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Undercutting Underdetermination-Based Scepticism

by

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Abstract: According to Duncan Pritchard, there are two kinds of radical sceptical problem; the closure-based problem, and the underdetermination-based problem. He argues that distinguishing these two problems leads to a set of desiderata for an anti-sceptical response, and that the way to meet all of these desiderata is by supplementing a form of Wittgensteinian contextualism (which can undercut the closure-based problem) with disjunctivist views about factivity (to undercut the underdetermination-based problem). I agree that an adequate response should meet most of the initial desiderata Pritchard puts forward, and that some version of Wittgensteinian contextualism shows the most promise as a starting point for this, but I argue, contra Pritchard, that the addition of disjunctivism is unnecessary and potentially counter-productive. If we draw on lessons from Michael Williams's inferential contextualism then it is both possible, and preferable, to meet the most important of Pritchard's desiderata, undercutting both closure-based and underdetermination-based sceptical problems in a unified way, without the need to resort to disjunctivism.

Keywords: radical scepticism, inferential contextualism, underdetermination, closure, BIV

1. Introduction

IN THIS ARTICLE I WILL DEFEND a kind of Wittgensteinian contextualism against an objection made by Duncan Pritchard (*Epistemic Angst*, forthcoming), and argue that it provides a viable solution to radical scepticism, which he is mistaken to dismiss. Pritchard thinks that there are two kinds of radical sceptical problem, and that by keeping them distinct we can make progress in resolving them. The first step to resolution, as he sees it, is to recognize that the most desirable response to scepticism will be an undercutting, rather than overriding one, and that it will respond to both problems in a unified way. I agree with this. The second step is to focus on the most plausible response to closure-based scepticism, a form of Wittgensteinian contextualism, and develop it in such a way that it can also respond to the underdetermination-based problem. I also agree with Pritchard that Wittgensteinian contextualism is the most plausible response to the closure-based problem, but I disagree over the details of how to flesh this out.

In formulating his response to the underdetermination-based problem Pritchard supplements the Wittgensteinian account with a version of disjunctivism; I argue that this is both unnecessary, and potentially harmful to the account. Instead, I draw on aspects of Michael Williams's inferential contextualism, and show that this allows for a solution to the underdetermination problem without the need for

disjunctivism. All things considered, inferential contextualism will prove to be a viable solution to radical scepticism that should be explored alongside Pritchard's hybrid account.

2. Two Problems

A popular sceptical hypothesis is the brain-in-a-vat, or "BIV", hypothesis. The hypothesis is intended to raise the possibility that the experiences you are currently having (such as patches of red and blue) are created not by corresponding (red and blue) stimulus in the world, but artificially, by an advanced computer plugged directly into your disembodied, and envatted, brain. Duncan Pritchard (forthcoming b) has noted that there are two superficially similar, but distinct, problems that a sceptic could raise with this hypothesis, and that both seem to result in the conclusion that we are mistaken to take ourselves as knowing anything about the external world.¹

Let us start with the similarities. In both cases, our attention is drawn to three claims that look, at least at first, to be intuitively true. The claims are also mutually incompatible (at most two of them can be true at one time), and so consistency demands that we reject one of each set of claims. The problems arise because in each case all three claims seem intuitive, and so it is not clear which should be rejected.

The three claims that make up each problem differ slightly, but again there are similarities. The first claim in each problem is a claim about the rational support² we have for the denial of sceptical hypotheses. The third claim in each problem is the claim that we have widespread (rationally supported) knowledge of the world. These are each taken to be intuitive, arising from our reflections on sceptical hypotheses and on our epistemic position respectively. Both problems also contain a "bridging" claim based on some (again, supposedly intuitive) principle that relates rational support for knowledge of the world to rational support for knowledge of sceptical hypotheses.

Now the differences; let us look first at the closure-based problem. One thought that is supposed to arise naturally from reflecting on the BIV hypothesis is that we lack rational support for propositions that deny sceptical hypotheses. After all, any empirical evidence that I could offer in support of such a proposition could also be

¹ Pritchard argues specifically that the two problems are logically distinct, which is why it is so pressing that they are dealt with separately. See Pritchard (forthcoming b).

² Pritchard formulates the problems in terms of "rationally supported" knowledge, rather than knowledge *simpliciter*, to show that scepticism still creates a problem for epistemic externalists. See Pritchard (forthcoming b, ch. 1).

caused by a BIV-stimulating computer. Thus, a requirement for this evidence to constitute rational support (for me) for the claim that I am not a BIV is that I have rational support for the claim that I am not a BIV. This is exactly what I am trying to obtain; the only potential rational support I have results in circularity, and so it seems that:

(CB1) I cannot have rationally supported knowledge that I am not a (handless) BIV.

In order to see how rational support for the denial of sceptical hypotheses relates to rational support for propositions about the external world, we need some form of closure principle. The closure principle and its significance for scepticism have been discussed widely,³ and there are a variety of different formulations of it. Here it will make sense to follow Pritchard's formulation:

Closure- $_{RK}$: If *S* has rationally grounded knowledge that *p*, and *S* competently deduces from *p* that *q*, thereby forming a belief that *q* on this basis while retaining her rationally grounded knowledge that *p*, then *S* has rationally grounded knowledge that *q*. (Pritchard, forthcoming b, ch. 1, p. 13)

This principle is thought to have intuitive support. It follows from the closure principle, using $modus\ tollens$, that if a subject does not have rationally grounded knowledge of proposition q (say, that she is not a handless BIV), then it cannot be the case that both she knows p and that q can be rationally deduced from p. Or, in other words, it cannot be the case that q can be rationally deduced from a proposition which S knows. Since the proposition that S knows she has hands can seemingly be deduced from the proposition that S knows she is not a BIV, then she must not know that she has hands. Thus we have support for the following bridging claim:

(CB2) If I cannot have rationally supported knowledge that I am not a BIV, then I cannot have rationally supported knowledge of many everyday propositions (such as that I have two hands).

