

The Skeptical Paradox and the Generality of Closure (and other principles)  
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In this essay I defend a solution to a skeptical paradox. The paradox I focus on concerns epistemic justification (rather than knowledge), and skeptical scenarios that entail that most of our ordinary beliefs about the external world are false. This familiar skeptical paradox hinges on a “closure” principle. The solution is to restrict closure, despite its first appearing as a fully general principle, so that it can no longer give rise to the paradox. This has some extra advantages. First, it suggests a general strategy that provides solutions to other versions of the paradox, not just those that depend on closure. Second, it clarifies the relation between the paradox and other kinds of skeptical problem.

## 1. A Skeptical Paradox

The paradox I have in mind involves propositional justification, or what you have justification to believe (even if you don't believe it, or don't believe it in a justified way), and skeptical scenarios that entail the falsity of your ordinary, contingent beliefs about your environment that you base on your senses. Two standard examples are that you are a brain in a vat in an otherwise empty world, and that you are a victim of Descartes' demon. Let 'SK' stand for your favorite such scenario, and let 'P' stand for your favorite ordinary proposition whose negation is entailed by SK—mine is [there are tables]. Here is the paradox presented as an argument:

Skeptical Premise: You lack justification to believe that  $\sim$ SK

Connecting Premise: If you lack justification to believe that  $\sim$ SK, then you lack justification to believe P.

Paradoxical Conclusion: You lack justification to believe P.

The conclusion is “paradoxical” in the sense that its negation is so plausible (for many ordinary beliefs), that the fact that any remotely plausible premises seem to lead to such a conclusion makes the argument a paradox. The paradox set, then, contains the premises and the negation of the Paradoxical Conclusion. The Connecting Premise connects our ignorance about SK to our ordinary beliefs. Some closure principle about justification will motivate this premise, since SK entails  $\sim$ P. But, if we were considering a different kind of skeptical scenario, such as that you are currently dreaming, which does not entail  $\sim$ P, we'd need a different connecting premise. This will inevitably depend on some other general epistemic principle.

## 2. The Premises

Why do the premises of the paradox seem plausible?

## 2.1 The Skeptical Premise

The Skeptical Premise is plausible because justification of the relevant, epistemic sort, requires some good evidence or argument, while there seems to be none for  $\sim$ SK. Consider:

Evidentialism: if you lack good evidence that some proposition is true, then you lack (epistemic) justification to believe that proposition.<sup>1</sup>

Why is Evidentialism plausible? Arguably, it is due to the very nature of belief and evidence. To believe is to take something to be *true*, and evidence for something is simply an indication of its truth. Justification is a positive status. How could taking something true be *justified* if nothing indicates its truth?

Perhaps there are reasons for taking something to be true that do not themselves indicate the truth of that thing, so they are not evidence. That you threatened to tickle me until I cry otherwise, for example, could be reason to believe whatever you say. But that is not the sort of reason at stake in the paradox, for it is *obvious* that I could have this sort of reason to believe  $\sim$ SK, and it is *obvious* I have the other, evidence-requiring, “evidential” or “epistemic” sort of justification to believe P. So, we can take Evidentialism to define the kind of justification that the paradox is about, rather than being a substantive principle about all justifications. Evidential justification is what makes both the Skeptical Premise plausible and the Paradoxical Conclusion paradoxical.

The term ‘good’ in Evidentialism needs explication. What counts as good evidence arguably depends on the kind of proposition at issue. I take no stand here, on behalf of Evidentialism, on what good evidence is for, say, mathematical propositions and propositions about one’s own mental states. The propositions at issue are contingent propositions about the external world, such as P and  $\sim$ SK. When it comes to such propositions, the important qualification introduced by ‘good’ is that not just *any* indication of the truth of something is *good* evidence for that thing. That there are tables is a good indication that there are tables, but it is not good evidence that there are tables. Good evidence requires, at least, independence from what it is evidence for.

I do not offer an account of evidential goodness and independence, for lack of space and because Evidentialism is not my focus. My point is merely to explain Evidentialism’s plausibility, and to point out that the case for it seems fully general, since it applies to all beliefs, given their nature. Given Evidentialism’s initial plausibility, why is the Skeptical Premise plausible?

We seem to lack good, empirical evidence for  $\sim$ SK, even though we have sensory experiences whose contents entail  $\sim$ SK. The problem with appealing to such evidence is not that it is question-begging against a skeptical position,<sup>2</sup> or that it problematically assumes that

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<sup>1</sup> Some philosophers use ‘evidentialism’ to express an analysis of justification, which gives necessary and sufficient conditions. I use it here in a weaker sense, to specify only a necessary condition on being epistemically justified. See Avnir (2011: 178-80) for discussion of ‘epistemic’ and connection to the truth, in relation to the paradox.

<sup>2</sup> See Wright (1991: 89) on the “adversarial stance,” and Pryor (2000: 517) on the “modest anti-skeptical project.”

the Paradoxical Conclusion is false. We aren't currently debating a skeptic, and we are assuming that the Paradoxical Conclusion must be false, in approaching this argument as a paradox. Rather, the problem is that, intuitively, the appeal to empirical evidence seems to depend on  $\sim$ SK, in a way that runs afoul of the "independence" or "goodness" condition above. To appeal to empirical evidence is ultimately to appeal to how things seem or look. If you were neutral (or negative) about  $\sim$ SK, or about whether things are the way they look, then why would you appeal to how things look, empirically, as evidence for how things are? Instead, in appealing to how things look as evidence for something, you seem to be assuming that things are (likely to be) the way they look. This at least suggests that any empirical evidence we might appeal to will depend on  $\sim$ SK. And this suggests that such empirical evidence *for*  $\sim$ SK is therefore not independent, or good. Of course, many philosophers reject this suggestion, for a variety of reasons (including a rejection of the internalist assumptions lurking throughout these paragraphs).<sup>3</sup> But they have been aptly criticized elsewhere, and are not my target here.

