Absence of evidence against belief as credence 1

Andrew del Rio
George Fox University

Abstract: On one view of the traditional doxastic attitudes, belief is credence 1, disbelief is credence 0, and suspension is any precise credence between 0 and 1. Jane Friedman (2013) argues, against these views, that there are cases where a credence of 0 is required but where suspension is permitted. If this were so, belief, disbelief, and suspension could not be identified or reduced to the aforementioned credences. I argue that Friedman relies on two different notions of epistemic rationality and two different kinds of evidential absence. I clarify these distinctions and show that her argument is either not valid or includes implausible premises, twice over. If this is so, the view that belief is credence 1, disbelief is credence 0, and suspension is any precise credence between 0 and 1 cannot be rejected on the grounds that Friedman proposes.

1. Introduction

Friedman (2013) makes a significant attack on accounts of suspension of judgment that identify or reduce suspension to precise credences.[1] Her paper is compelling in many ways, and I agree with her conclusion that there are no plausible precise credal accounts of suspension.[2]

Part of the paper, however, involves an argument against what I'll call the Broad View of suspension.

> **Broad View:** Suspension on p just is any precise credence that p within the interval (0, 1). Neither a credence of 0 nor a credence of 1 is suspension.

The Broad View of suspension complements the Maximizing View of belief and the Minimizing View of disbelief.

---

[1] See Monton 1998 for a shorter critique of credal accounts of suspension.

[2] See del Rio forthcoming for an extended argument against both precise and imprecise credal accounts of suspension.

Maximizing View: Belief that p just is credence 1 that p.

Minimizing View: Disbelief that p just is credence 0 that p.

These views are growing in popularity and have been defended in Clarke 2013 and Greco 2015.[3] Those that hold these views should find Friedman's argument of interest, for though the Broad View was her explicit target, her argument, if successful, would also show that the Maximizing/Minimizing views are false. I'll refer to these three views as the Extreme Views. Here I argue that the argument is unsuccessful twice over. In the process I identify two distinct notions of epistemic rationality and two distinct kinds of evidential absence.

2. Explanation of Friedman's Argument

Friedman's argument against the Broad View could be regimented like this:

1. If the Broad View is correct, then it is never the case that: it is epistemically permissible to suspend on some proposition p AND $cr(p) = 0$ is epistemically required.
2. If there is no evidence for or against an ordinary contingent proposition p, it is epistemically permissible to suspend judgment about p.
3. There is an ordinary contingent proposition p such that there is no evidence for or against p AND $cr(p) = 0$ is epistemically required.
4. So, there is an ordinary contingent proposition p such that it is epistemically permissible to suspend on p AND $cr(p) = 0$ is epistemically required. (from premisses 2 and 3)
5. So the Broad View is not correct. (from premisses 1 and 4)

Let me offer a brief explanation and defence of the premisses, especially premiss 3, before critiquing the argument.

Premiss 1 follows from the definition of the Broad View and the nature of permission. If it is permissible to suspend, then according to the Broad View it is permissible to have a credence between 0 and 1, for you can only have one with the other. And if it is permissible to have a credence between 0 and 1 then it is not required

---

[3] Clarke (2013) and Greco (2015) explicitly defend the Maximizing View. Their views are contextualist, but their contextualism does not save their views from Friedman's argument. If her argument is correct, belief that p cannot be credence 1 that p (in context). This is so because Clarke's and Greco's views state that credence 1 (in context) is always belief, but Friedman's argument requires that credence 1 (in context) is, at least sometimes, not belief.

that one have a credence of 0. So if the Broad View is correct, then it is never true that one is permitted to suspend and required to have credence 0. Note that the same line of reasoning shows that the Maximizing View is not compatible with both it being epistemically permissible to suspend on some proposition p and $cr(p) = 0$ being epistemically required.

Premiss 2 is what Friedman calls the Absence of Evidence Norm. In her words:

> **Absence of Evidence Norm:** In the absence of evidence for or against an ordinary contingent proposition p, it is epistemically permissible to suspend judgment about p.[4]

This sounds eminently plausible. If suspension is ever permissible it should be permissible in the absence of evidence.[5]

Premiss 3 -- that there is an ordinary contingent proposition for which there is no evidence and in which a credence of 0 is epistemically required -- is in need of support. Here consideration of an infinite partition enters the story. Friedman argues for premiss 3 by exploiting the notion of ur-priors. An ur-prior p-credence is the rational credence that p in the absence of evidence for p -- prior to any evidence for p. But there are propositions for which one's ur-priors must be 0, namely for some of the propositions that form an uncountably infinite partition.