But when we put CB1 and 2 together with the intuitive claim about knowledge of the world, the inconsistency appears:

Closure-based problem

- (CB1) I cannot have rationally supported knowledge that I am not a (handless) BIV.
- (CB2) If I cannot have rationally supported knowledge that I am not a BIV, then I cannot have rationally supported knowledge of many everyday propositions (such as that I have two hands).
- (CB3) I have widespread rationally supported knowledge (such as that I have two hands).

³ In particular, see Nozick (1981), Dretske (2003; 2005) and Hawthorne (2005).

The first two claims seem to entail the denial of the third claim, and so one of the three must go. The sceptical suggestion is to reject CB3: since the first two claims are so plausible, we should accept that we do not in fact have rationally supported knowledge of our hands (nor of much else). Most people are reluctant to accept this solution to the paradox, but we are then faced with the problem of deciding which claim to reject in its place. It seems that whichever route we take we will be running up against intuitions, and so considering the sceptical hypothesis in light of the closure principle has left us in a very uncomfortable position.

What about the underdetermination-based problem? When we consider the BIV hypothesis there is another thought which is supposed to strike us: that the rational support we have for propositions that we are BIVs is no worse than the rational support we have for everyday propositions. This is because the situations that make the competing propositions true are indistinguishable to us. Given this, it seems odd to maintain that our evidence favours one proposition over the other, and so it seems true to say:

(UB1) I do not have better rational support for believing everyday propositions (such as that I have hands) than that I am a BIV.

This time we need a different principle to connect the claim about rational support for denials of sceptical hypotheses to rational support for external world propositions. Pritchard offers the Underdetermination-RK principle:

Underdetermination- $_{RK}$: If S knows that p and q describe incompatible scenarios, and yet S lacks a rational basis for preferring p over q, then S lacks rationally supported knowledge that p. (Pritchard, forthcoming b, ch. 2, p. 5)

Again, this is supposed to be intuitive and so it seems unproblematic to derive the following:

(UB2) If I lack a rational basis which favours my belief that I have hands over the BIV scenario, then I lack rationally supported knowledge that I have hands.

And again, the combination of these two claims seems to entail the denial of the third claim about our knowledge of the world, and so the three look to be incompatible:

Underdetermination-based Problem

- (UB1) I do not have better rational support for believing everyday propositions (such as that I have hands) than that I am a BIV.
- (UB2) If I lack a rational basis which favours my belief that I have hands over the BIV scenario, then I lack rationally supported knowledge that I have hands.

(UB3) I have widespread rationally supported knowledge (such as that I have hands).

Again, all three of these statements look to be intuitively true, and yet they are not jointly compatible, so one of them needs to be rejected. And again, the sceptic's suggestion is to reject the third statement, and accept that I do not in fact have rationally grounded knowledge that I have hands (or rationally grounded knowledge of much else).

We now have two distinct problems raised by the BIV scenario.⁴ In the next section we will take a look at Pritchard's desiderata for a response to these two problems, and establish which of these an inferential contextualist view should meet, and which they can. Perhaps unsurprisingly I will claim that they can meet all of the desiderata that they need to, and so offer a satisfying response to both sceptical problems.

3. Deciding on Desiderata

With the problems outlined, we can now turn to the desiderata that Pritchard gives for an anti-sceptical strategy. According to him, the best response to scepticism will, first of all:

- a) reject at least one claim of each of the sceptical paradoxes, and
- b) respond in an *undercutting*, rather than *overriding*, manner (Pritchard, forthcoming b, ch. 2, pp. 26–27)

The first desideratum is an uncontroversial condition on a sceptical response; either CB1 or CB2 (or both), and UB1 or UB2 (or both), must be shown to be false to dissolve the sceptical paradoxes without endorsing a sceptical conclusion. The second desideratum is more controversial, but not one that I will dispute – I agree that an undercutting response which shows the sceptical paradoxes to be illusory, and resting on controversial theoretical claims, has significant advantages over an overriding one which accepts the paradoxes at face value, and instead demands that we review our ordinary epistemic practices. The first kind of response locates the source of the paradox in the sceptic's theoretical commitments, and so avoids what Pritchard calls the "intellectual unease" of discovering that it is our own epistemic

⁴ One recent sceptical problem which does not obviously fall into either of these two groups is Schaffer's (2010) Debasing Demon. In personal correspondence Pritchard has suggested that the debasing problem is a variant of underdetermination-based scepticism (because it appeals to the idea that there is nothing in the subject's overall rational basis which favours the proposition that she is in the good case rather than the demon-debased one).

practices which are at fault.⁵ I agree, then, that it is desirable for a response to scepticism to meet both of these initial conditions. In line with this, the solution I propose will do just that.

Pritchard also recommends some further conditions that he thinks increase the plausibility of sceptical solutions;⁶

- c) maintain the underdetermination-_{RK} principle, and reject UB1 in an intuitively plausible way,
- d) maintain the closure-_{RK} principle, and reject CB2 in an intuitively plausible way, and
- e) respond to the two paradoxes in an integrated, unified fashion (Pritchard, forthcoming b, ch. 2, pp. 27–28)

These conditions are more demanding, and my account will not be able to meet them all; specifically, I will be unable to reject UB1 and so fail to meet condition c). However, I will be able to reject UB2 (whilst maintaining the underdetermination- $_{RK}$ principle), and so can still meet condition a) and respond to the paradox. I will argue for this claim, and that my account will successfully meet conditions d) and e), in the following sections. In the remainder of this section I hope to show that meeting all but condition c) is sufficient for a successful, satisfactory response to scepticism.

If both Pritchard's arguments in *Epistemic Angst*, and my own in what follows, succeed, then it seems there will only be one difference between our views, at least in terms of the desiderata which he has set out.⁷ This difference is that his view is able to meet condition c) — to reject UB1 whilst also maintaining the underdetermination-_{RK} principle — and so shows that the rational support we have for our beliefs in everyday propositions does favour them over beliefs in sceptical alternatives, whilst mine is not. It is not clear to me that failure to meet this condition is problematic, for two reasons.

⁵ For more of Pritchard's reasons for preferring an undercutting response, see his (forthcoming b, ch. 1) and (2012a, pt. 3, section 6). Also cf. Williams's (1991, ch. 1) discussion of therapeutic vs. theoretical responses to scepticism.