On the other hand, a priori arguments for  $\sim$ SK seem doomed, a priori, since they are attempts to establish a specific, contingent truth by "pure thought" alone. That hasn't stopped many philosophers from trying, but such attempts, such as Putnam's (1981) appeal to semantic externalism and appeals to an "inference to the best explanation" (e.g. Vogel 2005), have been aptly criticized elsewhere, and are not my target either.

To be clear, I have not attempted to refute the most popular strategy for solving the paradox, which is to reject the Skeptical Premise. Rather, I have merely presented an initial case for the Skeptical Premise, in order to motivate a closer look at the Connecting Premise.

## 2.2 The Connecting Premise: closure

The Connecting Premise seems plausible, in part, for the same reason that we seem to lack independent evidence for  $\sim$ SK: empirical claims, such as P, seem to somehow depend on  $\sim$ SK, and so if you lack justification to believe  $\sim$ SK, there goes the basis of your justification to believe P. But, setting this often-neglected intuition in favor of the Connecting Premise aside, it is often observed that the Connecting Premise derives its plausibility from some general principle such as closure, along with some innocuous assumptions.

What is closure? Roughly: if you have justification to believe something, then you have justification to believe any known entailment of that thing. There are various formulations of this principle, and various problems for them. Some formulate the principle in terms of competent deduction, rather than known entailment.<sup>4</sup> But the version that I think is most defensible is this:

Closure: For all propositions A and B: If you have justification to believe the proposition [A & (if A then B)], then you have justification to believe B.

Here it might help to note that the propositional justification in the consequent amounts to this: you have what it takes, epistemically, to form a belief that B. This is compatible with your

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<sup>3</sup> Two different, classic cases are Pryor (2000) and Williamson (2000).

<sup>4</sup> See Williamson(2000), Hawthorne (2005), and Pritchard (2016).

never coming to believe it, and with your coming to believe it in a way that is not (doxastically) justified. Propositional justification is the abstract, basic notion of having sufficient epistemic support, in principle available, for a belief. But this need not be due to an inference from A, as a deductive formulation of the principle would suggest.

Closure, or some variant of it, is held by most epistemologists to be not only plausible, but obviously true, and almost has the status of an axiom. This explains why the majority of anti-skeptical strategies target the Skeptical Premise, and the need, of those who do deny Closure, to come up with an explanation for the mass and intense appeal of Closure.

The focus on Closure might seem puzzling given the bigger picture. If we were considering a different sort of skeptical scenario, one which does not entail  $\sim P$ , then Closure would be irrelevant. To see why, consider the auxiliary assumption required for Closure to imply the Connecting Premise. The Connecting Premise says nothing about your awareness of the logical relation between P and  $\sim SK$ . So, to derive the Connecting Premise from Closure, we must assume that whenever you have justification to believe P, you realize that P entails  $\sim SK$ , so that you have justification to believe [P & (if P then  $\sim SK$ )]. Only now can we derive the Connecting Premise, since the relevant instance of the consequent of Closure is that you have justification to believe  $\sim SK$ . According to Closure, then, if you lack justification to believe  $\sim SK$ , the relevant instance of the antecedent of Closure is false: you lack justification to believe [P & (if P then  $\sim SK$ )]. According to the assumption, you therefore lack justification to believe P. In other words, if you lack justification to believe  $\sim SK$ , given the assumption and Closure, then you lack justification to believe P. That's the Connecting Premise. But now consider, instead of SK, the scenario in which you are dreaming. We should not assume that you ever have justification to believe [if P then you're not dreaming], since you presumably realize that you might be dreaming while asleep at a table. The assumption we used above is no good. In that case, we need some principle other than Closure to connect the dreaming scenario to P in a way that implies the relevant version of the Connecting Premise.<sup>5</sup>

For now, let us continue to focus on Closure, keeping in mind that the same strategy defended below should apply just as well to other such general principles, which support other versions of the paradox.

Next, I describe the two main arguments for Closure.

### 2.2.1 The argument from deduction

Here is one argument for Closure. Suppose you have justification to believe, about some propositions R and S, [R & if R then S]. This is an instance of the antecedent of Closure. Either your justification to believe R depends on some prior justification to believe S, or it does not.

Suppose it does. Then an inference to S would be circular, or question-begging. But, given (as we are supposing) that you have justification to believe R, you must already have justification to believe S, as this is (in part) what your justification to believe R depends on. So, in this case you already have justification to believe S.

Suppose instead that your justification to believe R does not depend on some justification to believe S. Then the inference, from [R & (if R then S)] to S, could provide justification to believe S. For, how could that inference fail to provide justification for S, given

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<sup>5</sup> See Stroud (1984, ch. 2).

that your justification to believe the premise does not depend on any justification to believe S? It would not, in this case, be a circular or question-begging inference. You therefore have justification to believe S; you have what it takes, epistemically, to justifiably conclude that S, even if you never do so.

So, either way, you have justification to believe S, which is the consequent of Closure. Since its consequent can be derived from its antecedent for two arbitrary propositions, Closure must be true.

Notice that this argument depends crucially on the idea that either your justification to believe R rests on justification to believe S, or else deducing S from [R & (if R then S)] produces justification. There is no other way that a deductive inference can fail, according to this reasoning. But, as I explain in section 4, this is dubious, and is the reason the argument from deduction fails.

### 2.2.2 The argument from coherence

A different kind of argument for Closure claims that any closure failure would make justification incoherent, or make possible that an incoherent state be justified. The best way to make this case is to claim that any epistemic notion for which Closure fails is *probabilistically* incoherent, in the sense of failing to conform to the probability calculus. Return to R and S, from above, and recall that you have justification to believe [R & (if R then S)]. In that case, if you are not as confident that, or assign as high a probability to, S as you do R, you are probabilistically incoherent. This might naturally be taken to mean that you would not have justification to believe R in such a case, or that any justification you did have would be undermined by your failure to believe S. Failure to believe (with at least the same confidence) S would make you irrational, so you must have some justification to believe S.<sup>6</sup>

This argument is tempting but not valid, and at best supports a restricted version of Closure, as I explain in section 4. But the arguments from deduction and coherence constitute the main case for Closure and, accordingly, the Connecting Premise.

