sup> He *knew* that the building would collapse, but could not say how or why he knew it. He was, it seems, just reliably picking up on crucial features of the environment. Fortunately for his firefighters, the chief did not reflect on his lack of grounds and stay in the building anyway. He was guided by what, inexplicably and unbeknownst to him, he knew. Crucially, the firefighter did not need to *reflect* on what he knew in order for it to guide him.

There is nothing spooky about this sort of guidance. It is easily explained by a distinction in contemporary cognitive psychology, between conscious and unconscious processes.<sup>57</sup> The ‘adaptive unconscious’ refers to mental processes that influence judgment and decision making, but are not (typically) accessible to introspective awareness. It is *adaptive* because many of the unconscious processes at work are beneficial. They are shaped by evolution so as to allow us to quickly respond to patterns in our environment. The adaptive unconscious is different from conscious processing in that it is quick, effortless, and less flexible; it makes use of shortcuts and heuristics.<sup>58</sup> When we reason our way through a math problem, we use these conscious, reflective processes; when we sense danger, we do so through the adaptive unconscious.

Gendler [2008] calls the cognitive states we form as a result of the adaptive unconscious *aliefs*.<sup>59</sup> She says that aliefs are:

associative, *automatic*, and *arational*. As a class, aliefs are states that we share with nonhuman *animals*; they are developmentally and conceptually *antecedent* to other cognitive attitudes that the creature may go on to develop. And they are typically also *affect-laden* and *action generating*. (641)

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<sup>56</sup> See Klein [1998].

<sup>57</sup> See Wilson [2002]. Other work in the Dual Processing tradition such as Sloman [1996], Kahneman [2003] and Baumeister [2005] is also relevant.

<sup>58</sup> See Kahneman and Tversky [1982] for examples of heuristic-based reasoning.

<sup>59</sup> Though Gendler mostly focuses on (admittedly more entertaining) *false* aliefs.

Notice that these states are a lot like the sort of knowledge I have been arguing that we have. They are states available to small children and non-human animals. They are states we are in long before we acquire the ability to believe and reflect. They affect our emotions and they guide our actions. They are also, Gendler says, *arational*. (Though they can also be rational and, as in Norman's case, irrational.)

I see no reason why knowledge must be a process that takes place in the slower, reflective system—why we cannot have *aliefs* that amount to knowledge as much as we can have beliefs that do so. We should not want to deny the fire chief *knowledge* that he was in danger.<sup>60</sup> And if he did know this, we can certainly make sense of his knowledge guiding his actions.

So knowledge can certainly guide action. And, importantly, it can guide *successful* action: she who knows more will be more successful in what she tries to do. I think this way of responding to the guidance worry is mostly right. And it shows how we haven't "missed the point" of knowledge.

### 3.22 Still missing the point? Maybe that is okay.

But perhaps unconscious guidance is not good enough when it comes to knowledge. There are, again, at least three things to say here. First: to *separate* knowledge and reason is not to make them *incompatible*. Even if knowing that *p* does not automatically entitle me to reason with it, it may well be that most of the time, when I know *p*, I am entitled to reason with it—perhaps because in the process of gaining knowledge I also gained reasons or justification.<sup>61</sup>

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<sup>60</sup> But there may be similar cases in which we might deny him *rationality*. The fire chief is a hero for sure—he did the right thing at the right time. But his success is so impressive in large part *because of* the lack of *reasons* for belief.

<sup>61</sup> This is in line with a more general response that I think is available to externalists accused of putting the justifiers "out of reach" and "beyond the agents' ken". It is not that, in making the conditions of knowledge external to the agent, they make them in principle inaccessible. It is just that they are not automatically accessible. It may well be that we often have access to what we know and the fact that we know it.

Second, even if knowledge cannot always guide action (in the reflective way), it is not our only epistemic resource. Notice that my beliefs might have one or more of a number of properties that (a) fall short of knowledge, (b) guide my actions, (c) and when I reason with propositions that possess them, tend to produce more of themselves or other epistemic goods. Here are some examples of the sorts of beliefs I have in mind:

1. Those for which I reasonably take myself to have sufficient justification, evidence, reasons, or grounds.
2. Those which I reasonably take myself to know.

