

For a special issue of *International Journal for the Study of Skepticism*
entitled ‘Hinge Epistemology: Basic Beliefs After Moore and Wittgenstein’,
(eds.) A. Coliva & D. Moyal-Sharrock.

THE SOURCES OF SCEPTICISM

Duncan Pritchard

University of Edinburgh

duncan.pritchard@ed.ac.uk

ABSTRACT. It is claimed that the radical sceptical problem that is the focus of much of contemporary epistemological discussion in fact divides into two logically distinct sub-problems—a formulation that turns on the closure principle, and a second formulation which turns on the underdetermination principle. The Wittgensteinian account of the structure of rational evaluation is set out, and it is shown how this proposal—at least when properly formulated—can deal with closure-based radical scepticism. It is also claimed, however, that this account fails to gain any purchase on underdetermination-based radical scepticism. The antidote to this latter form of radical scepticism lies elsewhere—with, it is suggested, epistemological disjunctivism.

KEYWORDS: Belief; Closure; Epistemological Disjunctivism; Hinge Commitments; Knowledge; Perception; Scepticism; Underdetermination; Wittgenstein.

1. TWO FORMULATIONS OF RADICAL SCEPTICISM

The contemporary literature on radical scepticism tends to run together two formulations of the problem.¹ On the one hand, we have a *closure-based* formulation of this problem, which treats radical scepticism as essentially trading on a principle concerning how knowledge is transferred across competent deductions. On the other hand, we have an *underdetermination-based* formulation of this problem, which instead treats scepticism as essentially trading on the claim that (roughly) agents in normal conditions have no better rational support for their beliefs than their

¹ Note that by ‘radical scepticism’ here I mean specifically the kind of Cartesian scepticism which is the focus of much of the contemporary epistemological debate. For more on contemporary treatments of radical scepticism, see Pritchard (2002; 2010).

counterparts in sceptical scenarios. These two formulations of radical scepticism generate the same sceptical conclusion and seem to be so closely related that it can seem almost pedantic to keep them apart. And yet, as I will argue in this section, it is vital that we do so. In order to see this, we first need to revisit these arguments and their moving parts.

We begin with the closure-based formulation of the sceptical problem, since this has now become the most common formulation of the problem in the literature. We will focus our attention on rationally grounded knowledge, in order to side-step issues that might arise with knowledge which lacks a rational grounding.² In order to simplify things, we will formulate the sceptical problem as it concerns an agent's rationally grounded knowledge of an 'everyday' empirical proposition ('E'), the kind of proposition which is typically thought to be known, and where the belief in question is regarded as rationally grounded. If one has rationally grounded knowledge of these everyday empirical propositions, then the challenge posed by radical scepticism is illusory. We will also focus on a specific radical sceptical hypothesis which is by stipulation incompatible with E—*viz.*, the hypothesis that, unbeknownst to one, one is a brain-in-a-vat (BIV) being 'fed' one's experiences by supercomputers.

With these stipulations in mind, here is the closure-based radical sceptical paradox:

The Closure-Based Radical Sceptical Paradox

- (S₁1) One cannot have rationally grounded knowledge that one is not a BIV.
- (S₁2) If one cannot have rationally grounded knowledge that one is not a BIV, then one cannot have rationally grounded knowledge that E.
- (S₁3) I have rationally grounded knowledge that E.³

(S₁1) is motivated by the general thought that one cannot have rationally grounded knowledge that one is not the victim of a radical sceptical hypothesis. Given that, *ex hypothesi*, one cannot distinguish between one's ordinary experiences and the corresponding experiences that one would have if one were a BIV, then how could one have a rational basis for knowing that one is not a BIV?⁴ (S₁3) is motivated by the general anti-sceptical thought noted above that E-type propositions are widely known, where this knowledge is rationally grounded.

That leaves us with the second claim, (S₁2). This is motivated by appeal to the following principle:

² For further discussion of why the sceptical problem is best understood in terms of rationally grounded knowledge, see Pritchard (2015a, part one).

³ Note that this formulation of radical scepticism is in fact much stronger than we need to generate the sceptical paradox. In particular, in terms of (S₁1), it would suffice, for example, that one *does not*—as opposed to the stronger *cannot*—have rationally grounded knowledge that one is not a BIV. Relatedly, it would suffice for (S₁2) that it follows from one's lack of rationally grounded knowledge that one is not a BIV that one lacks rationally grounded knowledge that E.

⁴ Note that in order to keep matters simple I am setting to one side those responses to radical scepticism—e.g., Vogel (1990)—which claim that we have an *abductive* rational basis for preferring our everyday beliefs over sceptical alternatives. I critically discuss such a proposal in Pritchard (2015a, ch. 1).

The Closure Principle

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 .

With the closure principle in play, it follows that if one did have rationally grounded knowledge that E , then one could competently deduce from this knowledge that one is not a BIV, and thereby acquire rationally grounded knowledge that one is not a BIV.⁵ Conversely, if it is already granted that one simply cannot have rationally grounded knowledge that one is not a BIV, it follows that one cannot have rationally grounded knowledge that E either. We thus get (S₁2).

The guiding thought behind the closure principle is that competent deduction is a paradigm instance of a rational process. Accordingly, any belief which is grounded on a competent deduction from rationally grounded knowledge—and where the original rationally grounded knowledge is preserved throughout the deduction—cannot be itself any less rationally grounded. There are, of course, weaker formulations of closure-style principles in this general vein in the literature, and some of them have been rejected for various reasons.⁶ But it is hard to see how one could motivate a rejection of the principle as just formulated. How could one have rationally grounded knowledge, competently deduce a belief on this basis (while retaining the original rationally grounded knowledge), and yet lack rationally grounded knowledge of the proposition deduced? At the very least, any anti-sceptical strategy which proceeds by rejecting this principle will face a steep up-hill task.

Since the three claims that make up this paradox are in logical conflict with one another, so we know that at least one of them must be false. But since they are all highly intuitive, or at least supported by highly intuitive claims (such as the closure principle), it is hard to see which is to go.

Next, consider the second way of expressing the radical sceptical paradox, which turns on the underdetermination principle:

The Underdetermination-Based Radical Sceptical Paradox

- (S₂1) One cannot have a rational basis which favours one's belief that E over the BIV scenario.
- (S₂2) If one cannot have a rational basis which favours one's belief that E over the BIV scenario, then one lacks rationally grounded knowledge that E .
- (S₂3) I have rationally grounded knowledge that E .⁷

⁵ Note that here, and in what follows, we are taking it as given that one knows that E entails that one is not a BIV.

⁶ In particular, the most famous rejections of closure-style principles as a means of blocking radical scepticism—due to Dretske (1970) and Nozick (1981)—have been concerned with much weaker formulations of the closure principle, and hence do not straightforwardly apply to the closure principle as we have formulated it here. For a useful recent exchange on the status of closure-style principles, see Dretske (2005a; 2005b) and Hawthorne (2005).