## 3. Closure Denial

The most popular strategy is to deny the Skeptical Premise, but my purpose here is to deny Closure, and thereby reject the Connecting Premise. There are different ways to deny the Connecting Premise. Here is a brief, critical summary of the alternatives to the one I defend.

### 3.1 Closure fails even in non-skeptical cases

The (historically) first, and still most widely known denial of Closure is Dretske's (1970, 2005). I will not go into the details, because I think it is the least promising approach. Closure fails, according to this view, even in relatively ordinary, or at any rate non-skeptical situations. For example, suppose you see a bottle on the table (in normal circumstances), and it looks like there's wine in it. You can have justification to believe that there's wine in the bottle on the basis of the way it looks, while lacking justification to believe that the liquid in the bottle is not colored water—it would look just the same if it was full of colored water instead.

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<sup>6</sup> In Avnur (2012a) I consider another version of the argument from coherence.

But such examples are implausible. You *do* seem to have at least some justification to believe such things as that the bottle does not have colored water in it. It's just that this justification does not derive from inference from its looking like wine. Rather, your justification to believe that it is not water comes from background considerations, perhaps inductive information from past experiences with bottles and drinking. If you really lacked justification to believe that it is not water, then, intuitively, you *would* lack justification to believe it is wine. It seems that Dretske conflated different kinds of justification, concluding from the fact that you don't have justification to believe it is not water by inference from how things look, that you lack any kind of justification. But independent, background justification is in place in all such ordinary cases; I'm unaware of any plausible *non-skeptical* instances of Closure failure, for this reason.

### 3.2 Mixed Closure

Wright (2004) and Coliva (2015, ch. 3) both deny Closure, at least interpreted to be about evidential justification. They accept, in its place, a similarly general principle that mixes different epistemic statuses.

The initial impetus for this strategy is that Closure for *evidential justification* is false. As Wright (2004: 178) points out, this should not be surprising. He cites Dretske-style cases, such as the zebra case: at the zoo, your visual evidence supports that it is a zebra, but the same visual does not support that it is not cleverly disguised mule. In other words, the same visual evidence justifies belief that it is a zebra, but not belief that it is not a cleverly disguised mule, even if you realize that zebras are not cleverly disguised mules. Specific (in this case visual) evidential relations are not even apparently closed under known entailment. This is a crucial insight, and we can add a further point. In a formal or "Bayesian" framework, evidence is a matter of confirmation (where *e* confirms *q* just in case the probability of *q* given *e* is higher than the prior probability of *q*). But we know independently that confirmation closure, also known as Hempel's "special consequence principle," fails.<sup>7</sup> In other words, the "makes more probable" relation is not closed under known entailment, and being supported by evidence arguably just is being made more probable by that evidence. So why should the status of being supported by evidence be closed under known entailment? Not only are specific sorts of evidence unclosed, evidence in general is unclosed.

Wright's response to this was to preserve a general closure principle for a category, warrant, that includes evidential justification and entitlements. Briefly, an entitlement is a non-evidential, positive status that applies to *trusting* "cornerstone" propositions, of which  $\sim$ SK is one. While he offers a few different accounts of entitlement, one in particular is held to be relevant to Cartesian skeptical paradoxes of the sort at issue here, namely, entitlement of "cognitive project" (2004: 205; sections 5 and 6). This entitlement derives from the fact that, when investigating some empirical matter, such as *p*, we must presuppose  $\sim$ SK, have no reason to doubt it, and would be engaging in circular reasoning if we were to try to establish it within this investigation. Setting aside various worries about entitlement,<sup>8</sup> the suggestion is that a

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<sup>7</sup> See Hempel (1965, 31).

<sup>8</sup> Wright himself considers an objection to entitlement, the "leeching" problem (209), which has remained a live objection even today. See Coliva (2015) ch. 2 section 2 for a helpful survey of objections to Wright. See Avnur

general closure principle can be saved if it is construed to be about warrant—the status of having either evidential justification or entitlement.

Coliva (2015) instead suggests that  $\sim$ SK, and other cornerstones, or “hinges” as she calls them, are necessary assumptions of epistemic rationality. Specifically, the assumption that  $\sim$ SK is necessary for the acquisition of perceptual warrants (or justification due to the evidence of the senses). The subject’s assumption that  $\sim$ SK is therefore “mandated” by epistemic rationality, and is partly constitutive of epistemic rationality itself (129). I find much to agree with here. But Coliva’s approach to Closure is, like Wright, to posit a fully general version of it that is about, not evidential justification, but “extended” epistemic rationality, which includes both evidential justification and those assumptions necessary for the acquisition of that justification. And both P and  $\sim$ SK are epistemically rational in that extended sense, so mixed closure is satisfied.

Below, I offer some criticism of the idea that assuming  $\sim$ SK is *necessary* for perceptual warrants. For now, consider an objection to the general strategy of mixing non-evidential with evidential statuses in order to produce a general closure principle, due to Pedersen (ms).<sup>9</sup> Pedersen posits an obviously gerrymandered property, ‘blib-blob’: “Something is a *blib-blob* if and only if it is divisible by 2 with no remainder, or has two hydrogen atoms and an oxygen atom, or is valid, or is blue, or loves soccer.” It’d be unsatisfying to try to vindicate a general mathematical principle, say, by replacing it with a blib-blob principle. Unless entitlement and rational mandates can be shown to be epistemically significant in the same way that evidential justification is—to bear on the likely truth of the proposition they apply to—warrant (Wright’s) and rationality (Coliva’s) will be blib-blob-like properties, with nothing unifying them. In that case, Closure for warrant and rationality is not worth defending, for it is trivial to come up with *some* disjunctive property, one of whose applications is to justified beliefs, such that that property is closed. Why should that make the failure of closure *for justification* any less problematic? On the other hand, the appeals to warrant and rationality were made precisely because it *cannot* be determined that  $\sim$ SK has a property that is directly epistemically significant in the way that evidential justification is. The whole point of appealing to a non-evidential status is that, apparently, there is no positive epistemic status to attach to  $\sim$ SK. So, the objection goes, the strategy of mixing Closure is bound to be unsatisfying.

