Closure Reconsidered

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CONSIDER THE FAMILIAR SKEPTICAL HYPOTHESES ACCORDING TO which your experiences are subjectively just as they are now but your ordinary beliefs about the external world are false. Two popular examples are the hypothesis that you are a brain in a vat in an otherwise empty world, and that you are a victim of Descartes' demon in an otherwise empty world. Let 'Deception' be a placeholder for such hypotheses, and 'Non-Deception' a placeholder for the negation of such hypotheses. Deception entails that you are in an (otherwise) empty world, so your ordinary beliefs — at least those that depend for their truth on the existence of external objects — are false. Thus the truth of any ordinary belief about the external world entails Non-Deception. Here is a classic skeptical argument:

> **Skeptical Premise:** You do not have justification to believe Non-Deception.

> **Closure Premise:**[1] If you are justified in believing contingent propositions about the external world, such as that there are hands, then you have justification to believe Non-Deception.

> **Skeptical Conclusion:** Therefore, you are not justified in believing contingent propositions about the external world, such as that there are hands.

This argument constitutes a paradox, since it is valid, has independently plausible premises, and has an implausible conclusion. Granted that the Skeptical Conclusion is false, solving the paradox requires identifying the false premise and explaining away its initial appeal.

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1. Other considerations besides closure may motivate what I am calling the Closure Premise. I call it the Closure Premise because my focus in this paper is the skeptical paradox involving closure, and the question of whether closure raises a problem for perceptual justification. I will ignore principles other than closure that might be thought to motivate this premise, as they are not the focus of this paper.

The *standard strategy* is to reject the Skeptical Premise. The argument from (1)–(3) to the Skeptical Premise is valid:

(1) You have no a priori evidence (or argument) for Non-Deception.

(2) You have no a posteriori evidence for Non-Deception.

(3) In order to have justification to believe a contingent proposition about the external world, such as Non-Deception, you must have either some a priori or some a posteriori evidence for that proposition (where "evidence" might be propositional or non-propositional).

So, the standard strategy rejects one of (1)–(3).[2] Historically, this has not been easy.

Rejecting (1) has not been easy because Non-Deception is a contingent truth about the external world, and it seems that there can be no good a priori arguments for such contingent truths.[3]

Rejecting (2) has not been easy because, despite skillful opposition,[4] it still seems that any inference from some empirical claim such as "I see hands"[5] to Non-Deception is circular, or question-begging, or at any rate does not provide or specify a justification to believe Non-Deception.[6]

Rejecting (3) has not been easy because, despite skillful opposition,[7] we still want to resist counting belief in a contingent proposition about the external world as justified when one has no evidence or argument for it. For, otherwise, the notion of justification seems overly permissive, insubstantial, or not epistemic.[8]

Nevertheless, most epistemologists follow the standard strategy because the strategy of rejecting the Closure Premise is widely regarded as a non-starter. But a more careful consideration of the Closure Premise reveals that this popular opinion is unwarranted, and the case in favor of the Closure Premise has been grossly overstated. I will argue that rejecting the Closure Premise is not a non-starter by rebutting the three strongest arguments for the Closure Premise. If my arguments succeed, I will have shown that "one of the least plausible ideas to come down the philosophical pike in recent years" (Feldman 1995, p. 487) is in fact a live option and is at least as promising as the standard strategy.[9]

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2. Although not all standard strategists are explicit about which of (1)–(3) they reject, they are all committed to the falsity of one of them. For example, consider contextualists and disjunctivists. Contextualist solutions, which usually accept the Closure Premise (for any one standard) and hold that we are justified by ordinary standards in believing that there are hands, must hold that we have justification, by ordinary standards, for believing Non-Deception. So they must reject one of (1)–(3) for ordinary standards of justification. For example, Stewart Cohen (2000) opts for rejecting (3). Likewise, disjunctivists can reject any of (1)–(3). McDowell (2008), for example, rejects one of (2) and (3), but does not say which one (see especially pp. 385–386).

3. Some notable rejections of (1): Putnam's (1992) a priori argument that he is not a brain in a vat; "paradigm case" arguments about how predicates like 'is red' get their meaning, which purport to constitute arguments that we cannot be massively mistaken about the world around us; "Inference to the best explanation" arguments, for example, Peacocke (2004), Russell (1912), and Vogel (1990), according to which the hypothesis that the world is roughly as it seems "better" explains our experiences than any skeptical hypothesis. Inferences to the best explanation are a priori arguments in the sense that it is a priori which explanation is better. See Alston (1993) for a critique of this approach.

4. For example, Bergmann (2004), Pryor (2004) and Markie (2005).

5. The same point holds for "There are hands" or "It looks like there are hands".

6. More generally, the intuition is that the deliverance of some faculty cannot *by itself* be justifying evidence that that faculty is reliable. For example, see Cohen (2000), Vogel (2000), White (2006), and Wright (2007).

7. For example, Cohen (2000), Harman (1988), White (2006a), and Wright (2004), but note that Wright deals there with "acceptance" or "trust" rather than belief.

8. See Feldman and Conee (2004), especially Chapter 12, and Pritchard (2005) for criticisms of rejecting (3).

9. In the quoted passage, Feldman is expressing confidence in closure principles that clearly entail the Closure Premise. Dretske (2005) surveys other recent overstatements about the "absurdity" of denying closure principles.

Although I will not attempt to offer a complete alternative theory of justification, my thesis has important consequences for the theory of justification. Since most epistemologists regard the Closure Premise as non-negotiable, they must stretch the notion of justification so that it applies to Non-Deception (so that the Skeptical Premise comes out false). This presumed constraint on a theory of justification — that we have justification to believe Non-Deception — is undermined by my thesis. One significant beneficiary would be P.F. Strawson's (1985) theory on behalf of Hume and Wittgenstein, a "naturalist" account of justification that denies the possibility of justification to believe Non-Deception.[10] More generally, my thesis is good news for anyone who has given up the quixotic search for an a priori argument for Non-Deception and is dissatisfied with the conceptual stretching involved in rejections of (2) and (3).