⁷ As with our formulation of the closure-based radical sceptical paradox above—see footnote 3—note that this formulation of radical scepticism is in fact much stronger than we need to generate the sceptical paradox. In particular, in terms of (S₂1), it would suffice, for example, that one *does not*—as opposed to the stronger *cannot*—have a rational

As with the closure-based formulation of the radical sceptical paradox, these three claims are clearly in logical conflict, and hence we know that at least one of them must be false. The final claim that makes up the underdetermination-based radical sceptical paradox is identical to the final claim that makes up the closure-based radical sceptical paradox, so we can focus our attention on the other two.

The first claim, (S₂1), captures a widely held commitment in epistemology to the so-called *new evil demon intuition*. Consider two agents. The first is in normal epistemic conditions—call this the *good case*. The second, in contrast, is an identical counterpart of the first but unfortunately the victim of a radical sceptical hypothesis (such as the BIV hypothesis)—call this the *bad case*. It is by stipulation impossible for either subject to distinguish between their experiences and those had by their counterpart. The new evil demon intuition is the claim that the first agent in the good case cannot have a better rational basis for her beliefs than her counterpart in the bad case does for her corresponding beliefs. After all, given that the good and bad cases are indistinguishable to the subjects concerned, how could the agent in the good case have a better rational standing for her beliefs than her counterpart in the bad case?⁸

The second claim in the underdetermination-based formulation of radical scepticism, (S₂2), is meant to be derived from the following underdetermination principle:

The Underdetermination Principle

If *S* knows that *p* and *q* describe incompatible scenarios, and yet *S* lacks a rational basis which favours belief that *p* over *q*, then *S* lacks rationally grounded knowledge that *p*.

With this principle in play, it follows that if one lacks a rational basis which favours E over the BIV alternative, then one lacks rationally support knowledge that E. We thus get (S₂2).

The underdetermination principle is meant to be entirely uncontentious. Consider what it would mean for it to be false. This would entail that one could have rationally grounded knowledge of a proposition even while recognising that the proposition believed was incompatible with an alternative scenario and that one's rational basis for one's belief didn't favour it over the alternative scenario. An example might be having rationally grounded knowledge that one is seated even while recognising that one has no better reason for thinking that one is seated than that one is standing (a known to be incompatible alternative). Although there might be some dispute over what is involved in having rationally grounded knowledge, we would surely want a conception of

basis which favours one's belief that E over the BIV scenario. Relatedly, it would suffice for (S₂2) that it follows from one's lack of such a favouring rational basis that one lacks rationally grounded knowledge that E.

⁸ The *loci classici* as regards the new evil demon intuition are Lehrer & Cohen (1983) and Cohen (1984). For a helpful general discussion of the new evil demon intuition and its epistemological significance, see Littlejohn (2009). See also Bach (1985) and Engel (1992).

this kind of knowledge such that it excluded this possibility.

These two formulations of the radical sceptical paradox are clearly very similar. They share a claim, and the sceptical challenge posed in each case is the same. Moreover, they can each be formulated in terms of a conflict between our rationally grounded knowledge of an everyday proposition, E, and an epistemic lack which is exposed by radical sceptical hypotheses, in this case the BIV hypothesis. Crucially, however, these two formulations of the sceptical problem are logically distinct, and this is because the epistemic demands made by the two epistemic principles on which they turn are subtly different.

We can evaluate the relative logical strengths of these two epistemic principles by considering, in a simplified and analogous fashion, what each principle demands in the particular case of a subject's belief that E in the context of the BIV sceptical hypothesis:

The Simplified Closure-Based Entailment

If *S* has rationally grounded knowledge that E, then *S* has rationally grounded knowledge that she is not a BIV.

The Simplified Underdetermination-Based Entailment

If *S* has rationally grounded knowledge that E, then *S* has rational support for her belief that E which favours that belief over the sceptical alternative that she is a BIV.

I take it that the simplified closure-based entailment is an obvious, and uncontentious, simplification of what the closure principle demands in this case. That the simplified underdetermination-based entailment is a simplification of what the underdetermination principle demands is not so obvious, but that is because we are effectively working with a contraposed version of the principle. Uncontraposed, the entailment would be that if one lacks a rational basis which favours belief that E over the alternative sceptical scenario that one is a BIV, then one lacks rationally grounded knowledge that E. The reason why it is useful to work with a contraposed version of this claim is that the underdetermination-based entailment will then share its antecedent with the simplified closure-based entailment. We can thus focus our attention on what is entailed in each case.

With the entailments generated by the underdetermination and closure principles simplified in this way, we can detect one obvious difference between them. This is that whereas the simplified closure-based entailment demands that one has rationally grounded knowledge that one is *not* a BIV, the simplified underdetermination-based entailment merely demands that one has a rational basis which favours belief that E over the BIV alternative. The former claim is much more demanding than the latter claim, in that one can have better reasons for believing E rather than the BIV hypothesis without thereby possessing rationally grounded knowledge that one is *not* a BIV. In particular, while having better reason to believe that E as opposed to the BIV hypothesis

plausibly entails that one has *some* reason for believing that one is not a BIV, it would be a stretch to maintain that this *by itself* entails that one has rationally grounded *knowledge* that one is not a BIV (even granted that the entailed belief in question will be true). There is thus a strong *prima facie* basis for arguing that the underdetermination principle is logically weaker than the closure principle, in the sense that from the same antecedent the former principle extracts a logically weaker consequent.

This point is confirmed once we reflect on the logical relationships in the other direction—*viz.*, from the closure principle to the underdetermination principle. For notice that if one has rationally grounded knowledge that E, and one thereby has rationally grounded knowledge, via the closure principle, that one is not a BIV, then of course one inevitably has a rational basis for which favours E over the alternative sceptical scenario that is a BIV. One has, after all, rationally grounded knowledge that one is *not* a BIV. The closure principle is thus more demanding than the underdetermination principle.

Given the logical differences between these two ways of arguing for radical scepticism, we cannot take it as given that a response to the one formulation of the sceptical problem is thereby a response to the other formulation of the problem. Indeed, we cannot even take it as given that any adequate response to the underdetermination-based sceptical paradox is thereby an adequate response to the closure-based radical sceptical paradox. True, it does follow from the fact that the closure principle entails the underdetermination principle that a rejection of the latter would entail a rejection of the former. Hence, any response to the underdetermination-based sceptical paradox which involved a rejection of the underdetermination principle would thereby be a response to closure-based scepticism. But notice that this claim falls well short of the more general thesis that any adequate treatment of the underdetermination-based sceptical paradox is thereby an adequate treatment of the closure-based sceptical paradox. After all, one could respond to the former sceptical paradox in a way that keeps the underdetermination principle intact, and clearly this manner of dealing with underdetermination-based scepticism might have no obvious ramifications for how one should respond to the closure-based sceptical paradox. The point thus remains that these two formulations of radical scepticism might be amenable to very different anti-sceptical resolutions.⁹

⁹ For further discussion of the logical structure of sceptical arguments, with a particular emphasis on closure-based and underdetermination-based formulations of radical scepticism and how they relate to one another, see Yalçın (1992), Brueckner (1994), Cohen (1998), Byrne (2004), Vogel (2004), and Pritchard (2005*a*, part one; 2005*b*; 2015*a*, part one).