I could satisfy some of these conditions with respect to some proposition without thereby knowing that proposition. Yet no one would fault me for reasoning with propositions that merely satisfy one of these conditions—even if I do not in fact know those propositions. So knowing that  $p$  is at least not necessary for being entitled to reason with  $p$ .

But mightn't it still be sufficient? We might want knowledge of  $p$  to suffice for reasoning with  $p$  if we think that:

- (a) the *only* point of knowledge is to guide action and produce more knowledge, and
- (b) only knowledge can play this role

But we can say against (a): There are other, perhaps more important points to knowledge, such as reliable connection to the truth. Perhaps there is a cluster of conditions that provide entitlement to reason. And perhaps knowledge provides something else entirely. What exactly it provides depends on the theory. (Typically some sort of connection to the truth/world.) And we can say against (b): Knowledge can sometimes guide action and produce more knowledge. But so can other things. Like reasoning with propositions that meet the above conditions. There is undoubtedly much good in reflection and epistemic self-awareness. But we do not need knowledge to accommodate this.

The third thing to say here is that this guidance worry might arise because it has been our mistake, in recent epistemology, to run knowledge and justification together. Foley recently suggested this much. He says:

The deepest mistake of the justified true belief tradition is that it fails to recognize that the project of understanding knowledge and that of understanding justified belief are distinct, independent projects. ([2002], 720)

Foley argues that reliabilists made this same mistake. Once they gave their accounts of knowledge as reliably formed true belief, they then tried to give accounts of justification as just reliably formed belief. Williamson [2002] continues this mistake, Foley says, but he just flips things around by putting knowledge first. According to Foley, connecting knowledge and justification is unfortunate for both: it over-intellectualizes knowledge and divorces justification from our everyday assessments of each other's opinions. Perhaps, then, guiding action (in the reflective sense of guidance) is not the point of knowledge. Perhaps it was a huge, distracting mistake to think that it was.

### **3.3 Objection: This view devalues knowledge**

True beliefs we cannot legitimately reason with—this is not what we think of when we think of the knowledge we know and love. Perhaps in placing all the normativity with justification, the view I suggest devalues knowledge. Or, at least, the notion of knowledge we end up with is thin, almost worthless.

I admit that separating knowledge and reason in the way I suggest does deflate knowledge. But there are motivations for such a thinner notion. For one, knowledge is not, as Foley put it, *over-intellectualized*. It is not this lofty, unreachable state. It is something the babies and the puppies have. It is very much in the spirit of some views to “devalue” knowledge—for precisely

such reasons. (Conveniently enough, these views are exactly the ones that could deny Reason to get out of bootstrapping.)<sup>62</sup>

And the conception of knowledge I suggest is certainly not *worthless*. What good is reflective endorsement and reasoning in the absence of appropriate connection to the truth? We can end up coming to rational, but completely insane world views. Perhaps our very sanity depends on our appropriate connection to the facts—as does our ability to successfully negotiate the world. Much of the dual processing and alief literature focuses on the times when we are wrong in what we believe or intuit. Yet the adaptive unconscious is indispensable to our successful management of everyday situations and to our evolutionary success.

Perhaps we should not think that knowledge is epistemically the Best Thing Ever, anyway. Why think it will get us everything we want—that it will be able to do all important epistemic jobs? Perhaps the sensible thing to do is to divide the labor between knowledge and other epistemic goods. Maybe this doesn't allow us to capture why we care about knowledge. But maybe we care too much about the wrong thing.

### 3.4 A worry about belief

I am arguing for a view on which you can know that  $p$ , but not be entitled to reason with  $p$ . So if you know  $p$  and  $p \rightarrow q$ , you cannot conclude that  $q$ . In fact, you cannot even conclude that  $p$  from  $p$  itself. On my view then, not only am I not entitled to reason with  $p$ , but I am also not entitled to assert  $p$ . Perhaps I am not even entitled to believe it.