Consider an ordinary contingent proposition like *the length of table T is 5 feet*. There is an uncountably infinite partition of propositions about T's length. Here are some other propositions in this uncountable partition: *T is 5.1 feet*, *T is 5.01 feet*, *T is 5.001 feet*, *T is 5.0001 feet*, *T is 5.00001 feet*, *T is 6 feet*, *T is 7 feet*, ad infinitum. These are mutually exclusive and exhaustive.[6] For every uncountable partition of ordinary contingent propositions, an agent S is required to have credence 0 in an uncountable number of propositions. Otherwise the sum of the probabilities that S assigns to each proposition in the partition would sum to greater than 1, violating the probability axioms. So in the absence of evidence about T's length, S's ur-priors must be 0 for some propositions about T's length. There is no probability distribution that does not assign 0 to some

---

[4] Friedman (2013), 60. Friedman does qualify this norm by saying this is 'roughly' what the absence of evidence norm says.

[5] Some will worry that having no evidence for p is impossible. If it is not, then premiss 3 is false and the argument fails. For the sake of argument I will assume that, in some important sense, absence of evidence is possible.

[6] There are complications here when it comes to determining the length of a table to an infinite decimal place. One might deny that there are uncountably infinite partitions for ordinary contingent propositions because *none* of the infinitely fine-grained propositions would be true. If so, so much the worse for the argument against the Broad View.

propositions in this partition. Hence premiss 3; sometimes credence 0 in ordinary contingent propositions is epistemically required in the absence of evidence.

The falsity of the Broad View follows easily enough. Premiss 4 is entailed by 2 and 3, and the conclusion is entailed by 1 and 4. Note that the falsity of the Maximizing View follows from 1 and 4 as well, if the antecedent of premiss 1 is altered to state that the Maximizing View is correct. Such a premiss is just as plausible.

This is an interesting argument. In effect, Friedman argues that if we are to think of suspension as credence then the Broad View is not broad enough! Where this argument leaves belief is unclear, but belief cannot be credence 1.

3. Critique

The first thing to notice is that premiss 4, which is an intermediate conclusion from premisses 2 and 3, is implausible. It says that for some p it is permissible to suspend on p, and also credence 0 that p is required. There are two concerns here.

The first concern is that the mere possibility of the permitted state seems highly suspect. Try to imagine you are *certain* that the table is not exactly 5 feet but you *suspend judgment* about whether it is. By 'certain,' I mean maximally confident.[7] Is this possible? It doesn't seem so to me. How could I be certain and suspend judgment at the same time? One could argue that the state doesn't need to be possible. Assuming some kind of *ought-can* principle, the premiss would require that one can have credence 0 that p since it says that one ought to have credence 0. Suspending, however, is only claimed to be permissible. Could suspending be epistemically permissible but also impossible? It's unclear. On the one hand, there are some lousy children out there and presumably it would be epistemically permissible for their parents to think so -- say they are in a position to know it -- but I can imagine it could also be psychologically impossible for some of these parents to think their children are lousy. On the other hand it seems like this parental bias is a weaker notion of impossibility than when I say it seems impossible to suspend on p while I'm certain that p. Perhaps the impossibility is more deeply metaphysical like saying a rock cannot suspend. Because rocks cannot suspend, it seems wrong to say rocks are permitted to suspend, even though they have no evidence. So the force of the first concern is unclear, but if this case is more like the rocks than the parents, then the seeming incompatibility of credence 0 and suspension would suggest that premiss 4 is false.

The second concern is more pressing. It is just not plausible that the state of suspending on p while being certain that not-p is epistemically permissible. These

---

[7] Some, like Clarke (2015), use a stronger notion of certainty that requires a stability of opinion in addition to maximal confidence.

attitudes don't look rationally compatible. On the contrary, the following would seem to be the case:

> **Intuitive Claim:** It isn't epistemically permissible to suspend on whether p while being maximally confident that p.

Wouldn't it be strange to say you are permitted to suspend about something while there is literally nothing you are or could be more confident about?[8]

So premiss 4 should look counterintuitive. But premiss 4 is just deduced from premisses 2 and 3, and those premisses both sound reasonable enough. What's going on?