2. TWO SOURCES OF RADICAL SCEPTICISM

I think the logical differences between these two formulations are important, in that they reveal two different sources of radical scepticism.

Consider first closure-based radical scepticism. This form of scepticism exposes the apparent sceptical consequences of what we might naturally refer to as the ‘universality’ of rational evaluation, where this concerns the manner in which there is no *in principle* constraints on the extent of one’s rational evaluations (this is in contrast to *practical* constraints, of which there are usually many: time, imagination, opportunity-cost, and so on). Call this the *universality of rational evaluation thesis*. Such an idea seems to underlie closure-based radical scepticism in virtue of how there seems no inherent problem with the idea of extending the scope of a rational evaluation indefinitely by undertaking competent deductions from one’s current stock of rationally grounded knowledge. In this way, one moves from rational evaluations of one’s everyday beliefs to rational evaluations of one’s explicitly anti-sceptical commitments. In so doing, one is in effect shifting from a local rational evaluation to a global one, where the latter involves a wholesale rational assessment of one’s epistemic situation. That such a shift in epistemic focus is thought harmless reflects an implicit commitment to the universality of rational evaluation thesis, since without this in play we would not be so inclined to allow such closure-based inferences. In particular, if we antecedently held that there were in principle constraints on rational evaluation, then we would be inclined to limit such inferences so that they did not enable subjects to extend the scope of their rational evaluation beyond these limits.

In contrast, underdetermination-based radical scepticism is concerned with how the rational support we have for our everyday beliefs in empirical propositions is troublingly weak, in that it does not favour these beliefs over radical sceptical alternatives. In this way, underdetermination-based radical scepticism exposes the ‘insularity’ of our rational support for these beliefs. Accordingly, call the claim that the rational support for our empirical beliefs doesn’t favour those beliefs over sceptical alternatives the *insularity of reasons* thesis. Whereas the universality of rational evaluation thesis is concerned with the lack of in principle constraints on rational evaluation, the insularity of reasons thesis is concerned with a certain limitation on rational support itself, at least as regards our empirical beliefs.¹⁰

That the rational support we have for our perceptual beliefs is insular in this way is often taken to be a core epistemological datum which requires explanation. Indeed, the insularity of

¹⁰ It is an interesting question how the insularity of reasons thesis relates to the ‘veil of perception’, where the latter is a metaphysical claim about the nature of perceptual experience (i.e., that one never directly experiences an external world). While I think these two theses are related, it would take me too far afield to explore this issue here.

reasons thesis is simply a more generalised version of the new evil demon intuition noted above (in that it is concerned with radical sceptical hypotheses more generally, and not a particular radical sceptical hypothesis). It should be clear that underdetermination-based radical scepticism buys into the insularity of reasons thesis without question. After all, the key element in this argument is the effective granting of the new evil demon intuition, for without this component one could not derive (S₂1) in the first place, and the appeal to the underdetermination principle in (S₂2) would be idle. This formulation of the radical sceptical paradox is thus essentially wedded to the insularity of reasons thesis.

Although the ultimate sceptical import of the universality of rational evaluation thesis and the insularity of reasons thesis is the same, it is important to note that they pose distinct epistemological challenges. Suppose, for example, that one rejected the universality of rational evaluation thesis and therefore argued that there are in principle limitations on the scope of rational evaluation. In this way, one could argue that closure-based inferences need to be restricted in some way to prevent them taking the subject from local to global rational evaluations. One could thus undermine the closure-based radical sceptical paradox. In particular, one could hold that one's rationally grounded knowledge of everyday empirical propositions is entirely compatible with a lack of rationally grounded knowledge of the denials of radical sceptical hypotheses (on account of the fact that one cannot employ a closure-based inference in order to claim that one's rationally grounded knowledge of everyday propositions, if genuine, would entail the contested rationally grounded anti-sceptical knowledge).

It is far from obvious how that would help one resolve the problem posed by the insularity of reasons thesis, however. That one can have rationally grounded knowledge of mundane empirical propositions while lacking rationally grounded knowledge of the denials of radical sceptical hypotheses is one thing. That one can have adequately rationally grounded knowledge of mundane empirical propositions when that rational basis (one is aware) does not favour one's everyday empirical beliefs over sceptical alternatives quite another. As one might put the point, if one's everyday empirical beliefs do not satisfy the underdetermination principle, then in virtue of what, exactly, do they amount to rationally grounded knowledge? Thus, even with the closure principle out of action, one can still employ the underdetermination principle—and, thereby, the insularity of reasons thesis—to motivate a radical sceptical conclusion.

The same is true in the other logical direction, in that merely denying the insularity of reasons thesis does not in itself deliver a satisfactory response to the sceptical problem posed by the universality of rational evaluation thesis. For suppose that one argues that one's rational support can, in optimal cases say, epistemically favour one's everyday empirical beliefs over radical

sceptical alternatives. The insularity of reasons thesis would thus be rejected, and the underdetermination principle—while still standing—would be deprived of its sceptical ramifications. But can one straightforwardly generate on this basis a response to the radical sceptical problem posed by the universality of rational evaluation thesis? Alas, no.

For notice that the claim that one's rational support favours one's everyday empirical beliefs over radical sceptical alternatives is consistent with one nonetheless lacking rationally grounded knowledge of the denials of these radical sceptical alternatives. The extent to which one has better rational support for one's everyday empirical beliefs over radical sceptical alternatives could, after all, be merely marginal, and not of a kind that could underpin rationally grounded knowledge of the denials of these sceptical alternatives. It follows that one could have better rational support for one's everyday empirical beliefs over radical sceptical alternatives and yet nonetheless lack rationally grounded knowledge of the denials of these radical sceptical alternatives. And note that this could be so even if one further supposes that one has rationally grounded knowledge of these everyday propositions.

But insofar as the rejection of the insularity of reasons thesis is compatible with a lack of rationally grounded knowledge of the denials of sceptical hypotheses, then the radical sceptic can appeal to the closure principle—and, thereby, the universality of rational evaluation thesis—in order to call the possibility of rationally grounded everyday empirical knowledge into question. Thus, the mere fact that one has a better rational basis for one's everyday empirical beliefs over radical sceptical alternatives will not suffice to block the closure-based radical sceptical argument. The upshot of the foregoing is that a fully adequate response to the problem of radical scepticism may well need to be sensitive to the particular challenges posed by *both* of the articulations of this problem that we have examined. As we will see below, this conclusion is potentially important in terms of our understanding of two prominent styles of anti-scepticism which can appear to be in competition with one another. In particular, it invites the thought that these two responses to the problem of radical scepticism may well be responding to different versions of the radical sceptical challenge, such that on closer inspection they are not competing anti-sceptical proposals at all, but rather mutually supporting.