⁶ Pritchard's conditions are slightly more specific – rather than merely suggesting that we "reject UB1 in an intuitively plausible way" and "reject CB2 in an intuitively plausible way" he specifies plausible strategies for these rejections. Namely, he recommends that we deny the "insularity of reasons" and the "universality of reasons" theses respectively (ch. 2, p. 27). I have chosen not to talk about these theses as they are not directly relevant to the differences between my account and his. For clarity: the intuitively plausible way in which my account rejects CB2 is equivalent to denying the universality of reasons thesis; I leave the insularity of reasons thesis intact and avoid the paradox in a different way (by rejecting UB2 instead of UB1), but (i) suggest that this is more intuitive than Pritchard's strategy (or at the very least no less intuitive) and (ii) argue that it is a more "unified" strategy than Pritchard's.

⁷ To be clear, although my view is intended as a rival to Pritchard's, I do not think the two are incompatible.

First, we should note that the meeting of condition c) leads Pritchard to draw on disjunctivism. Briefly, the idea is that we have different, and better, rational support in cases where our experiences are veridical, than we do in cases where they are hallucinatory, or otherwise mistaken. Thus we have better rational support for everyday propositions than we do for propositions about being BIVs, and so can reject UB1. Disjunctivism is highly contentious though, and it could just as easily be argued that this feature of Pritchard's view is a *disadvantage*. Bearing this point in mind then, the debate between Pritchard's view and mine is a debate between a view which meets all five conditions but relies on a contentious thesis, and a view which meets four of the conditions without resorting to such a contentious thesis. As long as the uncontroversial first condition can be met in both cases, which it can, then it does not seem clear which of the views "wins" here.

I am inclined to go a step further than this, and suggest that my view is in fact better than Pritchard's. This is because UB1 is based on a strong intuition (this is why disjunctivism is so contentious), and so by denying this claim Pritchard risks turning his view into an overriding, rather than an undercutting, response. Of course Pritchard argues that we are mistaken both in holding this intuition, and in thinking that it is a genuine folk-epistemic intuition. However, humour me for a moment and assume that we do not find this argument wholly convincing. If so, then the number of differences between my view and Pritchard's is increased: his meets condition c) whilst mine does not, and mine meets condition b) whilst his does not. We agree that meeting condition b) is an important feature of a sceptical response, but I have cast doubt on the idea that meeting c) is, and so now the tally clearly favours my view: Pritchard meets three out of four important conditions, whilst also incurring a theoretical cost, whereas I meet all four with no theoretical cost.

Of course, even if someone were to accept that Pritchard's view fails to meet condition b) they might still be persuaded by his weighting of the conditions (i.e., by his claim that meeting c) *is* desirable) to think that each view meets four out of five important conditions are so are on a par. Again then, there would be no clear winner in the debate. Even this conclusion is interesting though, as it would show that more needs to be done before my view can be dismissed. Although I happen to find both of the previous points persuasive, and so think that my view trumps Pritchard's, I do not have time to defend that fully here. However, we have seen that accepting either point is sufficient to warrant further investigation, and so I will hope that the reader has found at least one of the reasons I have offered in defence of my view's failure to meet condition c) somewhat plausible, and rest content with merely arguing that Pritchard is wrong to dismiss it as quickly as he does.

⁸ For Pritchard's earlier work on disjunctivism, see his (2012a).

⁹ I owe this suggestion to Kevin Wallbridge.

In what follows I will demonstrate that a form of Wittgensteinian contextualism which draws on inferential contextualism is capable of meeting the remaining desiderata for an anti-sceptical response. I will outline Wittgenstein's view of justification in section 4, as well as the basics of the contextualist interpretation of this which are common to mine and Pritchard's views. In section 5 I will show that inferential contextualism, drawing on Wittgenstein's work, offers an undercutting response to scepticism, and that it meets conditions b) and d). In section 6 I will demonstrate that inferential contextualism can use the same resources it deploys in resolving the closure-based problem to deal with underdetermination-based scepticism, and thus meets conditions a) and e). I will conclude in section 7.

4. Wittgensteinian Justification and Contextualism

The view I will defend has its roots in a picture of justification described by Wittgenstein. In his final notebooks, eventually published as *On Certainty* (1969), Wittgenstein uses some innocuous observations about rational support to make two, more startling, claims about justification.

The first observation is that any basis offered in rational support of a proposition must be more certain than the proposition it supports. Call this O1:

O1: For a proposition P1 to offer rational grounds for support for another proposition P2, P1 must be more certain than P2.

Imagine a subject attempting to support her belief that she has two hands with the "evidence" that she sees them before her. Something seems off about this, and Wittgenstein claims that it is a failure to acknowledge O1. It is not clear which of the two propositions the subject believes is more certain, and so it is not clear that she shouldn't instead test her eyes by looking to see whether she sees her two hands (1969, sections 125 and 250). O1 explains this oddness in a plausible way.

Once we acknowledge O1 however, something surprising follows; our most certain beliefs have no rational support. This is because, as we have acknowledged, (1) rational support for a particular proposition must be more certain than the proposition is, but (2) by definition there are no propositions which are more certain than our most certain beliefs, and so it follows that (3) there are no propositions which could rationally support our most certain beliefs.

The second observation can be seen to be at work in Wittgenstein's writing, ¹⁰ but he does not make it explicit. This observation is that any basis offered as rational grounds for doubting a proposition must be more certain than the proposition it calls into doubt. We can call this O2:

¹⁰ Pritchard (forthcoming a and forthcoming b) gives a helpful explanation of this part of Wittgenstein's thought.

O2: For a proposition P1 to offer rational grounds for doubt of another proposition P2, P1 must be more certain than P2.

This observation is a corollary of the first and, I think, looks equally plausible. If a proposition P_1 is certain for you, and I propose a contradictory proposition P_2 which is less-than-certain for you, then it does not seem rational for you to doubt P_1 . If this is right, then we can construct a similar argument using this observation. As (1) rational grounds for doubting a particular proposition must be more certain than the proposition is, and (2) by definition there are no propositions which are more certain than our most certain propositions, it follows that (3) there are no propositions which could rationally ground doubt in our most certain beliefs.