For most of this paper I focus on Deception. In the last section, I consider a version of the paradox that, though it involves closure, appeals to skeptical hypotheses that are importantly different from Deception. The aim of that last section is to suggest how the general strategy defended here can be expanded to apply to some neighboring closure paradoxes. However, I will not argue that the strategy discussed here can apply to every skeptical paradox.[11] For instance, I will not have space to discuss skeptical paradoxes that do not explicitly involve closure principles[12] or concern knowledge rather than

justification. The question whether closure creates a problem for perceptual justification is independently interesting and important for the theory of justification.

1. Rejecting the Closure Premise

In this section, I formulate a closure principle, motivate it, and sketch a strategy for rejecting the Closure Premise. First, the difference between "having justification to believe" and "being justified in believing" must be made explicit, or else the Closure Premise might be misunderstood. The former, *propositional* justification does not require that one actually have the relevant belief, while the latter, *doxastic* justification does. Having doxastic justification requires (among other things) having propositional justification, but not vice versa. Having propositional justification requires that one have what it takes, *epistemically*, to form a justified belief. One could still lack what it takes *psychologically* or *physically* to form a justified belief, and one could form the relevant belief on the wrong basis, so that, though one has justification to believe it, one's belief is not justified.[13]

Rejecting the Closure Premise requires rejecting closure for justification. What is closure? The rough idea is that you cannot lack justification to believe something if you realize that it is entailed by your (other) justified beliefs. There are some well-known problems with this rough formulation, but, unfortunately, these problems do not undermine the Closure Premise. So I will set aside the problems for the rough formulation and instead focus on this more defensible formulation:

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10. On Strawson's view, belief in Non-Deception is "not unjustified" either, since it is not a belief about which "the question of the rationality or irrationality, justification or lack of justification" can come up (1985, 39).

11. Whether this is so depends on issues far removed from the focus of this paper. For example, if knowledge does not require justification, then the strategy of rejecting the Closure Premise may not provide guidance for solving a skeptical paradox involving knowledge.

12. For example, Vogel (2004) discusses a skeptical argument deriving from an "underdetermination" principle. The strategy sketched in the next section may provide a template for "restricting" such underdetermination principles, thereby offering a way to resist such skeptical arguments. Also, paradoxes involving dreaming scenarios, which don't entail the falsity of many of our ordinary beliefs, will not be discussed here.

13. It is not clear whether one can have what it takes, epistemically, to justifiedly believe something that one cannot believe because one lacks the requisite concepts. So it is not clear whether the Closure Premise is plausible for people who lack the concepts necessary to believe Non-Deception (such as very young children). How or whether paradoxes and theories of justification apply to such subjects is indeed puzzling. But the Closure Premise does seem initially plausible for subjects who are in a position to easily recognize that our ordinary beliefs entail Non-Deception. So the paradox remains significant even if we ignore unsophisticated subjects.

Closure: $\forall p \forall q$ [if one has justification to believe the proposition $\langle p,$ and p entails $q \rangle$ then one has justification to believe q].

Closure seems plausible and avoids the various well-known problems for other, rougher formulations of closure.[14,15]

The Closure Premise follows from Closure and a few assumptions that the anti-skeptic should find unproblematic. Suppose the antecedent of the Closure Premise is true, so you are justified in believing some contingent propositions about the external world. I assume that if you are justified in believing any contingent propositions about the external world, then you are justified in believing that you have hands. I assume that you are a normal, reflective adult capable of recognizing that your having hands entails Non-Deception. I assume that, since you can recognize this, you have justification for believing that your having hands entails Non-Deception. Finally, I assume that, in this simple, straightforward case, since you have justification to believe (i) that you have hands[16] and (ii) that your having hands entails Non-Deception, you have justification to believe the conjunction of (i) and (ii).[17] The anti-skeptic should find these assumptions unproblematic. According to Closure, it follows that you have justification to believe

14. For example, some formulations state that if we know that *multiple* justified beliefs together entail some other belief, then we must have justification for that other belief. Such principles are subject to so-called "preface" and "lottery" counterexamples. Closure avoids this problem because its antecedent involves just one justified belief. See Hawthorne (2004a), pp. 31–50, though much of his discussion concerns knowledge rather than justification.

15. Some authors prefer a "deduction" version of closure according to which one is justified in believing an entailed proposition if one "competently deduces" it from a justified belief. See Williamson (2002) and Hawthorne (2004a), though they focus on knowledge rather than justification. Much of my discussion of Closure applies straightforwardly to deduction closure (particularly the "argument from deduction", discussed in the next section).

16. Recall that being justified in believing something, as the antecedent of the Closure Premise states, entails having justification.

17. Note that we need not assume here that, for *any* two propositions, if one has justification to believe both, then one has justification to believe their

Non-Deception. That you have justification to believe Non-Deception is the consequent of the Closure Premise. So, supposing the antecedent of the Closure Premise is true, we derived the consequent of the Closure Premise by appealing to Closure and a few assumptions that the anti-skeptic should find unproblematic. In this way, the Closure Premise can be derived from Closure along with these assumptions.

Closure is initially appealing and therefore motivates the Closure Premise. Its initial appeal is that there are no obvious, everyday counterexamples. However, the absence of everyday counterexamples to Closure is consistent with the falsity of the Closure Premise, since the Closure Premise involves a non-everyday belief: Non-Deception. The strategy that I will defend restricts Closure so that it excludes Non-Deception but includes everyday beliefs. So it accommodates the absence of everyday counterexamples to Closure, avoids commitment to the Closure Premise, and thereby accommodates (1)–(3) and the Skeptical Premise. After presenting the strategy, I will address its advantage over Dretske's strategy for rejecting closure.

Here is the proposed restricted principle, where 'ordinary' is a category of propositions that excludes Non-Deception but includes everyday propositions:

Closure*: $\forall$ ordinary $p, \forall$ ordinary q [if one has justification to believe the proposition $\langle p,$ and p entails $q \rangle$ then one has justification to believe q].

Since Closure* excludes Non-Deception, it does not support the Closure Premise. The ordinary/extraordinary distinction can be drawn in a natural way, since there is a principled difference between the negation of skeptical hypotheses and other, ordinary propositions. Our present task is to solve the traditional paradox involving Deception.[18]

conjunction. Rather, we need only assume this for a very simple, straightforward conjunction.