3. WITTGENSTEIN ON THE STRUCTURE OF RATIONAL EVALUATION

We begin with the closure-based radical sceptical paradox. I contend that the antidote to this problem lies in a distinctive conception of the structure of rational evaluation that is offered by

Wittgenstein in his final notebooks, published as *On Certainty* (OC).¹¹ What is common to the rational evaluations undertaken by both radical sceptics and traditional anti-sceptics (such as Descartes or G. E. Moore) is that they each attempt a universal rational evaluation of our beliefs. While the sceptics conclude from this evaluation that the rational standing of our beliefs is insecure, the classical anti-sceptics in contrast argue that a solid rational basis for our beliefs is available. Where Wittgenstein diverges from both sceptical and traditional anti-sceptical proposals is in his contention that the very idea of a fully general rational evaluation—whether positive (i.e., anti-sceptical) or negative (i.e., sceptical)—is simply incoherent. He thus offers a conception of the structure of rational evaluation which is essentially local, and which is thus directly at odds with the universality of rational evaluation thesis.

Key to Wittgenstein’s account of the structure of rational evaluation is the idea of *hinge commitments*. These concern that which we are optimally certain of, the so-called ‘Moorean’ propositions, such as ‘I have two hands’. Moore (1925; 1939) noted that the optimal certainty which we accord to such propositions seems to allow them to play an important epistemic role our practices of epistemic evaluation. But while Moore thought that this optimal certainty revealed a special kind of epistemic status, Wittgenstein instead argues that the exact opposite is the case, in that our hinge commitments are essentially groundless. Indeed, not only are they essentially groundless, but they cannot be subject to rational doubt either. This is because they form the framework relative to which any rational evaluation occurs, whether positive or negative.

As we might expect from unedited notebooks containing impressionistic remarks, Wittgenstein doesn’t offer a straightforward argument for this account of our hinge commitments. Rather he offers a series of examples which highlight the implausibility both of doubt of a hinge commitment being rational and of the idea that we could regard such commitments as rationally grounded. Consider the following passage:

If a blind man were to ask me “Have you got two hands?” I should not make sure by looking. If I were to have any doubt of it, then I don’t know why I should trust my eyes. For why shouldn’t I test my *eyes* by looking to find out whether I see my two hands? *What* is to be tested by *what*? (OC, §125)

Wittgenstein is suggesting that doubt of that which is optimally certain cannot be rational because it throws into question one’s entire system of beliefs, and thus the very putative rational basis of the doubt itself. Such a doubt, he writes, would “drag everything with it and plunge it into chaos.” (OC, §613) Doubt of a Moorean certainty is deemed akin to doubting everything, but Wittgenstein cautions that:

¹¹ Though as I’ve argued elsewhere—see Pritchard (2015c)—the ultimate source of this distinctive proposal may well be Newman (1870). See also Kienzler (2006).

If you tried to doubt everything you would not get as far as doubting anything. The game of doubting itself presupposes certainty. (OC, §115)

And elsewhere, “A doubt that doubted everything would not be a doubt.” (OC, §450; cf. OC, §§370; 490; 613)

Something must thus stand fast for rational doubt to occur, and this is our bedrock of hinge commitments. But, crucially, Wittgenstein further argues—contrary to a certain brand of broadly Moorean anti-scepticism—that it does not follow that these hinge commitments have a special rational grounding, but rather that just as they cannot be rationally doubted, so they cannot be coherently thought of as rationally grounded either. Consider the following passage:

My having two hands is, in normal circumstances, as certain as anything that I could produce in evidence for it.

That is why I am not in a position to take the sight of my hand as evidence for it. (OC, §250)

That is, just as one cannot make sense of a rational basis for doubt of a hinge commitment, for the very same reason one cannot make sense of a rational basis for belief of a hinge commitment either. Such commitments are thus essentially arational.

Relatedly, Wittgenstein also emphasises the point that our hinge commitments are neither acquired via rational processes nor responsive to rational considerations in the way that normal beliefs are. We’ve already noted the latter point, in that we’ve seen how our hinge commitments are simply not responsive to rational considerations in the usual way—e.g., they are not susceptible to being undermined by rational doubt. Indeed, our hinge commitments are, instead, completely non-optional, and represent a visceral, “animal” (OC, §359), certainty. On the former point, Wittgenstein points out that we are never explicitly taught our hinge commitments, but we rather “swallow them down” in other things that we are taught. No one teaches you that you have two hands, for example, but lots of things that you are taught presuppose this commitment. In a similar vein, Wittgenstein notes that it takes a very special kind of inquiry—one that is specifically philosophical in nature—to bring our hinge commitments to the fore. In the normal run of things, they “lie apart from the route travelled by inquiry.” (OC, §88)

Putting all these points together, Wittgenstein argues for the necessity of hinge commitments for there to be rational evaluation, and thus he contends that—as a ‘matter of logic’—all rational evaluation is essentially local. Consider these famous remarks on our hinge commitments:

[...] the *questions* that we raise and our *doubts* depend upon the fact that some propositions are exempt from doubt, are as it were like hinges on which those turn.

That is to say, it belongs to the logic of our scientific investigations that certain things are *in deed* not doubted.

But it 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. If I want the door to turn, the hinges must stay put. (OC, §§341-3)¹²

This point about how rational evaluation must be this way is very important to Wittgenstein's anti-scepticism, but it is often overlooked. Wittgenstein is quite emphatic that it is not a mere practical limitation on rational evaluation that he has in mind, such that if only we were cleverer, more imaginative, more conscientious, and so forth, then we would be able to make sense of the idea of a fully general rational evaluation. That these hinges stand fast for me, Wittgenstein (OC, §235) writes, is not "grounded in my stupidity or credulity." (OC, §235) Rather his point is that the very idea of a fully general rational evaluation—i.e., a rational evaluation which isn't relative to hinge commitments which are immune to rational evaluation—simply doesn't make sense.¹³

4. PUTTING THE WITTGENSTEINIAN PROPOSAL TO WORK

How does this help us with the sceptical paradoxes that we encountered above? As I've argued elsewhere—see, especially, Pritchard (2015*a*)—the import of Wittgenstein's account of the structure of rational evaluation to these paradoxes is moot, in that one needs to develop the proposal in very specific ways in order for it to get the required grip on the problem in hand. We will ignore the twists and turns in this discussion here, however, and go straight for what I believe is the concluding thought. This is that Wittgenstein's proposal has direct application to the closure-based sceptical paradox in virtue of how it demonstrates how closure-based inferences are simply not applicable to our hinge commitments.

As noted above, in the first instance Wittgenstein's proposal applies to the closure-based sceptical paradox in virtue of rejecting the universality of reasons thesis which we saw

¹² Although the "hinge" metaphor is the dominant symbolism in the book, it is accompanied by various other metaphors, such as the following: that these propositions constitute the "scaffolding" of our thoughts (OC, §211); that they form the "foundations of our language-games" (OC, §§401-3); and also that they represent the implicit "world-picture" from within which we inquire, the "inherited background against which [*we*] distinguish between true and false" (OC, §§94-5).