The message that is borne out by these two conclusions, and from which both Pritchard and the inferential contextualist take inspiration, is that the practice of rational evaluation is necessarily limited. Not everything can be justified and not everything can be questioned, but this is not due to psychological discomfort or the limits of human cognition. Rather, it is just a fact about rational justification that some propositions are beyond support or doubt. As Wittgenstein puts it; "[I]t isn't that the situation is like this: We just *can't* investigate everything, and for that reason we are forced to rest content with assumption", rather it is part of the very logic of justification that some, optimally-certain propositions (now often referred to as "hinge propositions") must remain fixed; "[i]f I want the door to turn, the hinges must stay put" (Wittgenstein, 1969, section 343).

These basic insights set the stage for a radical new understanding of justification. Pritchard develops this picture further in a way which he argues can undermine CB2, and thus the closure-based argument, but which leaves the underdetermination-based argument unscathed. Whilst I will not dispute that his strategy works, I think that we can do better. In the next section I will explain how inferential contextualism develops this idea to solve the closure-based problem. Then, in section 6, I will argue that the strategy deployed by the inferential contextualist is capable of solving both sceptical problems.

5. Undercutting the Closure-Based Problem

The inferential contextualist develops the Wittgensteinian picture described in the previous section. The key idea, defended most extensively by Michael Williams (1991), is that justification is context-sensitive because it is limited by those propositions which are most certain, and because which propositions are most certain will depend on contextual factors. Immediately following a terrible car accident, for example, a subject may not be certain of how many hands she has. Likewise, the usually-certain proposition that the world has existed for more than

five minutes may no longer be certain when a subject does philosophy (Williams, 1991, p. 122). In these contexts then, propositions which would otherwise be most certain (and so unquestionable and unsupported) become less certain, and gain the potential for rational doubt and support.¹¹

Accepting this is supposed to make way for an anti-sceptical strategy which reveals that the sceptic's arguments are faulty. They only work by presupposing a mistaken picture of justification, and this error can be highlighted by pointing out three implicit assumptions that the arguments rely on. Williams claims that showing these assumptions to be illegitimate reveals that the sceptic's arguments can only hold in particular contexts. Outside of these specific contexts they fall apart completely.

This strategy of pointing out implicit assumptions is an undercutting one, so adopting it will allow us to meet condition b). There are other features of inferential contextualism (at least as Williams sketches it), some of which have been criticized, ¹² but I will not discuss these here. Instead I will focus just on explaining the inferential contextualist's undercutting strategy.

First, I will explain the three assumptions that Williams accuses the sceptic of making. He refers to them as "priority", "independence" and "totality", and each one puts a condition on knowledge which we are able to question, and ultimately reject. I will then argue for a particular way of understanding how these assumptions relate to one another. As Williams talks about the priority assumption the most, discussions of the view have tended to focus disproportionately on the requirement it generates. This is the wrong way to understand inferential contextualism; totality is the most fundamental of the three assumptions, and the requirement it generates only leads to the priority requirement via the independence requirement. This will be crucial in understanding how inferential contextualism can respond to the underdetermination-based problem.

I will clarify the assumptions that Williams thinks the sceptic makes with reference to a general version of closure-based problem, and draw out the requirements they place on knowledge:

¹¹ This explanation of the picture simplifies some details. In particular there are a number of candidate contextual features which could affect whether a proposition is optimally-certain and so acts as a hinge or not. Williams talks about propositions which are required for *forms of inquiry*, such as history and philosophy, to go ahead. Sarah Wright instead talks about *social roles* instead. I will remain neutral in this article on which account is appropriate.

¹² Pritchard (forthcoming b, pp. 14–18) explains the key problems for this view.

¹³ For example, Jonathon Vogel (1997) mentions the priority assumption over 30 times, but does not mention the totality assumption at all; Tim Black's IEP article "Contextualism in Epistemology" talks exclusively about priority, and although Pritchard (forthcoming b) does mention the totality assumption (ch. 4, p. 13), he devotes an entire section (ch. 4, section 7) to discussing the priority assumption.

General Closure-based Problem

(GCB1) One cannot have rationally supported knowledge (RS-K) of the denial of a radical sceptical hypothesis (DENIAL).

(GCB2) If one cannot have RS- K_{DENIAL} , then one cannot have rationally supported knowledge of the external world (RS- $K_{EXTERNAL\ WORLD}$).

(GCB3) We have RS-K_{EXTERNAL WORLD}

Remember the sceptic would argue that GCB1 is an intuitive starting point for epistemology to begin from, and that combining it with GCB2 leads to the denial of GCB3. Williams claims that there are two readings of GCB2, and that conflating them makes the argument look more plausible than it is.

The first reading of GCB2 says something like:

ONE: the claim that we sometimes have knowledge of the world logically implies that we sometimes know [the denials of sceptical hypotheses]. ¹⁴ (Williams, 1988, p. 437)

This reading of GCB2 simply says that RS-K_{EXTERNAL WORLD} will always coincide with RS-K_{DENIAL}. This seems intuitively plausible, and Williams has no objections to the sceptic making this version of the claim. However, he points out that it is not sufficient to generate the sceptical conclusion. If all the claim says is that someone who knows one of the items of knowledge mentioned will also know the other, then it is possible to run the argument in the opposite direction to the sceptic (by combining GCB3 and GCB2) and so conclude with the denial of GCB1.

To get the sceptic's desired result then, we must impose a particular order of explanation on the two kinds of knowledge. This is what we see in the second reading:

TWO: If we are to know anything about the world, we must *first* be capable of knowing [the denial of sceptical hypotheses]: that is, of knowing this in some way that is independent of all knowledge of the world.¹⁵ (Williams, 1988, p. 437; original emphasis)

Now we can see that there is a supressed premise in this argument. It only works if we assume that $RS-K_{EXTERNAL\ WORLD}$ requires $RS-K_{DENIAL}$, but not the other way around, and so create an asymmetry between the two kinds of knowledge.