18. In the final section, I discuss broadening of the definition of 'extraordinary' — that is, further restricting Closure* — in order to deal with another kind of paradox-inducing hypothesis.

So, we must distinguish Deception from other hypotheses. Recall that 'Deception' is a place-holder for an hypothesis with two features, (a) and (b):

(a) It is plausible, due to (1)–(3)-type reasoning, that we lack justification to believe its negation.

(b) It entails the falsity of vast swaths of our perceptual beliefs.

Since (a) and (b) distinguish Deception, and since Non-Deception is the negation of Deception, let us stipulate that any negation of an hypothesis that satisfies (a) and (b), and any belief in such a negation, is *extraordinary*. For example, belief that one is not a brain-in-a-vat is extraordinary, as is the proposition that one is not a brain-in-a-vat. I discuss the status of conjunctions one of whose conjuncts is extraordinary, and belief in such conjunctions, in Section 4, below. Let us call all other propositions and beliefs *ordinary*, even if they seldom come up in everyday conversation. For example, the proposition that there are hands is ordinary. Note that the stipulated notions of 'extraordinary' and 'ordinary' here are not meant to capture the common meanings of those terms.

Extraordinary beliefs are unusual in that we never consider them in everyday circumstances. But extraordinary beliefs are also special from an epistemic perspective. They occupy a peculiar position within our epistemic situation: though we seem to lack justification for them, vast swaths of our other beliefs require their truth. They are momentous yet out of reach, an epistemically important combination of features that makes the distinction a natural one.[19] Wright (2004)

19. Skeptical hypotheses themselves, *i.e.*, Deception, count as "ordinary", and are not excluded from Closure*. This might seem odd since Deception is intuitively not "ordinary", but recall that the stipulated definition of 'ordinary' is not meant to capture its common meaning. One might worry that the ordinary/extraordinary distinction is arbitrary, since Deception is also special from an epistemic perspective: many beliefs would be false if it were true. However, while we arguably lack justification for both Non-Deception and Deception, this is not remarkable in the case of Deception. Indeed, we expect (and hope) that we lack justification to believe Deception, since we expect it to be false. Similarly, it is not remarkable that one lacks justification to believe that one does not exist, since one expects that one exists. Instead,

calls them "hinge" or "cornerstone" propositions, and they are also singled out in P.F. Strawson's (1985) version of Hume and Wittgenstein. Since the extraordinary/ordinary distinction is a natural one from an epistemic perspective, Closure* is not arbitrary. It follows from the general idea that extraordinary beliefs, which are momentous yet out of reach, and which never figure in everyday discourse, are outside the scope of ordinary epistemic principles — those that govern ordinary beliefs.

It follows from the forgoing definition of 'ordinary' and 'extraordinary' that no (single) hypothesis can lead to our paradox via Closure*. Consider any hypothesis, *h*. Suppose *h* fails to satisfy (a). Then it may be plausible that we have justification to disbelieve it, and so it does not raise a paradox via Closure* even if our perceptual beliefs entail not-*h* (since the consequent of Closure* would be satisfied). Suppose instead that *h* fails to satisfy (b). Then our ordinary beliefs do not entail not-*h*, and Closure* will not require us to have justification to disbelieve *h*, and so no paradox arises. Therefore, if *h* fails to satisfy (a) and (b), then it does not raise a paradox via Closure*. And if it does satisfy (a) and (b), then not-*h* is extraordinary and is excluded from Closure*, and so it does not raise a paradox via Closure*. So no (single) hypothesis can raise our paradox via Closure*.

Although Closure is initially plausible, Closure* would explain this. Closure* is easily confused with Closure, and Closure is simpler than Closure*, so one might be expected to consider Closure first and fail to consider Closure* as an alternative. Moreover, we usually ignore the extraordinary beliefs that are excluded by Closure*. Setting extraordinary beliefs aside, Closure and Closure* are equivalent, and so Closure usually appears plausible. These would

it would be remarkable if one lacked justification to believe that one exists, since, like Non-Deception, this is something whose truth is crucial to vast swaths of our beliefs. It is remarkable when we lack justification for something that, given all of our other beliefs, must be true. Relatedly, there is a sense in which our everyday beliefs presuppose Non-Deception, as Wright (2004) emphasizes when he calls such beliefs "cornerstones". Clearly, our beliefs do not presuppose Deception.

be understandable mistakes, so the truth of Closure* explains the initial plausibility of Closure.[20]

Furthermore, no everyday example can provide any reason for favoring Closure over Closure*. For no such example ever involves extraordinary beliefs. That is, we do not reject hypotheses that satisfy both (a) and (b) in everyday situations. So the strategy of replacing Closure with Closure* is compatible with the absence of every-day counterexamples to Closure. This distinguishes Closure* from Dretske's (1970, 2005) view, which many philosophers associate with rejecting the Closure Premise, and which, unlike Closure*, is committed to ordinary counterexamples to Closure.[21] A brief discussion of this may be helpful.

Dretske defines "heavyweight implications" as propositions that one cannot see to be true but which are entailed by something that one can see to be true (*e.g.*, Dretske 2005, p. 16). He excludes such propositions from closure, and holds that we often lack justification to believe heavyweight implications of our justified beliefs. For example, he holds that one may be justified in believing that there is wine in the bottle while lacking justification for believing that it is not colored water (even when one recognizes the entailment), since the latter is a heavyweight implication. Many epistemologists, including me, find this implausible. Intuitively, we have justification to believe heavyweight implications in normal cases. For example, we usually

have justification to believe that what looks like wine is not colored water, since we have inductive, statistical evidence, or evidence based on past drinking experience and testimony. Furthermore, cases in which one lacks this justification are cases in which, intuitively, one lacks justification to believe that there is wine in the bottle. Thus, Dretske's exclusion of all heavyweight propositions from closure is a major liability; it is hard to find a plausible, ordinary counterexample to Closure, and Dretske's view commits him to such counterexamples. Closure* avoids this problem. That the liquid in the bottle is not colored water is an ordinary belief, and so it is not excluded from Closure*. Thus, intuitions about everyday cases are accommodated by Closure*, while they undermine Dretske's view.