¹³ This point marks an important contrast between Wittgenstein's anti-scepticism and the superficially similar response to scepticism offered by Austin (1961). They are similar in that both emphasise the differences between sceptical doubt and everyday doubt. As Stroud (1984) so persuasively argued, however, it is open to the proponent of radical scepticism to embrace these differences while nonetheless maintaining that sceptical doubt is a *purified* version of everyday doubt (i.e., once the latter is stripped of purely pragmatic limitations, such as imagination, time, opportunity, ingenuity, and so on). Unlike Austin, however, Wittgenstein blocks even this move by demonstrating that the difference between sceptical doubt and everyday doubt is not a differences of degree but rather of kind, where one moves from a style of rational evaluation which is coherent to one which is simply incoherent. For further discussion of this point, see Pritchard (2011, §1; 2014*b*; 2015*a*, part two).

underpinned this formulation of the problem. If Wittgenstein is right, then there are limitations—moreover, in principle (i.e., ‘logical’) limitations, and not merely practical ones—on the extent to which one can rationally evaluate one’s propositional commitments. In particular, the scope of rational evaluation is constrained by the fact that all rational evaluations presuppose prior hinge commitments, and these cannot themselves be rationally evaluated. We should thus be very suspicious of the kind of closure-style inference in play in this formulation of scepticism, such that it takes us from treating a normal non-hinge claim as rationally grounded knowledge to treating a hinge commitment—concerning the denial of a radical sceptical hypothesis—as rationally grounded knowledge too.¹⁴

But does that mean that Wittgenstein is rejecting the closure principle? That would at least seem to be the implication of his rejection of the universality of reasons thesis, since one can surely recognise that one’s (rationally grounded) non-hinge commitments sometimes entail one’s hinge commitments. If the closure principle is allowed, then how is one to resist the conclusion that one can gain rationally grounded knowledge of one’s hinge commitments in this case, *contra* what Wittgenstein proposes? Conversely, insofar as we grant that rationally grounded knowledge of one’s hinge commitments is impossible, then one seems forced to admit that there is a standing challenge to the idea that any of one’s normal non-hinge beliefs amount to rationally grounded knowledge. The trouble is, didn’t we note above that the closure principle looked entirely uncontentious, such that denying it would be highly revisionary?¹⁵

The key to resolving this issue is to realise that the closure principle is simply inapplicable to our hinge commitments, and hence that it cannot be used to motivate the sceptical challenge in play. In particular, we need to establish some logical distance between the universality of rational evaluation thesis and the closure principle, such that the rejection of the one doesn’t entail the rejection of the other. Demonstrating that the closure principle doesn’t apply to our hinge commitments is one way of doing this.

Why would closure-style inferences be inapplicable to our hinge commitments? This depends on what we take a hinge commitment to be. The examples that are offered of our hinge commitments form, on the face of it anyway, a rather heterogeneous class. That one’s name is such-and-such (e.g., OC, §629), that one has never been to the moon (e.g. OC, §111), that one has

¹⁴ Proponents of a popular reading of OC—which I’ve elsewhere dubbed the “non-propositional reading” (e.g., Pritchard 2011; 2015*b*)—will dispute that the denials of radical sceptical hypotheses count as hinge commitments, since they will claim that such hypotheses fail to express a proposition at all. For an influential defence of such a reading, see Moyal-Sharrock (2004). For a helpful critical discussion, see Coliva (2010).

¹⁵ Wittgenstein recognised this problem himself—see, e.g., OC, §185—though obviously he didn’t express the point in terms of the closure principle. For discussion of this point, see Pritchard (2011, §1; 2012*b*, §2; 2015*b*, §2). For a prominent interpretation of OC which in effect takes Wittgenstein to be rejecting closure, see Wright (2004), though bear in mind that he expresses this point in terms of his denial of a slightly different closure-style principle, which he calls ‘transmission’.

two hands (e.g., OC, §1), that one speaks English (e.g., OC, §486), and so on—these instances of hinge commitments seem to be very diverse in character. Moreover, the very metaphor of the hinge implies a kind of optionality in our hinge commitments—hinges, after all, are usually movable (e.g., if one wishes to make a door turn a different way). Putting these two points together, one might be tempted by an account of hinges as optional commitments that one has, and which can vary radically from person to person, culture to culture, historical epoch to historical epoch, and so on.

I think this is precisely the kind of picture of our hinge commitments that it is crucial to resist. Consider first the putative heterogeneity of our hinge commitments. I contend that this diversity in our hinge commitments in fact conceals a common core. For what all of our examples of hinge commitments in effect codify is one's overarching conviction—call this the *über hinge commitment*—that one is not radically and fundamentally in error in one's beliefs. If, for instance, if I am wrong about whether or not I have hands in otherwise normal conditions, then clearly my beliefs are radically and fundamentally in error. The diversity in our hinge commitments thus belies a common source, which is our common commitment to the *über hinge*.

I take this to be a de-mystifying account of our hinge commitments, which is clearly an advantage of the proposal. Moreover, it also helps us to account for the properties that are attributed to our hinge commitments. The idea that one's commitment to the *über hinge* needs to be in place before one can engage in the game of doubt and belief, and thereby undertake rational evaluations, is obviously very plausible. Accordingly, insofar as one grants that the examples that Wittgenstein focuses on—the Moorean certainties, broadly speaking—are simply codifying the *über hinge commitment*, then it is hardly surprising that they will inherit this feature.

Furthermore, note that once we focus on the *über hinge commitment* it is clear why Wittgenstein's point is not merely psychological.¹⁶ For while it is undoubtedly true that we cannot, as a matter of psychology, engage in universal doubt, and thereby lose our *über hinge commitment*, the deeper point that Wittgenstein wants to make is rather one of (as he would put it) 'logic'. This is the philosophical thesis about the very nature of rational evaluation that we explored above—*viz.*, the fundamental incoherence in the very idea of a fully general rational evaluation (i.e., a rational evaluation that did not already presuppose the *über hinge commitment*, and hence whatever other commitments codify the *über hinge commitment*).

Reflecting on the *über hinge commitment* also makes us realise what aspects of the hinge metaphor Wittgenstein had in mind when using this terminology. The leading idea is clearly one of something having to stand fast in order for rational evaluations to take place. But in using this

¹⁶ I think this is a point that is overlooked in the naturalistic reading of OC proposed by Strawson (1985).

metaphor Wittgenstein wasn't also buying into the idea of optionality that is often associated with hinges. Indeed, our hinge commitments are precisely non-optional, since they reflect this basic animal conviction that we are not radically and fundamentally in error.¹⁷ I think this point helps the proponent of a hinge epistemology to avoid embracing a radical form of epistemic relativism, such that all rational evaluation is relative to a highly variable set of hinge commitments, thereby allowing subjects to potentially inhabit incommensurable spheres of rational evaluation. I don't think that this is part of Wittgenstein's proposal at all, for he emphasises again and again the shared basis of our rational systems. As he puts it at one point, in order to be rationally explicable one "must already judge in conformity with mankind." (OC, §156) Our shared language and practices—and, of course, our shared commitment to the über hinge—will tend to ensure a common thread is woven across our rational practices.¹⁸

A related advantage of this way of thinking about hinge commitments is that not just any attitude of pathological certainty will thereby count as a hinge commitment. The test is whether the certainty is grounded in the commitment to the über hinge. Moreover, notice that this picture of our hinge commitments can explain how specific hinge commitments which we hold—e.g., to having never been to the moon—can alter over time even though they are not directly responsive to rational considerations. For as our web of beliefs changes—as, in this case for example, space travel becomes more common—so what codifies our über hinge commitment can change also. This process of change can be rational, of course, but crucially it does not involve the direct rational evaluation of a hinge commitment.