¹⁴ It has been suggested to me that what is at issue here might be more accurately described as logical presupposition rather than logical entailment or implication. This matter is beyond the scope of this article and so I have chosen to use Williams's phrasing, although it might be that the most natural reading of this is indeed of presupposition.

¹⁵ Sometimes Williams seems to use "first" in a temporal sense (i.e., to know anything about the world at time t_0 , we must know the denial of sceptical hypotheses at time t_1 or earlier), and sometimes in a logical, or explanatory sense (i.e., knowing the denial of sceptical hypotheses is a logical or explanatory requirement of knowing anything about the world). The explanatory sense is the one that does the work – as far as I can see, the temporal sense is just a result of the fact that humans carry out logical inferences diachronically – and so to avoid confusion I have avoided using the temporally-loaded "first" except when quoting Williams, and have used "prior" to mean "explanatorily prior".

The potential knower can no longer have RS-K_{DENIAL} in virtue of her RS-K_{EXTERNAL WORLD}; rather the RS-K_{DENIAL} must be *prior* to her RS-K_{EXTERNAL WORLD}.

What exactly does it mean for one belief to be prior to another though? Williams is not especially clear on this point. I think the most illuminating explanation he gives is in the following passage, where he links the idea of priority to ideas like basic beliefs and intrinsic credibility:¹⁶

Foundationalism is the view that our beliefs arrange themselves into broad classes according to certain natural relations of epistemological priority. Beliefs to which no beliefs are epistemologically prior are epistemologically basic. Their credibility is naturally intrinsic, as that of all other beliefs is naturally inferential. (Williams, 1988, pp. 418–419)

From this we can glean that beliefs which are epistemologically prior (or basic) are non-inferentially justified. They are the source of epistemic standing, both generating it and being able to confer it to other, non-basic beliefs. We can thus define epistemological priority (PRI) as follows:

PRI: A subject's belief that p is epistemically prior to their belief that q when the epistemic status of their belief that p is required to confer a positive epistemic standing to their belief that q.

In TWO the belief, q, which is flagged as needing prior support, is a belief in $_{\rm EXTERNAL\ WORLD}$. The belief, p, which is charged with offering this prior support, is a belief in $_{\rm DENIAL}$. So the requirement which the sceptic is placing on knowledge of the external world is that something confers epistemic standing to it:

PRIORITY: RS- $K_{\text{EXTERNAL WORLD}}$ requires support from a belief which can generate and confer epistemic standing.

Thus, the success of the sceptic's argument depends on _{DENIAL} not being fit to meet this requirement – not being able to confer epistemic standing. We will come back to this later. For now, let us move on to the independence assumption.

We will start by looking again at the second clause of TWO, which makes an additional claim about priority:

TWO: If we are to know anything about the world, we must *first* be capable of knowing [the denial of sceptical hypotheses]: *that is, of knowing this in some way that is independent of all knowledge of the world.* (Williams, 1988, p. 437; second emphasis added)

¹⁶ The important point here is that the sceptical argument is committed to the idea of priority. In this quotation, Williams references foundationalism because he attributes the sceptic's commitment to priority as a result of them being committed to a particular view of justification (one which he calls "foundationalist"). This claim is controversial, but it is not one which is relevant to our purposes (not least because it is unclear that the view he labels as "foundationalism" bears much resemblance to what we ordinarily think of as foundationalism). As long as we can gain an understanding of priority and show that it is present in the general closure-based problem, then the quotation will have served its purpose.

The idea is that for a particular proposition to be prior to, or capable of conferring a positive epistemic standing on, another proposition it must be known in some "independent" way. This is interesting; Williams talks a lot about the significance of PRI, but here we can see that it is only problematic when combined with independence.

This notion needs unpacking too though – what does Williams mean by ways of knowing being "independent"? A good start will be to give a general definition of independence in terms of epistemic bases:

IND: A subject's way of knowing that p (on basis e) is epistemically independent of her way of knowing that q (on basis e*) when e and e* are distinct.

Now we need to decide how best to cash out what is meant by "distinct" epistemic bases. One, weak, interpretation is to think of ways of knowing as independent whenever they are non-identical:

IND1: A subject's way of knowing that p (on basis e) is epistemically independent of her way of knowing that q (on basis e^1) when e and e^1 are distinct; that is, when they are not identical.

Because this version of independence only requires that p and q's bases are non-identical, it is compatible with one coming to know that p on a perceptual epistemic basis e, and then inferring that q on a distinct epistemic basis e^2 , which is constituted by both e, and an additional inference. A slightly stronger interpretation of independence rules this out:

IND2: A subject's way of knowing that p (on basis e) is epistemically independent of her way of knowing that q (on basis e^2) when e and e^2 are completely distinct; that is, neither is even partly constituted by the other.

This means that if basis e is a particular perceptual basis then basis e^2 must not contain that particular perceptual basis, but it does not rule out basis e^2 being, or containing, some other perceptual basis. A yet stronger version rules out even this:

IND3: A subject's way of knowing that p (on basis e) is epistemically independent of her way of knowing that q (on epistemic basis e^3) when e and e^3 are (i) completely distinct, and (ii) concern different types of epistemic source.

This means that, in addition to not being partly constituted by the particular basis e, e^3 must also be of a different "type" to basis e. So two perceptual epistemic bases, even though different tokens of perceptual bases, would not count as distinct on IND3, and thus would not count as independent ways of knowing. If one way of knowing has a visual basis then for it to be independent from a second way of knowing the second way must have, for example, an auditory or testimonial basis.

These are all weaker than the sense of independence that the sceptic needs to generate the sceptical problem, as an example will show. Let us say that the item of RS-K_{EXTERNAL WORLD} that is being called into question by the BIV-hypothesis is my knowledge that I have hands. The basis *e* that I have for this purported knowledge is the perceptual basis of seeing that I have hands. The challenge is to find a way of knowing that I am not a BIV that is in some way independent of (and so prior to, or capable of conferring a positive epistemic standing on,) my belief that I have hands. The idea the sceptical argument is based on is that all such ways of knowing are beyond our reach.