In describing the virtues of Closure*, I have not attempted to prove that we lack justification to believe Non-Deception or to explain why we do not need justification for extraordinary beliefs. So far, I have argued only that the lack of everyday counterexamples to Closure does not establish that the Closure Premise is true or that the strategy of rejecting the Closure Premise is a non-starter. However, many epistemologists believe that there are other, decisive arguments in favor of the Closure Premise. Next, I will rebut the three best arguments.

2. Argument from Deduction

> **Deduction:** Whenever one validly deduces something from a (single) sufficiently justified premise, one thereby gains justification to believe that thing.

The Argument from Deduction is that, assuming that we all realize that any ordinary belief about the external world entails Non-Deception, we can all deduce Non-Deception from any such belief. So, if ordinary beliefs about the external world are justified, then we have justification to believe Non-Deception; the Closure Premise is true.[22]

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20. One might worry that, although Closure* could account for Closure's plausibility, Closure still *seems* true. But principles that must be false yet still seem true are endemic to paradox. Notice, for instance, that the restriction of Closure to Closure* is analogous to the strategy of restricting the principle (R): For every description, there is a set of things that satisfy that description. (R) gives rise to Russell's paradox. One legitimate strategy is to restrict (R) in a way that naturally distinguishes and excludes descriptions or sets that are in some sense extraordinary from a theoretical perspective. But (R), like Closure, still "seems" intuitively correct, even after one is convinced, by the paradox, that it is false unless properly restricted.

21. In its most recent incarnation (2005), Dretske's view concerns knowledge rather than justified belief. However, his earlier work concerned justification as well, and in any case it is instructive to see the advantage that Closure* has over the justification version of Dretske's recent view.

22. For example, see Schiffer (2004, p. 11).

The argument is unsound, since Deduction is false. Here is a counterexample: "A truthful God wrote that a truthful God exists; therefore, a truthful God exists." This is a valid deduction. But even if one is justified in believing the premise, one cannot thereby *gain* justification for believing the conclusion. There are many other such cases of question-begging yet formally valid inferences, which are often called "failures of transmission".[23]

One might think that in this counterexample, as in all inferences, the only way for the valid inference to fail to justify the conclusion (from here on, "fail") is for the justification for the premise to rest on some justification that one *already has* for the conclusion:

(4) $\forall p \forall q$ [if one is (sufficiently) justified in believing p while validly deducing q from p, then unless one's justification for p rests on some justification that one already has for q, one can gain justification to believe q via that deduction (*i.e.*, the inference does not fail)].[24]

This provides a better argument for the Closure Premise: whenever the premise of a valid inference is justified, this justification either does or does not rest on justification one already has for the conclusion. If it does, then of course one already has justification for the conclusion. If it does not, then (4) implies that the inference does not fail and one gains justification for the conclusion via the inference. Either way, one has justification to believe the conclusion. The Closure Premise follows.

Although this argument is better, it is far from decisive. For we can restrict (4) to (4*):

(4*) $\forall$ ordinary p, $\forall$ ordinary q[25] [if one is (sufficiently) justified in believing p while deducing q from p, then unless

23. See Wright (2003) and Pryor (forthcoming).

24. See Pryor (forthcoming) for a discussion of this and (apparently) similar principles about inference failure.

25. For the most part, it is not necessary to restrict the first quantifier, the one binding the premise of the inference. The reason to restrict the first quantifier concerns the Argument from Logical Equivalence, discussed below.

one's justification for p rests on some justification that one already has for q, one can gain justification to believe q via that deduction].

(4*) does not support the Closure Premise, since Non-Deception is extraordinary. (4*) and (4) make the same predictions in any case of deduction that concerns ordinary belief, since (4*) excludes only extraordinary beliefs. So intuitions about everyday cases, which never involve extraordinary beliefs, cannot favor (4) over (4*). Also, (4*) is easily confused with (4) in the same way that Closure* is easily confused with Closure. So (4*) helps to explain the initial appeal of (4). It seems natural, and at any rate can do no harm, to restrict (4) to (4*), since (4) gives a sufficient condition on a deduction from a justified belief resulting in gaining justification. We should exclude extraordinary beliefs from this, since one never has or gains justification for extraordinary beliefs (see condition (a), above).[26]

Unfortunately, (4*) does not explain why inferences from ordinary beliefs about the external world to Non-Deception fail. But this does not establish that rejecting (4) and the Closure Premise is a nonstarter. Rather, it shows that rejecting the Closure Premise requires an account of some other way, not specified in (4*), for valid inferences to fail (*i.e.*, when there is a valid inference from an ordinary to an extraordinary belief).[27] This itself is no decisive reason to accept the Closure Premise. For what is intuitively clear is that when a premise's justification rests on justification that one already has for the

26. Of course, the standard strategists deny that belief in Non-Deception is unjustified. In order to avoid dialectical confusion here, it is important to note that we are currently examining the strategy of accepting the Skeptical Premise. Our task is not to debate the standard strategists about whether the Skeptical Premise is true. Rather, we are trying to see where acceptance of the Skeptical Premise leads.

27. This isn't a new project. Coliva (forthcoming), Kung and Yamada (forthcoming), Silins (2008), and Weisberg (forthcoming) all motivate a sufficient condition for inference failure distinct from the one expressed in (4*) on independent grounds. In Avnur (forthcoming), I argue for a sufficient condition on inference failure that explains why any inference from a perceptual inference to Non-Deception fails.

conclusion, the inference fails. It is doubtful that we have some further, clear intuition that this is the only way for any inference to fail; it is one way for an inference to go wrong. Rejecting the Closure Premise commits us to some other way, some further sufficient condition on inference failure. Saying exactly what this further condition is requires some work. But this is not a heavier burden than the burdens of the three versions of the standard strategy:

Rejecting (1) requires some a priori argument for a contingent truth about the external world (Non-Deception). Surely this is not more promising than discovering some additional sufficient condition for inference failure.

Rejecting (2) requires rejecting and explaining away the widespread intuition that the inference "I have hands; therefore Non-Deception" fails. And furthermore, it requires an account of how, given (4), the inference does not fail. Again, this is at least as potentially problematic as positing a further sufficient condition for inference failure, one that matches rather than rejects the intuitions in favor of (2).