So we have a particular conception of our hinge commitments on the table. How does this bear on the issue in hand, which is the supposed inapplicability of the closure principle to our hinge commitments? The answer lies in the fact that on this conception of hinge commitments it is clear that they cannot be beliefs, much less can they be beliefs that are acquired via a rational process of the kind at issue in the closure principle. More precisely, our hinge commitments are

¹⁷ I think that certain readings of OC go awry precisely by taking the hinge metaphor too literally on just this score. Williams (1991), for example, clearly thinks of our hinge commitments (or 'methodological necessities', as he calls them) as if they can be, at least sometimes anyway, changed at will. For instance, he holds that changing one's inquiry can change one's hinge commitments. Similarly, Wright (2004) makes the mistake of trying to conceive of our hinge commitments as something akin to assumptions which we are entitled to accept due to their strategic importance in our inquiries (i.e., that inquiry would be stymied otherwise). But one can accept that p while being agonistic whether p , and yet the kind of propositional attitude that we are interested in with regard to hinge commitments is clearly not compatible with agnosticism whether p . I discuss both proposals in more depth in Pritchard (2015*a*). See also Pritchard (2005*c*; 2010; 2011; 2012*b*; 2014*a*; 2015*b*).

¹⁸ The parallels between Wittgenstein on this score and Davidson's (e.g., 1983) appeal to the principle of charity are striking. See Pritchard (2013) for an exploration of Davidson's anti-scepticism. For further discussion of the topic of epistemic relativism in the context of OC, see Pritchard (2010), which is essentially a critique of Williams' (2007) hinge epistemology on this front. In short, I argue that Williams's inferential contextualist account of hinge commitments in terms of methodological necessities forces him to adopt an epistemology which is far too amenable to the threat of epistemic relativism. See also footnote 17.

not beliefs in the specific sense that epistemologists are interested in—*viz.*, the propositional attitude which is held to be a constituent of knowledge (call this notion, *knowledge-apt belief*). A knowledge-apt believing, after all, is a believing a proposition *to be true*, and as such it bears certain essential conceptual connections to truth and to reasons. In particular, while one can obviously have an irrational or groundless belief, one cannot, for instance, recognise that one has no reason for believing *p* to be true and yet still count as believing *p* (at least not in the knowledge-apt sense of belief anyway). One's propositional attitude toward *p* would instead amount to something else entirely, such as a wishful thinking. Thus insofar as we take seriously Wittgenstein's claim that our hinge commitments are neither acquired via rational processes nor responsive to rational considerations, then they cannot plausibly be thought of as knowledge-apt beliefs at all, much less can they be the result of a rational process such as competent deduction.¹⁹

It is, however, crucial to the formulation of the closure principle that it involves the acquisition of a (knowledge-apt) belief in the entailed proposition via the paradigmatically rational process of competent deduction. As we noted earlier, it is only if closure is understood in this way that it captures the idea that competent deductions from rationally grounded knowledge (where rationally grounded knowledge of the antecedent is maintained throughout) cannot lead to anything less than rationally grounded knowledge of the consequent. But if Wittgenstein is right, then it is simply not possible to acquire a (knowledge-apt) belief in a hinge proposition, much less via a rational process, and hence the sceptic cannot employ the closure principle to motivate their sceptical conclusion. The Wittgensteinian response to radical scepticism thus proceeds by rejecting the universality of reasons thesis and then further noting that the rationale for rejecting this thesis also undermines the sceptical application of the closure principle. In particular, in terms of our formulation of closure-based radical scepticism above, it is the second claim, (S₁2), that is denied. More specifically, it is maintained that one can accept the closure principle and yet nonetheless deny (S₁2), on the grounds that closure doesn't apply to our hinge commitments and hence cannot be employed to generate this claim.²⁰

¹⁹ For a useful recent discussion of the notion of belief, which delineates several different ways in which this notion is understood in the literature, see Stevenson (2002).

²⁰ For further discussion of the different ways of interpreting Wittgenstein's proposal in OC—of which there are many—see Pritchard (2005c; 2011; 2015*b*). Note, in particular, that I have not here engaged with Moyal-Sharrock's (e.g., 2004) important work on OC. In particular, she makes the provocative proposal—which has some support in the text itself—that we are not to think of our hinge commitments as involving a propositional attitude at all. For an insightful discussion of her view see Coliva (2010). For some other important treatments of OC not explored here, see McGinn (1989), Coliva (2015), and Schönbaumsfeld (2015).

5. A WEAKNESS IN WITTGENSTEINIAN ANTI-SCEPTICISM

While the Wittgensteinian response to radical scepticism fares well when it comes to closure-based radical scepticism, it struggles with underdetermination-based radical scepticism. That rational support is essentially local is entirely compatible, after all, with it also being ‘insular’ in the manner set out above—*viz.*, such that one could never have rational support for one’s everyday empirical beliefs which favours those beliefs over sceptical alternatives. But with the insularity of reasons thesis in play, underdetermination-based radical scepticism seems inevitable. In short, it could *both* be true that all rational evaluation is essentially local *and* that the rational support which our empirical beliefs enjoy is also insular. Is there anything in Wittgenstein’s account of the structure of reasons which could block this move?

Now one might be tempted to respond to this point by arguing that Wittgenstein’s account has at least *indirect* relevance to the underdetermination-based sceptical problem. For doesn’t this view rule sceptical scenarios out of the epistemic court, in virtue of the fact that their denials aren’t in the market for knowledge? If that’s right, then while there is nothing in Wittgenstein’s proposal which would suffice to show that we have the relevant favouring rational support for our beliefs, nonetheless there is enough to make the putative negative epistemic import of sceptical scenarios inherently suspect. Given that underdetermination-based scepticism trades on these scenarios just as much as closure-based scepticism, this would surely be bad news for both variants of the sceptical problem.

But a moment’s reflection reveals that this train of reasoning, while superficially appealing, is far too quick. For while it’s true that closure-based scepticism and underdetermination-based radical scepticism both appeal to radical sceptical hypotheses, we need to bear in mind that the manner in which they appeal to them is very different. The closure-based sceptical argument demands that we must be able to have rationally grounded knowledge of the denials of radical sceptical hypotheses if we are to have widespread rationally grounded knowledge of everyday empirical propositions. The Wittgensteinian proposal we have considered deals with this form of scepticism by showing that our everyday rationally grounded knowledge is compatible with a failure to have rationally grounded knowledge of the denials of sceptical hypotheses.