It should be noted, in defense of Wright and Coliva’s strategies, that entitlement and rational mandates are clearly *closely related* to evidential justification. It seems clear that what they have offered is not exactly like a blib-blob closure. Nevertheless, Pedersen’s objection presses us to go further, either in explaining how the non-evidential statuses are similar enough to the evidential ones for the purpose of solving the paradox, or in explaining why it is not so bad, after all, if Closure for evidential justification fails to hold. Here I pursue that second path. My main difference from the mixed strategy is that I doubt that some positive, non-epistemic status can adequately explain why Closure and the arguments for it fail.

### 3.3 Restricting Closure

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(2011) for a more general objection to any appeal, in the context of skepticism, to a warrant that does not require evidence.

<sup>9</sup> For Pedersen’s positive view, see Pedersen (2020).

Finally, then, we come the strategy that I think is most promising. On this view, Closure applies to a large set of cases, but it is not *fully* general, as it initially appears. Restricting Closure in this way should accommodate the absence of non-skeptical exceptions to Closure, avoid Pederson's objection, and explain why the arguments for Closure fail.<sup>10</sup> Rather than posit a general, *mixed* principle in order to compensate for the failure of Closure for evidential justification, as Wright and Coliva do, this strategy posits no such general principle to replace Closure. Instead, it refutes the arguments in favor of Closure directly: we shouldn't have ever thought there is a fully general principle here. A similar strategy has been suggested for other great paradoxes. For example, some solutions to Russell's paradox (including Russell's) proceed by restricting the principle of properties and sets, so that it does not apply generally to all properties. And some solutions to the liar paradox restrict principles governing the truth predicate that initially appear fully general. The present strategy is similar, with Closure as the apparently general principle.

Restricting Closure requires the following steps, each of which is described below, in 4.1-4.3, respectively. First, distinguish a special set of propositions which includes  $\sim$ SK (and, preferably, other skeptical scenarios). The more natural and non-ad hoc this set is, the better. Second, exclude this set of propositions from Closure, by restricting its quantifier 'For all' to non-special propositions, and show how this explains the failure of the arguments for Closure. Finally, attempt to explain why unrestricted Closure may have seemed plausible even though it is false. The result is that we can deny the Connecting Premise, because it rests on an instance of Closure that concerns  $\sim$ SK, and we thereby avoid the Paradoxical Conclusion.

#### 4. How to Restrict Closure

This is the main, positive section of the paper, in which I develop the solution to the paradox.

##### 4.1 The special set

The special set of propositions is determined by the very notion of epistemic justification. Justification is not a neutral (or "formal") notion, it is biased towards some contingent contents, and those contents are the special propositions to be excluded from ordinary epistemic principles.<sup>11</sup>

Any theory of justification on which the Paradoxical Conclusion is false, so that many of our perceptual beliefs are justified, is biased in this way. For example, some, called 'Dogmatists', hold that its looking to you as if P, and your lacking any relevant defeaters, is sufficient for (prima facie) justification to believe P.<sup>12</sup> The notion of justification thereby facilitates an assumption that things are generally the way they look, unless you have evidence otherwise. You may—it is good to—take your perceptual beliefs to be faring well with respect to the truth, simply by virtue of their being based on perception, so the implicit starting assumption you may help yourself to even if implicitly, according to this way of evaluating

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<sup>10</sup> P.F. Strawson's (1985) view is at least compatible with this approach, though he never presented it in relation to Closure. See Avnur (2012c) and (2019) on how my view differs.

<sup>11</sup> See Strawson (1952) for a similar view about "reasonable belief," in response to the problem of induction.

<sup>12</sup> Pryor (2000, 2004), Huemer (2001).



beliefs, is that you are probably not massively deceived. Others, called ‘Conservatives’, hold that you have, by default, a (prima facie) justification to believe, or accept, or trust, or assume, that things are the way they look.<sup>13</sup> So long as this justification is undefeated by other evidence, you have justification to believe that P if it looks like P. The difference between the two is that, for Conservatives, your perceptual justification to believe P is mediated by, or dependent on, this other justification to assume that things are the way they look; for Dogmatists, your justification to believe P is immediate. Both have in common the idea that, one way or another, the way we evaluate beliefs has a built-in bias towards the proposition that we are not massively deceived, since a justified subject may operate doxastically on that starting assumption.

Why is the notion of justification biased in this way? This question is important in order to show that the special category I will soon distinguish on the basis of this bias is not *ad hoc*. Whether or not we ever occurrently entertain it, we typically all assume, and assume that everyone else assumes, that we are not massively deceived, or, a little more precisely, that *we can arrive at the likely truth through the use of our faculties*. Call this assumed proposition ‘T’, for Truth. We evaluate beliefs according to this starting assumption.<sup>14</sup> Similarly, a population in which everyone assumes that all Germans are cruel might be expected to employ a term such as “boche.”<sup>15</sup> The primary way of evaluating beliefs is to see if they are justified, and this notion of justification applies to what our faculties ultimately produce (absent defeaters), and implies (from the subject’s perspective) that the justified belief is likely true. Thereby, the notion is biased towards T: if your faculties deliver P, then all else equal you have what it takes, from this epistemic perspective, to believe P with justification.

Why do we all assume T, and assume that everyone else assumes it? Briefly, any creature with beliefs and sources of information must find itself assuming T when *epistemically* evaluating beliefs for whether they are supported by those sources, and must be unable to produce independent basis for believing T. For, any appeal to an informational basis for believing, and hence for believing T, must assume T. Our evaluation of beliefs must assume something, T, that cannot be positively evaluated. This explains why we use such a notion of justification, and provides a defense of, perhaps a reason for, using it.<sup>16</sup> Unlike Wright, I do not appeal to this observation in order to show that we are entitled to trust T. Rather, my point is only to show that it is not arbitrary, or a *mere* matter of convention, that our notion of justification displays a bias towards T. I note, too, that if we did not evaluate beliefs on the basis of an assumption that T, the Paradoxical Conclusion would not seem so intensely paradoxical in the first place.