Rejecting (3) requires giving an additional sufficient condition for being a justified belief, aside from having sufficient evidence. Once again, this is at least as daunting a task as the task of coming up with an additional sufficient condition for inference failure.

So the burden of replacing (4) with (4*) does not make rejecting the Closure Premise more costly than the standard strategy. Though this does not show that (4) is false, it does show that the Argument from Deduction, the best version of which depends on (4), is not decisive.

3. Argument from Coherence

Coherence: It is incoherent for you to be confident in one thing and less confident in another thing that you know to be entailed by the first; so if the former is justified, then you have justification for (as much) confidence in the latter.

The Argument from Coherence is that, since we know that ordinary perceptual beliefs entail Non-Deception, Coherence implies that we have justification to be as confident in Non-Deception as we are in our ordinary beliefs; so the Closure Premise is true.

There are two ways to interpret Coherence: in terms of subjective probability and in terms of the concept of justification. Neither version of the argument is decisive.

According to the first, "Bayesian" interpretation, a person is "coherent" iff her credence distribution conforms to the probability calculus. Being confident in one thing and less confident in some known entailment of that thing is in that sense "incoherent".[28] But nothing about justification follows from this unless there is some connection between this sort of coherence and justification. What is the connection? Let us consider four candidate connections: sufficiency, necessity, obligation, and permission.

Is being coherent *sufficient* for one's credences to be justified? Only Extreme Subjective Bayesians, such as De Finetti (1937), would hold that it is. One could in that case be justified in believing anything (*e.g.*, that squirrels rule the universe), so long as appropriate credences are assigned to logically related beliefs (*e.g.*, that it is not the case that squirrels do not rule the universe). This strikes most of us as implausibly permissive.

Is being coherent merely *necessary* for one's credences to be justified?[29] If this is the only connection between coherence and justification, then the Argument from Coherence is invalid. That I have met some *necessary* condition on my credences' justification does not imply that all of my credences (or beliefs) are justified. Thus, we can distinguish the very plausible claim that *unless I believe Non-Deception,*

28. For a recent example of this version of the argument from Coherence, see White (2006a, pp. 528–529) and (2006b, p. 70).

29. See Howson and Urbach (2005). There are well-known problems for this claim. One is that the probability calculus assigns a credence of 1 to all logical truths, but it is implausible that a necessary condition on epistemic rationality is being utterly confident in every logical truth. For more discussion of this see Christensen (2004).

I am not justified in believing that I have hands from the Closure Premise. We can accept the former and reject the latter: if I disbelieve Non-Deception while believing that I have hands, then I cannot be justified in believing that I have hands, since I am being blatantly incoherent.[30] But it does not follow that, if I believe Non-Deception and am justified in believing that I have hands, then my belief in Non-Deception is justified. Or at least it does not follow from the view that we are currently considering, that coherence is necessary for justification. Perhaps when it comes to strange, extraordinary cases such as Non-Deception, having a belief that is not justified can be a necessary condition on other beliefs' justification. So far we have encountered nothing that refutes this claim.

Still, granting that coherence is necessary for justification, one might think that, since in order for my ordinary beliefs to be justified I must believe in Non-Deception, I am obligated to believe Non-Deception, and therefore I have justification to believe Non-Deception. This tempting suggestion is problematic. Being a necessary condition on other beliefs' justification does not entail being justified, even if it entails being obligatory. For, any belief that is known to be entailed by one's other beliefs is, on the view we are granting, necessary for one's other beliefs' justification. But as we have seen, being known to be entailed by one's other beliefs is not sufficient for justification. This is so regardless of whether we regard the necessary belief as obligatory. To put it another way, justification requires evidence (or argument; see (3)), and obligation of the kind proposed here requires only being (known to be) entailed by other beliefs, since it requires only being a necessary condition on other beliefs' justification. Evidence (or argument) and entailment are two entirely different, non-equivalent notions.[31] This is why there is no skeptical paradox about obligation: no one would be fooled into believing the Skeptical Premise if it were interpreted as

a claim about obligation rather than justification: "I am not epistemically obligated to believe Non-Deception". It is obvious that we are obligated by our ordinary beliefs to believe Non-Deception. That is as obvious as the claim that the proposition that I have hands entails Non-Deception. However, we can sometimes be tempted to think that we lack justification to believe Non-Deception. So evidently we do not think of justification as merely a matter of obligation, and doubts can arise about justification where there are no doubts about obligation. Perhaps this is the disturbing thing about the paradox: I am obviously obligated, on pain of incoherence, to believe something for which I lack justification, since I have no evidence to believe it.

One might object that, in rebutting the suggestion above, I ignored the fact that ordinary beliefs, whose justification requires belief in Non-Deception, are actually justified. (Everything in the foregoing paragraph is compatible with our ordinary beliefs lacking justification). The idea is that, given that (many of) one's ordinary beliefs are justified, and given that, as we are granting, this entails that one believes Non-Deception, Non-Deception is obligatory and therefore justified. But this is still implausible. Among the necessary conditions on one's beliefs' justification are things that are not even beliefs, and therefore not epistemically justified. For example, given that having epistemic justification requires evidence, the fact that some of my beliefs are epistemically justified entails that I have some evidence for them. We may grant that, on this basis, I am obligated to have evidence for the things I believe. But clearly it does not follow that I am epistemically justified in having evidence, since having evidence is not even a belief, and so cannot be epistemically justified. Belief in Non-Deception, I am suggesting, may be just another such thing: a necessary condition on our beliefs' justification that is not itself justified. If I am right — and the argument from Coherence gives us no reason to think I am wrong — then being entailed by the fact that one's beliefs are justified is not sufficient for justification, even if it is sufficient for obligation.[32]

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30. For convenience, I am ignoring cases in which one has no attitude whatsoever regarding Non-Deception, which is the case when skeptical hypotheses have not yet occurred to one.

31. For example, "*p*, therefore *p*" is a bad argument, but "*p* entails *p*" is true.

32. I assume that the defender of the argument from Coherence needs the result that we have *epistemic* justification for believing Non-Deception (not,

It does not help to switch from obligation to permission. The argument would be: "Any belief for which one lacks justification is impermissible. But, clearly, belief in Non-Deception is permissible, since having that belief is necessary for your other beliefs' justification. Therefore, belief in Non-Deception is justified."