In contrast, the underdetermination-based sceptical argument doesn’t demand that we must be able to have rationally grounded knowledge of the denials of sceptical hypotheses at all, and hence the Wittgensteinian proposal doesn’t gain purchase here. Instead, it makes the demand that we must have better rational support for our empirical beliefs over sceptical alternatives if the former is to amount to rationally grounded knowledge. As we saw above, this is a logically weaker demand to make, in that one could have such favouring supporting for one’s everyday empirical

beliefs over sceptical alternatives even while failing to have rationally grounded knowledge of the denials of sceptical alternatives. And therein lies the crux of the matter. The Wittgensteinian proposal is that our everyday rationally grounded knowledge is fine even despite our inability to have rationally grounded knowledge of the denials of radical sceptical hypotheses. But this is irrelevant to underdetermination-based radical scepticism on account of the fact that this form of scepticism *never demanded* that we should have this kind of anti-sceptical knowledge if we are to have everyday rationally grounded knowledge.

The Wittgensteinian treatment of radical scepticism thus fails to engage with the underdetermination-based formulation of this problem. The worry that the rational support for our beliefs might be both local and insular is thus very real indeed. Worse, with the underdetermination-based formulation of the sceptical problem in play, it is surely even harder to be comfortable with the idea—which even Wittgenstein held took some getting used to (e.g., OC, §166)—of essentially local rational support. For remember what this idea means in practice—*viz.*, that the hinge commitments which underpin our system of rational evaluation are essentially unknown and lacking rational support. Wittgenstein offers us a compelling story as to why we should accept such a claim, despite it being in tension with a certain widely held philosophical picture (as encapsulated in the universality of rational evaluation thesis). But once we recognise the danger posed by underdetermination-based scepticism, this story starts to look much less compelling. The idea that rational evaluation is essentially local is acceptable only so long as we can retain our conviction that the rational support we have for our beliefs is *bona fide*. But with the underdetermination-based sceptical problem in play, there is no assurance that such local rational support is genuine at all.

6. WITTGENSTEINIAN ANTI-SCEPTICISM: WHITHER NOW?

So where does this leave a Wittgensteinian epistemology? I think that given the point made earlier that we are dealing with two distinct sceptical arguments which trade on two distinct sources of scepticism, the moral to be extracted is not that there is something seriously amiss with Wittgensteinian anti-scepticism, but rather that we should not expect an anti-sceptical proposal to offer us a complete solution to the problem in hand. In particular, the goal will be to find a way of supplementing this proposal with a further epistemological thesis which can deal with the problem of underdetermination-based radical scepticism.

It would take me too far afield to explain in detail how I think Wittgensteinian anti-

scepticism should be supplemented to deal with both sceptical problems—I offer the necessary detail in Pritchard (2015*a*)—so I will confine my remarks to a general outline of what I have in mind. The first point to note, however, is that it is vitally important that any supplementation of the Wittgensteinian position is not a mere ‘bolting-on’ of one anti-sceptical proposal to another. Rather, what we seek in a philosophically satisfying response to the dual problem posed by radical scepticism is a dual response which is compatible, integrated, and entered in the same spirit.

I think *epistemological disjunctivism*—a view that is rooted in the work of John McDowell (e.g., 1995)—fits the bill in this regard. Very roughly, this is the proposal that in paradigm cases of perceptual knowledge the rational support that one’s belief enjoys can be both reflectively accessible and factive. In particular, one’s reflectively accessible rational support for believing that *p* can be that one *sees that p*, where seeing that *p* entails *p*. So construed, epistemological disjunctivism—if it can be shown to be sound anyway—is clearly the antidote to underdetermination-based radical scepticism, since it blocks from the off the insularity of reasons thesis that is driving this form of scepticism. In particular, with epistemological disjunctivism in play the opening premise of the underdetermination-based sceptical argument is rejected, since in the right conditions one can have a rational basis for one’s everyday perceptual beliefs which favours—indeed, decisively favours, since it is factive—those beliefs over radical sceptical alternatives.

It should be granted from the outset that epistemological disjunctivism is a highly controversial position to hold. But, as I explain at length in Pritchard (2012*a*), the main reasons why this position is thought so controversial are in fact erroneous, such that this is a view that is available if we want it.²¹ Furthermore, I also argue that this proposal is rooted in our commonsense understanding of our epistemic practices, and hence that it is a position that we have only been led to abandon under pressure from faulty theoretical claims about the viability of the position. In a nutshell, one of the key claims of epistemological disjunctivism is that it is a view that we would have naturally endorsed had we not been misled by faulty philosophy. The upshot of this point is that this way of responding to underdetermination-based radical scepticism is an *undercutting* anti-sceptical strategy, just like the Wittgensteinian response to closure-based radical scepticism. That is, it is a strategy which demonstrates that what looked like a general sceptical paradox that traded only on our fundamental epistemological convictions was in fact nothing of the sort, but rather traded instead on contentious philosophical claims which we should reject. This is important, since it demonstrates the epistemological disjunctivism and Wittgensteinian

²¹ See also Neta & Pritchard (2007) and Pritchard (2008; 2015*a*, part three).

anti-sceptical are entered in very much the same philosophical spirit.²²

Furthermore, note that despite the very different nature of these proposals, they are clearly consistent with one another. That rational evaluation is in its nature local is entirely consistent with the possibility that some rational support is factive. And that some rational support is factive is entirely consistent with the possibility that rational evaluation is in its nature local. These proposals are also mutually supporting. If we ally epistemological disjunctivism to Wittgensteinian anti-scepticism, then we can explain how the latter can deal with the problem posed by underdetermination-based radical scepticism. And if we ally Wittgensteinian anti-scepticism to epistemological disjunctivism, then we can explain how the latter can avoid the epistemic immodesty of claiming that we can have rationally grounded knowledge—indeed, *factively* rationally grounded knowledge—of the denials of sceptical hypotheses. After all, it will now follow that closure-type inferences are simply inapplicable to our hinge commitments.

Moreover, notice it is easier to live with the Wittgensteinian idea that all rational evaluation is local if some rational support is factive. And (as we've just noted) it is easier to live with the idea that some rational support is factive if it doesn't entail that one can have rationally grounded knowledge of the denials of radical sceptical hypotheses. These are two proposals which are both stronger when grouped together, rather than considered separately.

I call this resolution to the problem of radical sceptical problem a *biscopic* proposal. The point is that we have hitherto failed to see the problem aright—in particular, we have failed to recognise its dual nature—and hence we have failed to see how this problem requires a dual solution. We have, if you will, been looking at the problem through only one eye at a time. But once we view the problem properly, and so see both of its aspects, then we can mount an integrated dual solution that offers philosophical satisfaction, and which is hence a cure for epistemic *angst* (of this variety anyway). That is precisely what this biscopic proposal offers us.²³

²² For more on undercutting anti-sceptical strategies—as opposed to *overriding* anti-sceptical strategies—see Pritchard (2014*b*; 2015*a*, part one). For some important and related discussions of how to classify different kinds of anti-sceptical proposals, see Williams (1991, ch. 1) and Cassam (2007).

²³ Thanks to Annalisa Coliva and Danièle Moyal-Sharrock.