A way of knowing that I am not a BIV which was only independent in the weakest sense (IND1) would not confer a positive epistemic standing to my belief about my hands; for example, knowing on basis e^{I} which is constituted partly by e (seeing that I have hands) and partly by an inference involving the proposition "if I can see that I have hands then I am not a BIV". This way of knowing depends on the target proposition (that I have hands) being true, and so it fails to confer a positive epistemic standing on it.

A way of knowing which is independent in the slightly stronger sense (IND2) would also be inadequate. Take for example a basis e^2 which is a combination of (i) seeing that I am working at my desk, and (ii) an inference involving the proposition "if I can see that I am working at my desk then I am not a BIV". This basis again involves reference to a proposition which is only true if the target proposition is true, because (according to the sceptic, anyway) what calls my belief that I have hands into question is that it is a perceptual belief, and so vulnerable to error in BIV cases. So again, this way of knowing fails to confer a positive epistemic standing on my belief, and whether or not it is within our reach is irrelevant. This is not the kind of knowing that closure-based arguments are concerned with.

The same is true even if we use IND3. A basis e^3 which is non-perceptual would still (according to the sceptic) be unable to confer a positive epistemic standing on our beliefs about our hands if it makes a claim about the external world. This is because our knowledge of such things is necessarily mediated by experience, and so "infected" with the same vulnerability to error, highlighted by the BIV scenario, as perceptual ways of knowing are. This means that ways of knowing like testimony and memory are ruled out as well.

What sense of independence does the sceptic have in mind then? What kind of basis must my knowledge that I am not a BIV have to allow it to confer a positive epistemic standing on my beliefs about the existence of my hands? Let us call this version IND4:

IND4: A subject's way of knowing that p (on basis e) is epistemically independent of her way of knowing that q (on epistemic basis e^4) when e and e^4 concern entirely different kinds of knowledge.

In other words, if basis e concerns RS-K_{EXTERNAL WORLD}, then basis e^4 must concern knowledge of a different kind. What kinds of knowledge are there, other than knowledge of the external world? Presumably, all the sceptic thinks we have left are propositions about our experiences.

Now that we have defined the sense of independence at play in the general closure-based problem we can establish the independence requirement it places on knowledge of the external world:

INDEPENDENCE: One item of RS-K_{EXTERNAL WORLD} cannot be justified by another item of RS-K_{EXTERNAL WORLD}.

I will now introduce a third and final assumption that Williams accuses the sceptic of making; the "totality of assessment" assumption. He appeals to a characterization of scepticism offered by Stroud to isolate the idea of "total assessment":

What is distinctive about the 'traditional' or 'Cartesian' examination of knowledge? What sort of an understanding of our knowledge of the world are we after when we pursue it? . . . According to Stroud, the traditional philosophical examination of knowledge 'aims at *an assessment of all our knowledge of the world at once*, and it takes the form of a judgment on that knowledge made from what looks like a detached "external" position'. (Williams, 1988, p. 422; emphasis added)

The idea is that Cartesian sceptics attempt to rationally evaluate all of our beliefs in one go, and it would be difficult to deny that this is a fundamental part of the sceptical endeavour. Descartes explicitly says that he "will not need to run through [his beliefs] individually" and will instead "go straight for the basic principles on which all [his] former beliefs rested", as undermining these will undermine *all* of his beliefs *at once* (Descartes, [1641] 1996, p. 12). Later, he clarifies this with an analogy to a basket of apples: if you think there could be some rotten apples in the basket, and wish to remove them to prevent the rot from spreading, you should upend the *whole* basket *at once*. And, as with apples, so with beliefs (Descartes, [1641] 1996, p. 63).

Of course for this analogy to work there must be certain, significant similarities between apples and beliefs. Beliefs would have to be the kind of thing that can be grouped together (though theoretically in categories, not physically in baskets) and the kind of thing which it makes sense to assess by separating them from the rest of the group. The kind of "rot" that beliefs have would also have to be the kind of thing which spreads. Are these similarities shared? Williams thinks the sceptic is wrong to assume so. She makes two mistaken claims:

The first is that there is something – 'our knowledge of the world' – to examine. The second is that examining it, in the sense of charting its relation to experience, is tantamount to assessing it, that a failure to ground knowledge of the world, at this level of abstraction and generality, will reflect badly on every particular knowledge-claim. (Williams, 1988, p. 423)

So in making the totality assumption the sceptic commits herself implicitly to the two-part claim that (i) all RS-K_{EXTERNAL WORLD} can be grouped together, (ii) such that its credibility can be assessed at once. We can thus define the assumption as follows:

TOT: All instances of RS-K_{EXTERNAL WORLD} can be assessed at once.

The idea is that if we were to get rid of the totality condition and assess EXTERNAL WORLD in a piecemeal way then there would be no sceptical problem. Whilst assessing one belief about the external world we could take other beliefs about the external world for granted, and so use them to justify each other (Williams, 1988, p. 423). The requirement that this assumption puts on knowledge of the external world then is the following:

TOTALITY: All instances of RS-K_{EXTERNAL WORLD} should be assessed at once.

Now that we have definitions of the three assumptions, and the requirements that they appear to license being placed on knowledge, we are in a position to explain how they all relate to one another. This is the part that I think the majority of discussion of inferential contextualism gets wrong. Although the priority requirement is essential to the sceptic's argument, the inferential contextualist recognizes that the priority requirement is only present because of the independence and totality requirements.

Let us look again at the totality requirement. It says that assessment of knowledge of the external world should be wholesale, rather than piecemeal:

TOTALITY: All instances of RS-K_{EXTERNAL WORLD} should be assessed at once.

Once this is granted as a requirement for knowledge of the external world, it should be fairly obvious that the independence requirement follows. If all items of knowledge about the external world are under scrutiny at the same time, then they cannot be used to support each other. So, the following is also a requirement on knowledge:

INDEPENDENCE: One item of RS- $K_{\text{EXTERNAL WORLD}}$ cannot be justified by another item of RS- $K_{\text{EXTERNAL WORLD}}$.