This argument fails because it does not follow from a belief's lack of justification that it is impermissible — at least not without further controversy. To see this, consider two ways for a belief to lack justification. One way a belief can lack justification is for the epistemic norms to have a negative verdict on it. A second way is for epistemic norms to be entirely silent on a belief: it lacks justification because there is nothing positive or negative about it, epistemically. It simply lies outside the scope of epistemic norms. This goes well with the idea that ordinary epistemic principles do not apply to extraordinary beliefs. For it may be the case that extraordinary beliefs, including Non-Deception, are outside the scope of epistemic norms in the sense that epistemic norms do not apply to and are silent on them. In that case, belief in Non-Deception lacks justification, but nothing follows about what we epistemically should or shouldn't believe.[33] In particular, it wouldn't follow that it is impermissible to believe Non-Deception.

To sum up, we can all agree that if having justified beliefs requires that one's beliefs are coherent, and since in order to be coherent one must believe Non-Deception (assuming, as we are, that one realizes that one's ordinary beliefs entail Non-Deception), belief in Non-Deception

is permissible and, indeed, required. Again, this is as uncontroversial as the claims that coherence is necessary for justification, which we are granting for the sake of argument, and the claim that Non-Deception is entailed by many of our ordinary beliefs. But this does not entail that there is justification for believing Non-Deception, since justification requires evidence, and Non-Deception may still lack evidence. Furthermore, belief in Non-Deception may lie outside the scope of the epistemic principles that determine whether a belief is justified. This view does not seem to be a non-starter. Of course, it is debatable. But what it shows is that the argument from Coherence is not decisive. In order for it to be decisive, it needs to offer a view about the scope or limits of epistemic norms, and any such view is debatable.

The second interpretation of the Argument from Coherence is that, unless the Closure Premise is true, the notion of justification is incoherent.[34] The idea is that justification is a right to believe, or a truth-aiming status, and truth is never incoherent. So, if one has a truth-aiming right to believe one thing, and knows (or has justification to believe) that it is true only if some other thing is true, then one has that *truth-aiming right* to believe that other thing. This argument, then, appeals to the fact that justification is a truth-aiming status, and concludes from this that justification must be closed under known entailment.

Let us grant that justification is a truth-aiming status. Still, this version of the Argument from Coherence is invalid. For the fact that a status is truth-aiming does not entail that it is closed under known entailment. Consider non-inferential justification. Many epistemologists would agree that, when I see a red surface, I can become non-inferentially justified in believing (5):

(5)   It looks as if there is a red surface.

This is non-inferential because my justification here does not depend on (justification for) any other belief. But suppose that I validly deduce (6) from (5):

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33. One might suggest that it follows that belief in Non-Deception is permissible. Consider an analogy: Perhaps wiggling your toe harmlessly for no apparent reason is outside the scope of ethical norms, because ethical norms don't say anything about toe wiggling in such circumstances. It follows that wiggling your toes is morally permissible (since the norms don't tell you not to do it). If this is the case, then we should say that belief in Non-Deception is permissible. I am neutral on whether this is right. I insist only that it does not follow from the norms' silence on it that the belief — or wiggling your toes — is impermissible.

34. For a recent example of this version of the argument from Coherence, see Schiffer (2004, p. 22).

(6)   Either there is a red surface or this is an illusion (where an
       "illusion" occurs when things are not the way they look)

My belief in (6) is entailed by (5), but it is not *non-inferentially* justified.
So non-inferential justification, which is a truth-aiming status, is not
closed under known entailment. Therefore, being a truth-aiming sta-
tus does not entail being closed under known entailment.[35]

One might object that, while closure fails for very specific sorts of
truth-aiming statuses, it cannot fail for the status of, say, being either
non-inferentially justified or justified by a valid deduction from a non-
inferentially justified belief. But this is just to restate the argument
from deduction, which, as we have already seen, is not decisive.

One might also object that it is still the case that if one's belief that p,
and p entails q, has some truth-aiming status or other, one's belief that
q must also have some truth-aiming status or other. Perhaps this is true,
but it does not help with the paradox. For, the Skeptical Conclusion is
that we lack *justification*, not that we lack any truth-aiming right at all.
Clearly, it is possible to have some truth-aiming right or other while
lacking justification. For example, a belief might be true, or objectively
likely to be true, while being unjustified. So, even if this objection is
correct, it does not vindicate this version of the argument form Co-
herence in favor of the Closure Premise, which concerns justification
rather than just any truth-aiming status.

Of course, none of this shows that the Closure Premise is false. In-
stead, what it shows is that the claim that justification is a truth-aiming
status does not settle whether the Closure Premise is true. It remains

35. One might object that non-inferential justification is not a "purely" truth-
aiming status, since it is a truth-aiming status with an additional feature
(being non-inferential). So I haven't shown that purely truth-aiming status
is not closed under known entailment. I grant that. But my belief that I have
hands is not "purely" justified: it has the additional features of being per-
ceptual and, arguably, non-inferential. So "pure" justification closure does
not support the Closure Premise. Thus, as long as I have undermined the
claim that being a truth-aiming status (pure or impure) does not entail be-
ing closed under known entailment, I have undermined the argument from
Coherence. For it is this more general and impure principle that the argu-
ment from Coherence appeals to in supporting the Closure Premise.

open whether strange, extraordinary beliefs lie outside of the scope of
truth-aiming rights. This idea should be (and has been)[36] developed in
detail. But the need for more detail does not show that it is incoherent.

4. The Argument from Logical Equivalence

This argument is due to Hawthorne (2004a, 2005), whose original
argument is intended as an objection to the rejection of closure for
knowledge, which he formulates in terms of "competent deduction".
But it may be thought to be just as powerful an argument for the Clo-
sure Premise. Here, then, is the justification version of the argument.

> **Logical Equivalence:** If two propositions are logically
> equivalent, then being justified in believing one entails
> having justification to believe the other (if the equiva-
> lence is recognized by the subject).

The argument is that the belief that *I have hands* is logically equiva-
lent to the belief that *I have hands, and Non-Deception*, so according to
Logical Equivalence, if I am justified in believing the former then I
have justification to believe the latter. If I have justification to believe
a conjunction, then I have justification to believe each conjunct. So the
Closure Premise is true.