REFERENCES

- Austin, J. L. (1961). 'Other Minds', in his *Philosophical Papers*, (eds.) J. O. Urmson & G. J. Warnock, 76-116, Oxford: Clarendon Press.
- Bach, K. (1985). 'A Rationale for Reliabilism', *The Monist* 68, 246-63.
- Brueckner, A. (1994). 'The Structure of the Skeptical Argument', *Philosophy and Phenomenological Research* 54, 827-35.
- Byrne, A. (2004). 'How Hard are the Sceptical Paradoxes?', *Noûs* 38, 299-325.
- Cassam, Q. (2007). *The Possibility of Knowledge*, Oxford: Oxford University Press.
- Cohen, S. (1984). 'Justification and Truth', *Philosophical Studies* 46, 279-96.
- (1998). 'Two Kinds of Sceptical Argument', *Philosophy and Phenomenological Research* 58, 143-59.
- Coliva, A. (2010). *Moore and Wittgenstein: Scepticism, Certainty, and Common Sense*, Basingstoke, UK: Palgrave Macmillan.
- (2015). *Extended Rationality: A Hinge Epistemology*, London: Palgrave Macmillan.
- Davidson, D. (1983). 'A Coherence Theory of Truth and Knowledge', *Kant oder Hegel?*, (ed.) D. Henrich, 428-38, Stuttgart: Klett-Cotta.
- Dretske, F. (1970). 'Epistemic Operators', *Journal of Philosophy* 67, 1007-23.
- (2005a). 'The Case Against Closure', *Contemporary Debates in Epistemology*, (eds.) E. Sosa & M. Steup, 13-26, Oxford: Blackwell.
- (2005b). 'Reply to Hawthorne', *Contemporary Debates in Epistemology*, (eds.) E. Sosa & M. Steup, 43-6, Oxford: Blackwell.
- Engel, M. (1992). 'Personal and Doxastic Justification', *Philosophical Studies* 67, 133-51.
- Hawthorne, J. (2005). 'The Case for Closure', *Contemporary Debates in Epistemology*, (eds.) E. Sosa & M. Steup, 26-43, Oxford: Blackwell.
- Kienzler, W. (2006). 'Wittgenstein and John Henry Newman On Certainty', *Grazer Philosophische Studien* 71, 117-38.
- Lehrer, K., & Cohen, S. (1983). 'Justification, Truth, and Coherence', *Synthese* 55, 191-207.
- Littlejohn, C. (2009). 'The New Evil Demon Problem', *Internet Encyclopaedia of Philosophy*, (eds.) B. Dowden & J. Fieser, www.iep.utm.edu/evil-new/.
- (2012). *Justification and the Truth-Connection*, Cambridge: Cambridge University Press.
- McDowell, J. (1995). 'Knowledge and the Internal', *Philosophy and Phenomenological Research* 55, 877-93.
- McGinn, M. (1989). *Sense and Certainty: A Dissolution of Scepticism*, Blackwell, Oxford.
- Moyal-Sharrock, D. (2004). *Understanding Wittgenstein's On Certainty*, London: Palgrave Macmillan.
- Newman, J. H. (1979 [1870]). *An Essay in Aid of a Grammar of Assent*, Notre Dame, IN: University of Notre Dame Press.
- Neta, R., & Pritchard, D. H. (2007). 'McDowell and the New Evil Genius', *Philosophy and Phenomenological Research* 74, 381-96.
- Nozick, R. (1981). *Philosophical Explanations*, Oxford: Oxford University Press.
- Pritchard, D. H. (2002). 'Recent Work on Radical Skepticism', *American Philosophical Quarterly* 39, 215-57.
- (2005a). *Epistemic Luck*, Oxford: Oxford University Press.
- (2005b). 'The Structure of Sceptical Arguments', *Philosophical Quarterly* 55, 37-52.
- (2005c). 'Wittgenstein's On Certainty and Contemporary Anti-Scepticism', *Investigating On Certainty: Essays on Wittgenstein's Last Work*, (eds.) D. Moyal-Sharrock & W. H. Brenner, 189-224, London: Palgrave Macmillan.
- (2008). 'McDowellian Neo-Mooreanism', *Disjunctivism: Perception, Action, Knowledge*, (eds.) A. Haddock & F. Macpherson, 283-310, Oxford: Oxford University Press.
- (2010). 'Epistemic Relativism, Epistemic Incommensurability and Wittgensteinian

- Epistemology', *Blackwell Companion to Relativism*, (ed.) S. Hales, Oxford: Blackwell.
- (2011). 'Wittgenstein on Scepticism', *Oxford Handbook on Wittgenstein*, (eds.) O. Kuusela & M. McGinn, 521-47, Oxford: Oxford University Press.
- (2012a). *Epistemological Disjunctivism*, Oxford: Oxford University Press.
- (2012b). 'Wittgenstein and the Groundlessness of Our Believing', *Synthese* 189, 255-72.
- (2013). 'Davidson on Radical Scepticism', *Blackwell Companion to Donald Davidson*, (eds.) E. LePore & K. Ludwig, Oxford: Blackwell.
- (2014a). 'Entitlement and the Groundlessness of Our Believing', *Contemporary Perspectives on Scepticism and Perceptual Justification*, (eds.) D. Dodd & E. Zardini, ch. 10, Oxford: Oxford University Press.
- (2014b). 'Sceptical Intuitions', *Intuitions*, (eds.) D. Rowbottom & T. Booth, 213-31, Oxford: Oxford University Press.
- (2015a). *Epistemic Angst: Radical Scepticism and the Groundlessness of Our Believing*, Princeton, NJ: Princeton University Press.
- (2015b). 'Wittgenstein on Hinges and Radical Scepticism in *On Certainty*', *Blackwell Companion to Wittgenstein*, (eds.) H.-J. Glock & J. Hyman, Oxford: Blackwell.
- (2015c). 'Wittgenstein on Faith and Reason: The Influence of Newman', *God, Truth and Other Enigmas*, (ed.) M. Szatkowski, Berlin: Walter de Gruyter.
- Schönbaumsfeld, G. (2015). *The Illusion of Doubt*, manuscript.
- Stevenson, L. (2002). 'Six Levels of Mentality', *Philosophical Explorations* 5, 105-24.
- Strawson, P. F. (1985). *Scepticism and Naturalism: Some Varieties*, New York: Columbia University Press.
- Stroud, B. (1984). *The Significance of Philosophical Scepticism*, Oxford: Clarendon Press.
- Vogel, J. (1990). 'Cartesian Scepticism and Inference to the Best Explanation', *Journal of Philosophy* 87, 658-66.
- (2004). 'Skeptical Arguments', *Philosophical Issues* 14, 426-455.
- Williams, M. (1991). *Unnatural Doubts: Epistemological Realism and the Basis of Scepticism*, Oxford: Blackwell.
- (2007). 'Why (Wittgensteinian) Contextualism is not Relativism', *Episteme* 4, 93-114.
- Wright, C. J. G. (2004). 'Warrant for Nothing (and Foundations for Free)?', *Proceedings of the Aristotelian Society* (supp. vol.) 78, 167-212.
- Yalçın, Ü. (1992). 'Sceptical Arguments from Underdetermination', *Philosophical Studies* 68, 1-34.