In other work, I defend and detail the idea that justification is loaded with this bias, and explain how it gives rise to the paradox.<sup>17</sup> My purpose here is to show how this simple

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<sup>13</sup> Wright (2004), White (2006)

<sup>14</sup> See Goldman (1993) for one development of this idea, and Avnur (forthcoming, section 2) for discussion.

<sup>15</sup> The example is from Dummett (1973), discussed in Brandom (2000: 69-71). But, though this is a convenient example, the view that justification is loaded with a bias carries no commitment to inferentialism, as I explain in Avnur (forthcoming). For a similar use of the analogy between *boche* and justification, see Lange’s (2008) discussion of induction.

<sup>16</sup> See Avnur (2012c) and (2019), and Pritchard (2016: 97-98) for a Wittgensteinian version of this idea.

<sup>17</sup> Avnur (forthcoming)

observation can also serve to distinguish a special set of propositions which are naturally excluded from principles such as Closure. When it comes to our beliefs about the world around us, T implies  $\sim$ SK, and the negation of any other skeptical scenario that initially seems to raise a skeptical paradox. A bias towards the proposition that you are capable of getting at the likely truth *about your environment* by the use of your faculties, is, all else equal, also a bias towards the proposition that your senses are not massively deceiving you, because otherwise you could not get at the truth about it. (This is so regardless of whether the subject, whose justification is in question, ever explicitly entertains SK.) And the various skeptical scenarios are just ways for your senses to be massively deceiving you. So, justification is biased towards T, and this means that *perceptual* justification is biased towards  $\sim$ SK.

The bias of justification, which includes  $\sim$ SK, is merely *prima facie*; it sanctions a *starting* assumption on the part of the thinker. The bias can be overwhelmed by certain courses of evidence. One can imagine cases in which one gains justification to believe some skeptical scenario. For example, one might find, at the bottom of one's visual field, messages purporting to be from the crew running the vat that one's brain is in (in the BIV scenario). These messages might make predictions about the course of one's experiences which come true. Surely, with the messages' reliability established, this is *some* good evidence that one is a BIV, and may even provide justification to believe it. If it is possible to be a BIV, then it is possible for the scientists to justifiably believe it in some such way. In such a case, one need not, and should not believe, assume, or accept  $\sim$ SK, even though some of one's beliefs, such as the belief that SK, are justified.

The observation that one's course of experience could generate justification to believe SK constitutes an objection to two other, recent rejections of the Connecting Premise. The first is Coliva (2015, ch. 4), according to which propositions such as  $\sim$ SK are mandated by epistemic rationality, because they must be assumed in order for us to have perceptual justification at all. That one could have perceptual justification that one is a BIV while presumably no longer assuming that one is not a BIV seems to refute the claim that the latter assumption is required for perceptual justification. One can still rationally respond to perceptual evidence, even when one no longer assumes  $\sim$ SK. Another recent attempt is Pritchard (2016, ch. 4.1). On this view, propositions such as  $\sim$ SK (as well as what he calls 'uber hinges' such as T) are not proper, "knowledge-apt" beliefs at all, and for this reason closure does not apply to them, and the Connecting Premise is false.  $\sim$ SK is not a knowledge-apt belief because it is entirely unresponsive to rational considerations.<sup>18</sup> But, as we've just seen, it is possible to rationally come to believe some SK, or  $\sim\sim$ SK, so  $\sim$ SK cannot be disqualified as a possible content of belief in this way. The rational thing to do in the case described above is to reject  $\sim$ SK, and I see no reason to suppose one *couldn't* do the rational thing there. Our usual commitment to  $\sim$ SK is also rationally responsive in a more temporary way. Recall Descartes' observation in the first meditation: "The result [of considering the skeptical scenario of dreaming] is that I begin to feel dazed, and this very feeling only reinforces the notion that I may be asleep." He later observes, as does Hume after him, that such effects don't last long. But these are still responses, albeit

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<sup>18</sup> See Pritchard (2016: 91- 92, 101-2) on the exclusion of non-beliefs from closure, and on our seeming to ourselves to believe  $\sim$ SK.

temporary, to rational considerations.<sup>19</sup> Since our attitudes about SK are not unresponsive to rational considerations, there seems to be no reason to legislate that they aren't proper beliefs.

Notably, in the above scenario, one is still employing the notion of justification that is biased towards T. After all, it is by the use of one's faculties, including reasoning and understanding as well as sensory experience, that one arrives at the conclusion that one's senses are no longer to be trusted as before, and that is precisely what generates *justification* to believe that one is a BIV.<sup>20</sup>

So, what is the special set distinguished by this account of justification's bias? The notion of justification at issue in the paradox, which makes sense of the repugnance of the Paradoxical Conclusion, is biased towards some propositions, including T and  $\sim$ SK, and those propositions are the special ones. We have seen that one might, though, come to learn that SK is true—perhaps one could even come to learn, for some specific SK, that SK is false. But that is the result of further investigation, not due to the a priori nature of justification itself. Even if, for example, we find some successful a priori argument for  $\sim$ SK, the notion of justification is still biased towards some propositions, and it is these propositions that are special, and excluded from principles like Closure, as I explain next.

#### 4.2 Exclude the set from Closure

In section 2, I described the arguments from Deduction and Coherence. We can now appreciate where they go wrong when it comes to the bias loaded into justification, and why, at best, they instead support:

Closure\*: For all *non-special* propositions A and B: If you have justification to believe the proposition [A & if A then B], then you have justification to believe B.