The argument is not decisive. For one can reasonably reject Logical
Equivalence. We have seen that the Argument from Coherence is not
decisive, so Logical Equivalence cannot be established on the basis
of its being incoherent to believe one but not the other of a pair of
(known to be) logically equivalent beliefs.

We have also seen that the argument from Deduction is not deci-
sive, since extraordinary propositions can be excluded from the rel-
evant deduction principle (*i.e.*, (4)). In order to see how this relates
to Logical Equivalence, consider whether conjunctions with an ex-
traordinary conjunct should count as extraordinary. The idea behind

36. Again, see P.F. Strawson's (1985) and Coliva (forthcoming).

the ordinary/extraordinary distinction is to distinguish negations of hypotheses that satisfy (a) and (b). *I have hands, and Non-Deception* is not a negation. However, *I have hands, and Non-Deception* both affirms that I have hands and negates Deception. Since it negates Deception, it is extraordinary. Less abstractly, in believing a conjunction, one thereby believes each conjunct. So, in believing that *I have hands, and Non-Deception* I thereby believe something extraordinary (*i.e.*, Non-Deception). To relate this to inference failure, notice that, intuitively, the inference "I have hands, therefore Non-Deception" fails in just the same way that the inference "I have hands, therefore I have hands, and Non-Deception" fails. The best explanation for this is that in believing the conclusion of the latter inference one believes the conclusion of the former inference. So, it seems natural to count conjunctions, and beliefs in conjunctions, one of whose conjuncts is extraordinary, as extraordinary.[37]

Accordingly, the inference from *I have hands* to *I have hands, and Non-Deception* fails, since the conclusion is extraordinary and therefore excluded from (4*); and inferring *I have hands* from the premise *I have hands, and Non-Deception* does not produce justification either, since the premise is extraordinary (and therefore lacks justification). So considerations of deduction do not vindicate Logical Equivalence.[38]

37. This is not to say that *every* conjunction that contains Non-Deception as a component is extraordinary. For example, *I have hands, and if I have hands then Non-Deception* is not extraordinary. For, the inference "I have hands; therefore, I have hands, and if I have hands then Non-Deception" may be odd, but it does not fail in the same way as the inference "I have hands, therefore Non-deception." Presumably this is because, in concluding that *I have hands, and if I have hands then Non-Deception*, one does not thereby conclude Non-Deception. So one does not conclude something extraordinary. Despite this, one could insist that the inference does fail and count *I have hands, and if I have hands then Non-Deception* as extraordinary. One would then restrict Closure* accordingly while still availing oneself of the solution to the paradox that I have been defending.

38. Those who reject the idea that in believing that *I have hands, and Non-Deception* one thereby believes Non-Deception might reject the argument from Logical Equivalence on other grounds. Such a person may well think that the inference from *I have hands* and *Non-Deception* to *Non-Deception* fails, since the conclusion is extraordinary (and therefore excluded from (4*)) and — on

So far, I have argued that considerations of coherence and deduction do not vindicate Logical Equivalence. The only other motivation I can think of for accepting Logical Equivalence is the thought that logically equivalent beliefs are not distinguishable in the sort of way that would be required in order for them to differ with respect to their epistemic status. But ultimately this does not seem plausible. To begin with, we can easily distinguish logically equivalent beliefs. Otherwise we would have a hard time distinguishing one's simple beliefs from the infinitely many logically equivalent beliefs that one does not have. We can also easily distinguish logically equivalent beliefs that one does have. Otherwise we would have a hard time distinguishing one's basic logical beliefs from the logically equivalent beliefs that one has inferred (whether correctly or confusedly) from the basic ones. Given that we are able to distinguish logically equivalent beliefs, why think that logically equivalent beliefs are *epistemically* indistinguishable?

Indeed, we seem to be able to distinguish logically equivalent beliefs from an epistemic perspective. To see this, notice that it is possible to assume one proposition without assuming another, logically equivalent proposition. Otherwise, one would not be able to assume only one of them when proving that they are logically equivalent by deriving each from the other. Obviously, one can do this even if one knows that they are logically equivalent. For example, one might look for new ways to derive one proposition from another when one already knows that they are logically equivalent. Next, notice that we understand how to evaluate a belief without thereby evaluating an assumption on the basis of which it was formed. This is just to evaluate a belief for whether it is justified relative to or given some assumption (or supposition). This might be relevant to one's epistemic evaluation of a thinker. Therefore, logically equivalent beliefs are distinguishable when we are making epistemic evaluations, and in a way that is clearly relevant to our evaluation. Applying this idea to Non-Deception, Hume's famous observation comes to mind: While we can never settle

their view — is not part of what one believes in believing the premise. However, I prefer to count the relevant conjunction as extraordinary.

whether there are external objects, it is something that we must "take for granted" — assume — "in all our reasonings".

Since I have just appealed to the notion of an assumption, my objection to Logical Equivalence might remind the reader of Harman and Sherman's (2004) objection to Hawthorne's original version of the argument, which, again, concerns knowledge rather than justification. One of Hawthorne's (2004b, p. 513) replies to Harman and Sherman may seem to undermine my objection as well, so this may be worth some discussion.

My rejection of the Closure Premise is quite different from Harman and Sherman's view, so Hawthorne's reply to Harman and Sherman does not apply to my rejection of the Closure Premise. Hawthorne's reply involves a scenario in which you are promised prize A iff the zebra-looking animal in front of you is a zebra, and prize B iff it is a zebra and not a cleverly disguised non-zebra. It is a priori that you get prize A iff you get prize B. Harman and Sherman hold that in everyday cases involving what I am calling ordinary beliefs, one can know something on the basis of an unknown assumption that is entailed by one's knowledge. Furthermore, they hold that in the case of the zebra, one can know that it is a zebra on the basis of the unknown assumption that it is not a cleverly disguised mule. Thus, they must say something awkward about this scenario: you know that you will get prize A (since you see the zebra) but you do not know that you will get prize B (since you know that you get prize B iff it is not a cleverly disguised mule), even though you know a priori that you get prize A iff you get prize B. Since the strategy I have been defending endorses closure for ordinary beliefs such as beliefs involving zebras and disguised mules, I am not committed to this strange verdict. In fact, as may be inferred from the discussion of Dretske in Section 1, I think that, in ordinary cases, one has plenty of evidence — inductive, testimonial, abductive — that the zebra-looking animal in front of one is not a cleverly disguised mule.