This is puzzling. Belief is typically taken to be a necessary condition of knowledge—one that is far less controversial than the justification condition. If I cannot even conclude that  $p$ , on the basis of knowing that  $p$ , then do I even believe  $p$ ? Can this account of knowledge accommodate the fact that in order to know that  $p$ , I need to believe that  $p$ ?

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<sup>62</sup> I am thinking here of externalists as well as, more generally, those who reject the antecedent knowledge requirement.

This worry goes back to the quiz show case. I claimed that the quiz show knowledge phenomenon worked in favor of my proposal. But, Feldman points out that:

The person who blurts out the correct answer to a quiz show question may not even believe that it was correct. She had a motive to give some answer, and this one came to mind. She may have had no stable belief-like disposition concerning the topic. So if we take it that she knew that Columbia is the capital just because she gave the right answer, then we are left with the idea that knowledge does not even require belief. This strikes me as wildly implausible. (114)

I think this should initially strike us as wildly implausible. But I also think there is more to say on the issue. For one, much of what I believe that manifests itself in my actions even though I neither have reason to believe it, nor am inclined to reflectively endorse it. It may well be that I abandon such beliefs as soon as I reflect and realize I have no reason to hold them. Since these beliefs are fleeting and transient, some of our knowledge will be quite fragile on this account. At the same time, it might be that sometimes, when we acquire a belief through the appropriate sort of connection, we feel a compulsion to believe it despite realizing that we have no reasons for it. So some of our knowledge will also be quite robust on this account.

(If you are reluctant to call these *beliefs*, then call them *aliefs*, following Gendler. That explains the sense in which we “believe” them, though they are not available for rational appraisal. Aliefs are exactly the sorts of states which can be hard to resist, despite conscious and deliberate efforts.<sup>63</sup> Ultimately, I do not really mind which term we use. I just want to insist that there is a sense in which we do “believe” when we know without reason—a sense robust enough for this to count as knowledge.)

### 3.5 A final worry: Closure

My inability to conclude  $q$  from  $p$  and  $p \rightarrow q$  (or even simply from  $q$ ) is puzzling in one other way. It looks to be a cleverly (or not so cleverly) disguised denial of closure. And there are views that

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<sup>63</sup> See Gendler [2008] for examples of how (in particular *false*) aliefs can be hard to get rid of.

deny closure without getting as extreme and counterintuitive as my view.<sup>64</sup> So, am I denying closure? And if so, why not do so in a more sensible way? It does follow from my view that closure fails. While my view may be initially more counterintuitive than rival views denying closure, my denial of closure itself is less counterintuitive and more plausible than the alternatives.

I claimed that knowledge does not automatically grant entitlement to reason—that some of what we know cannot be used to produce more knowledge or justification. This alone blocks closure. It will not hold for that class of beliefs that I *merely* know.

Why is this less absurd than the usual denials of closure? What seems bad about denying closure is that even though I have  $p$  and I have  $p \rightarrow q$ , I cannot get to  $q$ . I can think, believe, know both propositions, but not be able to make the simple entailment. But there is an important sense in which even though I *know*  $p$ , I do not *have* it, on my view. Its inaccessibility explains my inability to get to the logical entailments of what I know.

#### 4. Conclusion

I have argued for the possibility of *unreasonable knowledge*: knowledge of propositions that we have no reason for believing, in which we are not justified, and from which we cannot legitimately conclude anything. I have argued that this is a useful conception of knowledge. It allows babies, puppies, and quiz show participants to have knowledge. It negotiates the dilemma between bootstrapping and skepticism. If skepticism remains at all, it does so only for justification. And that seems right: skepticism about justification is, I think, far more difficult a problem than skepticism about knowledge. (As evidence for this take the solution to skepticism about knowledge that I just triumphantly defended.)

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<sup>64</sup> See, for example, Nozick [1981] and Dretske [1983].





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