This is Closure restricted. It applies to everything aside from what justification itself is biased towards. To be clear, Closure\* does not imply that one cannot, if conditions are right, get justification to believe B. Rather, Closure\* is the closest thing to Closure that can be successfully argued for a priori, or independently of any particular course of experience or argument for B. The instance of Closure that is of interest here involves  $\sim$ SK as B, in the consequent. And I do not deny that one could undergo experiences, or come up with a successful a priori argument, to produce inferential justification to believe  $\sim$ SK. The point rather is that the a priori arguments that appeared to support Closure and hence the Connecting Premise really only (at best) support Closure\*, which does not support the Connecting Premise. So, there is no *in principle* support for the Connecting Premise, and this is enough to solve the paradox. If one gained some justification to believe  $\sim$ SK, then the Skeptical Premise could be denied instead

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<sup>19</sup> It is also debatable whether responsiveness to rational considerations is a necessary condition on belief. See Avnur (2020) for some discussion.

<sup>20</sup> One could even find oneself in a situation in which even T comes into doubt: perhaps you learn, by the use of your faculties, that you have no way to arrive at the truth: your evidence is contradictory and impossible to explain. This is like Hume's 'consequent' skeptical result, a sort of *reductio* situation, in which, though you start out assuming something, on that basis you learn that the assumption is wrong.

(the antecedent of the Connecting Premise would then be false). Either way, the paradox would be solved.

The task now is to explain why the arguments given for Closure fail, and support Closure\* instead.

#### 4.2.1 Failed inferences and deduction

Begin with the argument from deduction, from section 2.2.1. What is wrong with the following, Neo-Moorean inference, which illustrates why we lack independent evidence for  $\sim$ SK?

NM1: I have hands (look, here they are!)

NM2: If I have hands, then  $\sim$ SK (because SK entails that I have no hands)

So,

NM3:  $\sim$ SK

Wright famously coined the term ‘transmission failure’ for this sort of case. Roughly, the idea is that transmission failure occurs when a premise, such as NM1, depends for its justification in part on some justification (or “warrant” from entitlement, as Wright terms it) one already has for the conclusion, NM3. So the argument cannot provide any new justification to believe the conclusion.

But does the Neo-Moorean inference exhibit this sort of transmission failure? We are currently considering the strategy according to which the Skeptical Premise is true, so there is no justification to believe  $\sim$ SK, and thus no justification for NM3 for NM1 to depend on. (And we are setting aside Wright’s “entitlement” to trust NM3.) Justification for NM1 is, as the dogmatists say, immediate. So, no, the neo-Moorean inference does not exhibit this failure.

Instead, the Neo-Moorean inference fails to generate justification due to a different reason: the very notion of justification—of being supported by (perceptual) evidence—is biased towards  $\sim$ SK, or NM3. In *regarding* NM1 as a premise fit to be used in an argument in which you are trying to determine whether NM3 is true, you thereby regard NM1 as justified (even if not explicitly in those terms). This is a primary function of the notion of justification, to determine which propositions you should infer the truth from. But, to regard any empirical premise as justified is to use a notion that is biased towards  $\sim$ SK/NM3, which is the conclusion of this argument. That is no way to earn justification for something, by appeal to a notion that is *biased* towards it! You may as well appeal to the notion of *boche* to establish that Germans are cruel. Of course, there is nothing special about NM1 or hands; this happens because the conclusion, NM3, is loaded into the very notion of justification, which is how we evaluate a premise’s fitness for use in an argument. In appealing to *any* premise in such an argument, you commit yourself to the claim that that premise is justified, but justification is biased towards  $\sim$ SK, so no premise can be used in such a *direct* argument to generate or specify a justification to believe  $\sim$ SK (where ‘direct’ means to exclude the sort of odd cases, mentioned above, involving things like messages in one’s visual field, the reliability of which might be established without an assumption that  $\sim$ SK, though it would still require the assumption that T).<sup>21</sup> This explanation of why the Neo-Moorean inference fails does not commit us to the view that we

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<sup>21</sup> But see Barnett (2014) for various issues that arise for this over-simplified claim about “circular” arguments.

have an antecedent justification to believe  $\sim$ SK, on which our empirical premises depend for their justification, so it is not an appeal to Wright's transmission failure. Rather, the inference fails because of how our notion of justification works.

Return now to the question of why the propositions towards which the notion of justification is biased are to be excluded from Closure. The answer is that such propositions systematically evade the argument from deduction. That argument assumed that the only way for an inference to fail is for the conclusion to already be justified (and for the premise's justification to rest on that justification). Because justification is loaded with a bias towards  $\sim$ SK,  $\sim$ SK cannot be justified by any direct inference from empirical premises about the world. (Contrast the case above, where the BIV lab sends you messages in your visual field or as voices in your mind. There, you appeal to sensory experiences, but not to objects in the world that are their contents.) But it is not the case, as the argument from deduction implies, that therefore  $\sim$ SK must itself be justified, as if justification must apply to the propositions that it is biased towards. Rather,  $\sim$ SK is a sort of blind spot of justification, in principle (again, absent any bizarre sequence of experiences or a priori arguments for  $\sim$ SK), because justification is biased towards it. So there is more than one way for an inference to fail.<sup>22</sup>

Objection: if  $\sim$ SK cannot be justified in a direct way from empirical premises, shouldn't one just discharge the assumption. Or stop believing it? Reply: No, that is not what epistemic justification requires; arguably, you should be at least as confident in  $\sim$ SK as you are in propositions that entail it, as I explain in the next subsection.

Still, the idea that a deductive inference fails only if the premise depends for its justification on the conclusion is actually a useful one with no apparent exceptions in ordinary life. It may hold perfectly well for non-special propositions, which justification is not biased towards. And, therefore, the argument seems plausible initially, and supports a Closure principle applied only to non-special propositions. That is, it supports Closure\*.

#### 4.2.2 Coherence requirements

Next is the argument from coherence, described in section 2.2.2. It is invalid, since it conflates necessary and sufficient conditions for justification.

Recall that the argument is based on the observation that, if you are confident that [P & (if P then  $\sim$ SK)], and are not as confident in  $\sim$ SK, you are probabilistically incoherent, and hence (with respect to these propositions) irrational. Surely justification follows what it is rationally required for you to believe, so that you must have justification to believe  $\sim$ SK insofar as you have justification to believe [P & (if P then  $\sim$ SK)].