One might suspect that there is a version of Hawthorne's reply that undermines the strategy I have been defending. But there is

none, since the version of Hawthorne's reply that concerns extraordinary instead of ordinary beliefs does not produce any commitments that have not already been addressed in the previous sections.

The scenario would be that you are promised prize A iff you have hands and prize B iff you have hands and Non-Deception. I grant that (7) is justified:

(7)   You get prize A iff you get prize B.

I also grant that you have a posteriori, or empirical justification to believe that you will get prize A. You also have justification to believe (8), though this justification is a posteriori, since it is a posteriori that you will get prize A:

(8)   You will get prize B.

I can accept all of this because (7) and (8) are ordinary. (9) is also ordinary (see footnote 37) and justified, and obviously a posteriori:

(9)   You will get prize B iff Non-Deception is true.

However, my strategy is to deny that we have any sort of justification for believing Non-Deception. Thus, I must hold that the inference from (8) and (9) to Non-Deception fails. The burden of such a commitment has already been discussed. It is simply a commitment to stick with our intuitions that any inference from any ordinary, a posteriori premises to an extraordinary conclusion fails. Intuitively, nothing can justify belief in an extraordinary proposition (by definition). Specifically, many of us have the intuition that an inference from *I see hands*, or (8)–(9), or any other a posteriori premises to Non-Deception will fail. If the inference "I see hands, therefore Non-Deception" seems like a bad inference, the inference from (8) and (9) to Non-Deception seems equally bad: they are both inferences from a posteriori premises to Non-Deception. Thus, no new burden is revealed by the fact that, on the view I have been defending, belief in (7)–(9) is justified but belief in Non-Deception is not.

Setting inferences aside, I must also hold that, though (8) and (9) obviously entail Non-Deception, and even though it would be incoherent for one to lack belief in Non-Deception given one's belief in (8) and (9), belief in Non-Deception is still not justified. I have discussed this commitment already, and it is no different from the situation with any ordinary belief that entails Non-Deception. That (7) involves logically equivalent claims adds no additional burden; the scorecard of the view I have been defending remains the same.

To sum up: since there is no decisive reason to accept Logical Equivalence, the Argument from Logical Equivalence is not decisive.

5. Beyond Deception

So far, I have argued that the absence of ordinary counterexamples to Closure and the Arguments from Deduction, Coherence, and Logical Equivalence all fail to establish the Closure Premise. So, rejecting the Closure Premise is not a non-starter, and it is at least as promising as the standard strategy.

However, I have focused exclusively on the traditional paradox involving Deception. In order to reach any general conclusion about anti-skeptical strategies, we must consider whether there are other ways in which closure, or Closure*, might raise a paradox. This is difficult, since new, different paradoxes could always be discovered. The purpose of this section is to consider one such additional paradox, in order to demonstrate how Closure*, and the definition of 'extraordinary', can be adjusted in order to solve other paradoxes that don't involve Deception but still depend on Closure*.

That I have hands obviously entails that I am not deceived by a demon only about having hands (and not deceived about anything else). (1)–(3) seem to show that I am not justified in believing that I am not deceived in this specific way, and yet this deception does not entail the falsity of vast swaths of my beliefs (only one of them). So, given the above definition of 'extraordinary', the hypothesis that I am specifically deceived about hands is ordinary, since it fails to meet condition (b). Still, it is unjustified (according to (1)–(3)). So, according to Closure*,

I lack justification to believe that I have hands. This argument can be repeated for chairs, squirrels, and any other ordinary object of our senses, and by this generalization the skeptical conclusion that I am not justified in believing anything about the external world follows.

A straightforward way to address this is to change the definition of 'extraordinary' so that it applies to the offending, specific-deception hypotheses:

> Any belief in the negation of an hypothesis that meets condition (a) and either meets condition (b), or meets condition (b) by some generalization of the deception it posits, is *extraordinary*.

With a suitably precise characterization of "generalization", the strategy of restricting Closure will provide a solution to this new paradox.[39] More generally, whenever some hypotheses distinct from Deception are found to raise a paradox via Closure*, the task will be to search for a suitable and natural restriction of Closure, so that the hypothesis is excluded. The effect will be that Closure* is further restricted, since it excludes more hypotheses (the same goes for (4*)). This task of adjusting the strategy to treat more versions of the paradox is similar to the task of those who pursue the standard strategy by rejecting (3): they must accommodate the fact that different sorts of hypotheses can raise paradoxes, and so on their view the negations of those hypotheses need not be supported by evidence in order to count as justified.

It is possible that skeptical paradoxes that depend on closure will be discovered which should be treated in an altogether different way. They will have to be addressed as they come up. My aim has only been to show that there is no reason to assume that restricting Closure will necessarily result in a less promising strategy than rejecting (1)–(3). For we can always further restrict principles like Closure, instead of

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39. It also blocks the conclusion that I am not justified in believing that I have hands.

weakening our notion of justification (or coming up with a priori arguments for deeply contingent truths) as the standard strategy requires.

One might be pessimistic and guess that the best solution to other paradoxes will be to reject (1)–(3), perhaps because, in some cases, the restriction of Closure will prove to be so unnatural or ad hoc that rejecting (1)–(3) seems easier. This still does not necessarily undermine the general strategy here. For although having one unified strategy to treat all closure paradoxes seems desirable, it is unreasonable to demand this given the variety of paradoxes and the different principles they rely on. There may well be more than one type of closure paradox; puzzles pervade. So, even if there are other paradoxes that are better solved by other strategies — and we have not yet encountered any — this itself would not establish that the strategy defended above is a non-starter, or any worse off than the standard strategies.

I conclude that rejecting the Closure Premise is not a non-starter, and just as promising as the standard solutions to the classic Deception Paradox. Furthermore, the strategy is flexible, so that it is unreasonable to assume that it cannot handle other, new paradoxes as well. So we should not assume that the aim of non-skeptical epistemology is to come up with a theory of justification on which the Skeptical Premise is false.[40]

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