If knowledge of the external world is ruled out as support, then some other kind of knowledge is required. What other knowledge is there? The sceptic seems to assume that the only viable candidate is knowledge of our own experiences. ¹⁷ As knowledge

¹⁷ Of course we may want to dispute this point – others kinds of knowledge, such as types of *a priori* knowledge, look like possible candidates for support. However, (i) I do not think it is uncharitable to attribute this assumption to the sceptic (indeed Wright and Davies's (2004) anti-sceptical strategy can be understood as an attempt to deny this assumption (whilst maintaining Priority) by providing *a priori* warrants for beliefs about the external world; and (ii) notice that the Priority assumption (and thus the spirit

of experience is the kind of knowledge which is often thought to be self-justified, and intrinsically credible, we can see then how the priority requirement arises:

PRIORITY: RS-K_{EXTERNAL WORLD} requires support from a belief which can generate and confer epistemic standing.

So, once the totality requirement is in place, the independence and priority requirements follow. Priority is the most obviously problematic one; it is the one which arises in TWO and places the requirement on knowledge which cannot be met (because knowledge of $_{\rm DENIAL}$ does not appear to have intrinsic credibility), but the totality requirement is at the root of this problem. If we can reject the totality requirement then we can also reject the two requirements that follow from it, and so reject the second reading of GCB2.

Williams's rejection of totality depends on his argument against something he calls "epistemological realism" – the idea that propositions can have inherent epistemic status in virtue of their content. This is one of the additional features of his view that I mentioned at the beginning of this section. Whilst I am not sure that this move is indefensible, it is not defensible concisely, and further there is no need to make this move to undercut the closure-based problem, so I will sidestep the issue altogether. Instead, I suggest that totality be rejected using just the Wittgensteinian contextualist picture outlined in the previous section.

Remember that on the picture of justification that Wittgenstein described there must always be some limits to rational evaluation – we cannot question everything at once; instead some optimally-certain hinge propositions must be held fixed at all times. The inferential contextualist adds that which propositions these are will depend on context – an idea which could be fleshed out in a number of ways. It seems plausible that whatever account of hinge propositions we have, there will be many contexts in which propositions about the external world act as hinges, and so must be held fixed. If so, then there are many contexts where we can deny the totality requirement on knowledge, which insists that all knowledge of the external world be assessed at once, and thus reject the sceptical argument.

The yet-to-be-specified account of hinge propositions carries a lot of the burden here. Rather than argue for a particular account of hinge propositions, which is a larger task than can be achieved within this article, I will rely on Pritchard's account. Pritchard offers an account on which hinge propositions are not knowledge-apt beliefs (forthcoming b, ch. 4, section 1). This account has two important features which will allow it to play the role we need. First, on this reading it is highly plausible that some propositions about the external world will

of the sceptical argument) would still follow from Independence, even if the sceptic did not specify knowledge of experience, because *a priori* knowledge is also often thought to be self-justifying and intrinsically credible.

be optimally-certain. Thus we can deny the totality requirement, and in turn deny the independence and priority requirements, which allows us to reject premises like GCB2 and CB2, so undercutting the closure-based argument.

Secondly, this reading will not undermine closure- $_{RK}$ which is important for meeting Pritchard's desiderata. Remember that claims like GCB2 are thought to follow from closure- $_{RK}$ because denying the consequent of closure- $_{RK}$ – that S has rationally grounded knowledge of some proposition q (such as the proposition that she is not a handless BIV) – seems to entail that q cannot be rationally deduced from knowledge that the subject has (such as that she has hands). On closer inspection however, it is apparent that denying the consequent of closure only entails that it cannot be the case that both the subject has rationally grounded knowledge that she has hands, and that she can deduce from this that she has rationally-grounded knowledge that she is not a BIV. Thus it is possible to maintain closure and deny premises like GCB2 and CB2, as long as one is prepared to accept that a subject cannot deduce knowledge that she is not a BIV from knowledge that she has hands.

Once some appropriate account of hinge propositions is in place then we can reject the totality requirement on knowledge. This, in turn, allows us to reject the independence and priority requirements, and thus we can deny GCB2 (and particular instances of it like CB2). And, importantly, we can do this without undermining closure-RK. Thus, the view meets condition d).

Undermining the totality requirement is the key to the inferential contextualist's response to closure-based scepticism then. Notice, too, that we have dealt with the closure-based problem by highlighting and rejecting implicit, unintuitive assumptions; this is an undercutting strategy then, and so satisfies condition b). In the next section I will argue that by focusing on the importance of this totality requirement, rather than the priority requirement, the inferential contextualist can undercut the underdetermination-based problem too. As we shall see, she does this in a way which is consistent with her response to closure-based scepticism, and thus meets conditions a) and e).

6. Undercutting the Underdetermination-Based Problem

With the strengths of the inferential contextualist's undercutting response to the closure-based problem clarified, it will be easier to show how the underdetermination problem can also be undercut, without any need for disjunctivist reasoning.

Remember the argument is as follows:

- (UB1) I do not have better rational support for believing everyday propositions (such as that I have hands) than that I am a BIV.
- (UB2) If I lack a rational basis which favours my belief that I have hands over the BIV scenario, then I lack rationally supported knowledge that I have hands.

(UB3) I have widespread rationally supported knowledge (such as that I have hands).

Condition c) asks for a response to UB1, and Pritchard (rightly) points out that inferential contextualism cannot offer this; telling us that our practices of rational evaluation are necessarily limited does not reveal anything about the level of support we in fact have for specific propositions, like those compared in UB1. What it can reveal, and in a way which is unified with its response to the closure-based argument, is how to deny the second premise.