The problem with this argument is that, at best, conformity to the probability calculus is a *necessary* condition on one's credences being justified.<sup>23</sup> It is terrifically implausible that conformity to the probability calculus is a *sufficient* condition for being justified. If that were so, then I could have justification to believe that my table is conscious and wishes it were a squirrel, so long as I have coherent attitudes towards logically related propositions, for example

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<sup>22</sup> For more on this, see my (2012a, 2012b). Coliva and I independently arrived at similar ideas on this second sort of transmission failure. See Coliva (2012, 2015, ch. 3 section 3). Others have motivated other conditions for inference failure besides Wright's. See Silins (2008), Kung & Yamada (2010), and Weisberg (2010).

<sup>23</sup> Though this is also implausible. See Christensen (2004) for discussion.

I also lack belief that it is not conscious. So, at most, all that the argument from coherence shows is that *unless I also believe  $\sim$ SK, I cannot have justification to believe P*. That does not yet imply that I have justification to believe  $\sim$ SK, because it may be that some beliefs for which one may lack justification are required for *other* beliefs to have justification. This is not as weird as it might initially sound. Arguably, as we've seen, having evidence is required for justification to believe anything. But the state of having evidence is not itself even a belief (even if it requires one), and so it is not something you can have the same sort of *epistemic* justification for. The same is presumably true of being conscious, if conscious experience is required for perceptual justification. Perhaps some special beliefs are just like that: requirements for having justification, but not themselves things that have justification (unless, again, some bizarre sequence of experience, or magnificent a priori proof, generates justification for them). Believing  $\sim$ SK is a requirement for having perceptual justification about objects in your environment, absent evidence that SK is true, but it is not itself justified.  $\sim$ SK plays this special epistemic role, of being an unjustified (in the absence of evidence for or against it) requirement, because justification is biased towards it.

So, the argument from coherence, for Closure, is invalid. But it may support Closure\*. Grant that unless you believe  $\sim$ SK, you lack justification to believe P. If justification itself is loaded with a bias towards  $\sim$ SK, and if our use of this notion is explained by the fact that we all typically assume that  $\sim$ SK, then this necessary condition makes sense, as long as you have justification for propositions like P (and so lack justification for SK). It would make no sense for you to regard yourself as having justification to believe P while doubting what that notion is loaded with. Perhaps regarding yourself as having justification is not a necessary condition on *having* justification. But if even an ideally conceptually sophisticated adult could not coherently regard her own belief that P as justified (because she doesn't even believe the starting assumption built into justification, and not because she has any evidence against it) were it to come up, then that suggests that no one, in similar circumstances, could be justified. This might explain, and at least accommodates, the idea that belief that  $\sim$ SK, when  $\sim$ SK comes up, is a requirement for having justification to believe ordinary things like P.

### 4.3 Explaining Closure's appeal

What about Closure's immediate, intuitive appeal? Setting aside special propositions, which never come up in everyday contexts and play a special role in our epistemic evaluation, Closure\* and Closure are equivalent. So it is not surprising that Closure seems initially true, especially given that Closure is the simpler of the two.

It might be suggested, though, that Closure *still* seems more intuitive than Closure\*, even once the theory behind restriction is taken into account.<sup>24</sup> Maybe so, but this comes with the territory of paradox. Had we restricted Evidentialism instead, it probably would have remained intuitive, too. This is the case with other paradoxes whose solutions require restricting general principles. After all, does it not still seem intuitive that, for every property, there is a set of all and only those things that have the property? And yet we know that this is not only false, but self-contradictory!

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<sup>24</sup> Thanks to Adam Pautz for discussion.

## 5. Other Paradoxes and Other Problems

### 5.1 Other Paradoxes

Other versions of the paradox ultimately appeal to some general principle in support of a connecting premise. Such general principles are motivated by consideration of everyday, or at any rate non-skeptical cases. But, since the notion of justification is biased towards the negation of any skeptical scenario that raises such a paradox, those general principles can be naturally and harmlessly restricted to apply only to the non-skeptical cases. So *any* paradox will be ripe for a restriction solution.

For example, some paradoxes appeal to this principle instead of Closure:

Underdetermination: For all propositions, A and B: if you know that A and B are inconsistent, and your evidence does not support A more than B, then you do not have justification to believe A.<sup>25</sup>

It would follow, letting P and SK be instances of A and B, and given that you know that P and SK are inconsistent, that if you lack *evidential* justification to believe  $\sim$ SK, then you lack justification to believe P. For if you had justification to believe P, your evidence would favor P over SK (according to Underdetermination). And if your evidence supported P over SK, that would presumably provide justification to believe  $\sim$ SK. So Underdetermination seems to support the Connecting Premise.

But, if justification is loaded with a bias towards  $\sim$ SK, then P and  $\sim$ SK could not be on equal ground before consideration of evidence. The reason you cannot appeal to some evidence for P as a basis of justification to believe P *over* SK, is that, in judging P to be justified by the evidence, you are already assuming a bias towards  $\sim$ SK. So  $\sim$ SK should be excluded from Underdetermination for just the same sort of reason as Closure, and this explains the failure of Underdetermination: it should be restricted to non-special propositions. Accordingly, no connecting premise concerning  $\sim$ SK can be supported by such a principle.

For another example, consider paradoxes involving dream scenarios, which do not entail  $\sim$ P. The bias towards T implies the negation of such scenarios in just the same way that it implies  $\sim$ SK. If you can get at the truth by the use of your faculties, then you're not dreaming. So the strategy of restriction can be used to exclude other skeptical scenarios besides SK's, and so to restrict whatever general principle connects such scenarios with our ordinary beliefs.

### 5.2 Other Problems

The strategy of restricting closure removes one argument, in the form of a paradox, that purports to show that our notion of justification is empty or incoherent. But why should we use, and care about, this notion of justification rather than another, perhaps one that is not biased towards  $\sim$ SK? This is a different problem—just as “Why care about what’s moral?” is different from “Is anything moral?” or “Is morality coherent?” This is a practical question: which

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<sup>25</sup> See Brueckner (1994), Cohen (1998), Vogel (2004), and Pritchard (2005, 2016).

tool should we use to evaluate beliefs? Insofar as it is difficult to answer, this is a worthy skeptical problem.<sup>26</sup>

Another, related question is whether T is true. This is a metaphysical question about how we are causally connected to the world, but one of profound epistemological importance. If it turned out that some skeptical scenario was actually playing out, then our notion of justification, loaded as it is with a bias *against* the actual situation, would be an unfortunate concept for one to use. Is our notion defective in this way? The only way to answer this is to find out whether T. And no epistemological, a priori theory of justification can help here. How could conceptual legislation about 'justification' determine whether, as it happens, T is true?<sup>27</sup>

## References

- Avnur, Yuval (2011). An old problem for the new rationalism. *Synthese* 183 (2):175-185.
- Avnur, Yuval (2012a). Closure Reconsidered. *Philosophers' Imprint* 12.
- Avnur, Yuval (2012b). Mere faith and entitlement. *Synthese* 189 (2):297-315.
- Avnur, Yuval (2012c). In Defense of Secular Belief. *Oxford Studies in Philosophy of Religion* 4.
- Avnur, Yuval (2019). The Nature and Limits of Skeptical Criticism. *International Journal for the Study of Skepticism* 9 (3):183-205.
- Avnur, Yuval (2020) What is Wrong with Agnostic Belief? in *Agnosticism: Explorations in Philosophy and Religious Thought*. Gavin Hyman & Francis Fallon, Editors. Oxford University Press.
- Avnur, Yuval (forthcoming). Justification As A Loaded Notion. *Synthese* 1:1-20.
- Barnett, David James (2014). What's the matter with epistemic circularity? *Philosophical Studies* 171 (2):177-205.
- Brandom, R. (2000). *Articulating reasons: An introduction to inferentialism*. Cambridge: Harvard University Press.
- Brueckner, Anthony (1994). The structure of the skeptical argument. *Philosophy and Phenomenological Research* 54 (4):827-835.
- Christensen, David (2004). *Putting Logic in its Place: Formal Constraints on Rational Belief*. Oxford University Press.
- Cohen, Stewart (1998). Two Kinds of Skeptical Argument. *Philosophical and Phenomenological Research* 58 (1):143-159.
- Coliva, Annalisa (2012). Varieties of failure (of warrant transmission: what else?!). *Synthese* 189 (2):235-254.
- Coliva, Annalisa (2015). *Extended Rationality: A Hinge Epistemology*. Palgrave-Macmillan.

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<sup>26</sup> See Avnur (forthcoming) and Coliva (2015, ch. 4.4, 4.5) on relativism and the "Oblomovian" problem.

<sup>27</sup> Thanks to Dominic Bailey, Adam Pautz, and Duncan Pritchard for discussion.



Dretske, Fred. 1970. "Epistemic Operators". *The Journal of Philosophy*, Vol. 67, No. 24, 1007–1023.

Dretske, Fred. 2005. "The Case Against Closure". In Ernest Sosa and Mathias Steup (eds.), *Contemporary Debates in Epistemology*, 13–25. Blackwell.

Dummett, M. (1973). *Frege: Philosophy of language*. London: Duckworth.

Hempel, Carl. (1965) "Studies in the Logic of Confirmations," *Aspects of Scientific Explanation and Other Essays in the Philosophy of Science* (New York: Free Press).

Kung, Peter & Yamada, Masahiro (2010). A Neglected Way of Begging the Question. *American Philosophical Quarterly* 47 (3):287.

Lange, M. (2008). Hume and the problem of induction. In D. Gabbay, S. Hartmann, & J. Woods (Eds.), *Handbook of the history and philosophy of logic, vol. 10: Inductive logic*. Hoboken: Elsevier.

Pedersen, Nikolaj (2020). Pluralist consequentialist anti-scepticism. In P. Graham & N. J. L. L. Pedersen (eds.): *Epistemic Entitlement* (297–326). Oxford University Press.

Pedersen, Nikolaj (MS) "Non-evidentialist epistemology, closure, and the question of unity"

Pritchard, Duncan (2005). The Structure of Sceptical Arguments. *Philosophical Quarterly* 55 (218):37 - 52.

Pritchard, Duncan (2016). *Epistemic Angst: Radical Skepticism and the Groundlessness of Our Believing*. Princeton University Press.

Pryor, James (2000). The skeptic and the dogmatist. *Noûs* 34 (4):517–549.

Putnam, Hilary (1981). *Reason, Truth and History*. Cambridge University Press.

Silins, Nicholas (2008). Basic Justification and the Moorean Response to the Skeptic. In *Oxford Studies in Epistemology Volume 2*. Oxford University Press.

Strawson, P. F. (1952). *Introduction to logical theory*. New York: Wiley.

Strawson, P. F. (1985). *Scepticism and Naturalism: Some Varieties*. Routledge.

Stroud, Barry (1984). *The Significance of Philosophical Scepticism*. Oxford University Press.

Vogel, Jonathan (2004). Skeptical arguments. *Philosophical Issues* 14 (1):426–455.

Vogel, Jonathan (2005). The refutation of skepticism. In Steup Matthias & Sosa Ernest (eds.), *Contemporary Debates in Epistemology*. Blackwell. pp. 72--84.

Weisberg, Jonathan (2010). Bootstrapping in General. *Philosophy and Phenomenological Research* 81 (3):525-548.

Williamson, Timothy (2000). *Knowledge and its Limits*. Oxford University Press.

Wright, Crispin (1991). Scepticism and Dreaming: Imploding the Demon. *Mind* 100 (1):87-116.

Wright, Crispin & Davies, Martin (2004). On Epistemic Entitlement. *Aristotelian Society Supplementary Volume* 78:167-245.