It will be helpful to think about a similar argument which Jonathan Vogel offered as an example of a sceptical argument which inferential contextualism could not handle. First, Vogel asks us to imagine two twins, Rex and Homer, who are visually indistinguishable to a particular subject. He claims that it seems reasonable to think that the subject could be looking at Rex, but would not know this by perception – for example, it would be irresponsible to form the perceptual belief "Rex is before me", because at most the subject's perception tells them "something looking like Rex (but also like Homer) is before me". Reflecting on this example gives us the following *indistinguishability principle*:

Indistinguishability Principle: If x and y are indistinguishable to you, then you can't know by perception that (you are confronted with) x and not y. (Vogel, 1997, p. 15)

If this principle is correct then less ordinary, and radically-sceptical, error possibilities look to pose a threat to our knowledge too. Instead of considering Rex and Homer, now consider Rex and a computer rigged to produce in you perceptually indistinguishable hallucinations of Rex. It seems that you do not have better support for the proposition that you are looking at Rex than for the proposition that you are a BIV looking at a computer-generated illusion, so even in cases where we would not ordinarily worry about the possibility of perceptually indistinguishable experiences (when looking at someone who does not have a twin, for example) the radical sceptic can still point to a problem with the underdetermination of our so-called knowledge.

Vogel's point with this argument from indistinguishability was to show that the sceptic does not have to rely on the priority assumption to generate the argument. Instead, we can just use the Indistinguishability Principle to justify the second premise of the argument. ¹⁸ If we make the argument explicit we can see that it resembles Pritchard's underdetermination-based problem:

The Indistinguishability Argument

(IA1) I can't know by perception that I am confronted with Rex rather than a computer-generated illusion.

¹⁸ As we will see, I dispute this claim.

(IA2) If I can't know this, then I lack rationally supported knowledge that I am confronted with Rex^{19}

(IA3) I do not know that I am confronted with Rex. (Vogel, 1997, p. 15)

Other than the change of the target proposition from "I have hands" to "I am confronted with Rex", the only significant difference between this and the underdetermination-based problem is that IA3 is a negation of the everyday belief in question (and so is taken to follow from the first two statements) rather than (as in the case of UB3) to be incompatible with the first two statements. Williams's response to this might inform our response to the underdetermination-based problem, then.

His response should be unsurprising given what I argued in the previous section; he points out that Vogel's argument requires us to evaluate all of our knowledge of the external world at once (the totality requirement), and thus is committed to epistemological realism (Williams, 1997, pp. 32–33). (For our purposes the problem with the totality requirement is that it fails to respect the limits of justification.) In the ordinary case, where Vogel asks us to agree that we cannot know that we see Rex rather than Homer, only our perceptual knowledge is being called into question. This means that if a subject had good reason to think that Homer was elsewhere (Williams's example is that he has been hospitalized) then she can know that she is looking at Rex.²⁰

However, in moving from this case to the sceptical one, Vogel moves from evaluating just one item of knowledge (about who a subject is confronted with) to evaluating a vast swathe of our external world knowledge in one go. In other words, he implicitly accepts the totality requirement. To see that this is so, imagine what the case would look like if we removed the BIV aspect, which invokes totality, and merely raised the less radical possibility that the subject is confronted with a (very convincing) computer-generated hologram. Now the case begins to look less threatening – the subject could have better rational support for the claim that she is confronted with Rex than for the claim that she is confronted with an illusion, because she can rely on other aspects of knowledge. She can check for nearby projectors, and rely on her memories about where Rex and Homer are expected to be, and thus gain rational support. In order to prevent this, the sceptic needs a case which questions all our knowledge of the external world at once. Thus, she implicitly commits herself to TOTALITY.

As we saw in the previous section, Totality leads to Independence (the assumption that one item of RS- $K_{\rm EXTERNAL\ WORLD}$ cannot be justified by another item

¹⁹ Again, Vogel just talks about knowledge *simpliciter*, but adding rational support will only make the sceptical argument stronger.

²⁰ And in fact, we may not even need a reason as extreme as this -I take it that many people make judgements about which of a set of twins (who are perceptually indistinguishable to them) they are looking at fairly frequently, and that in a lot of these cases they do know which twin they are looking at.

of RS- $K_{\rm EXTERNAL\ WORLD}$), which rules out certain kinds of knowledge as candidates for justification; we can no longer draw on, for example, other non-perceptual knowledge about the external world, such as testimony, or memory of the twin being elsewhere. If the independence assumption were not made by the sceptic then the argument would not work: the subject could simply employ other RS- $K_{\rm EXTERNAL}$ world in order to support the claim that she was looking at Rex, and so have better rational support for this, than for the claim that she was looking at a computer-generated illusion.

As INDEPENDENCE *is* assumed the only evidence left to carry the burden of justification is (or so the sceptic would have us believe) the only knowledge capable of generating and conferring epistemic standing: knowledge of experience. Thus, contrary to what he claims, Vogel's argument does rely on the priority requirement after all. This is apparent in both the first premise of Vogel's argument and in his indistinguishability principle, where he specifies that the subject does not know "*by perception*". If PRIORITY was not assumed then the subject would not be expected to produce knowledge which is capable of generating and conferring epistemic standing, and so this focus on perception would be unnecessary. Instead, the subject could rely on, for example, testimonial knowledge.

Like the closure-based argument then, the underdetermination-based argument is reliant on the three assumptions which Williams identified in *Unnatural Doubts*: priority, independence and (most importantly) totality. As we saw in the previous section, Wittgensteinian contextualism gives us the resources to reject the totality requirement, deny UB2, and undercut the underdetermination-based paradox.

Thus, although the inferential contextualist does not meet condition c), she can avoid the seemingly inevitable slide into radical scepticism another way. Importantly, inferential contextualism uses the same resources that it deploys in handling the closure-based problem to undercut the underdetermination problem, and so meets both conditions a) and e).

7. Conclusion

I have argued that inferential contextualism can meet four of Pritchard's five criteria for a successful anti-sceptical view. The one it fails to meet can only be met by endorsing disjunctivism, and thus risking becoming an overriding response. Inferential contextualism is thus much closer to meeting scepticism than Pritchard acknowledges, and possibly even closer to meeting it than his own view is. I have left a number of interesting issues unexplored, such as which contextual factors can affect justificatory status, whether the view of hinge propositions is in tension with independently plausible principles about transmission of rational support (see Pritchard, 2012b), and whether the view collapses into relativism (see Williams, 2007), but I hope that, having resolved the key challenge from Pritchard, I have

shown there is both room (and need) to develop a version of inferential contextualism which deals with these issues, and revives the debate over this kind of response to scepticism.

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