Objection 1: Premisses 2 and 3 use different notions of epistemic rationality. Notice that there is a reading of premiss 4 that does not conflict with the Intuitive Claim. One could say that suspension on p is permissible in one way and $cr(p) = 0$ is required in another way, while it is not permissible to do both at the same time. This is actually a very sensible interpretation of what could be inferred from premisses 2 and 3. Consider the following two notions that are plausibly in play: *permission by one's evidential state* and *requirement by one's other doxastic attitudes.*[9] In the discussion that follows, I'm assuming one's other doxastic attitudes are permitted by one's evidential state. Suspension could be permitted by one's evidential state but not by one's other doxastic attitudes. Likewise, credence 0 could be required by one's other doxastic attitudes, but not required by one's evidential state.

The Absence of Evidence Norm (premiss 2) is plausibly interpreted as the claim that suspension on p is *permitted by the evidential state* of no-evidence whether p, not that it is *permitted by one's other doxastic attitudes* whenever one is in the evidential state of no-evidence whether p. After all, the norm is explicitly about one's evidential state and the norm is not supposed to entail that suspension is required. If it doesn't entail that suspension is required, then it leaves open whether belief is sometimes permitted in the absence of evidence. If it leaves open whether belief is sometimes permitted in the absence of evidence, then it must leave open whether suspension is permitted by one's doxastic attitudes. This is so because if belief is permitted then one might have the belief that p, and then suspension on p would not be permitted by one's doxastic attitudes. The two attitudes are not coherent, in the broad sense of the term. So premiss 2 should

---

[8] 'No,' some might think, as long as p *could* be false. But, while p could (metaphysically) be false, being maximally confident that p amounts to taking the stand that p couldn't (epistemically) be false.

[9] This distinction is closely related to the distinction between substantive rationality and structural rationality. See Worsnip 2018 and 2022 for more about this distinction.

be read as a statement about what is permissible by one's evidential state, not what is permissible by one's other doxastic attitudes.

Premiss 3, the claim that $cr(p) = 0$ is required for a contingent proposition with no evidence, cannot be read as a requirement by one's evidential state. The only constraint we have placed on the ur-priors is that they are probabilistically coherent -- a structural constraint. Without being given a particular doxastic structure, all we can say is that some propositions or others from the uncountable partition get credence 0. No particular proposition is required an assignment of 0 by the evidential state. Indeed it is not only permissible by the evidential state that any particular proposition is assigned some credence between 0 and 1, it is also permissible that any countable number of propositions from the uncountable partition be assigned a credence between 0 and 1 in a single credence function (all those can be assigned the same credence if the countable number is also finite).

Is it enough that some proposition or other will be assigned credence 0 in the absence of evidence to make Friedman's argument work? No. If that assignment isn't required by the evidential state, then that evidential state permits credences between 0 and 1. The proponent of the Extreme Views is happy to grant that suspension is permissible by one's evidential state when a credence between 0 and 1 is also permissible by one's evidential state; one is permitted to suspend by taking a credence between 0 and 1. Another way of putting this point is that *premiss 1 of the argument requires suspension on* p *being permissible in the same way that cr(*p*) = 0 is required*. Since premiss 2 only admits of permission by one's evidential state and premiss 3 only admits of requirement by one's other doxastic attitudes, the validly deduced *premiss 4 states that suspension is permissible in a different way than the way cr(*p*) = 0 is required*. So my first objection to Friedman's argument is that the conclusion in 5 does not follow from 1 and 4 when we clarify the different ways an attitude can be epistemically permissible/required.

Objection 2: Premisses 2 and 3 refer to different kinds of evidential absence. A problem independent of the one just explained is that premiss 2 is plausible only if it refers to a different kind of evidential absence than that of premiss 3. Without reference to the same kind, premiss 4 doesn't follow.

Here are examples characterizing two ways one might be said to have no evidence. Imagine two different scenarios, the case of the mystery ticket and the case of the uncountable lottery ticket.

> **Mystery Ticket:** Philo has a mystery ticket. He doesn't know what the mystery ticket is for or where it is from. He doesn't know if the mystery ticket is a lottery ticket at all, and so he also doesn't know how many other tickets there could be or how many tickets could be winners, if any.

> **Uncountable Lottery Ticket:** Sophie has a lottery ticket. She knows how many other tickets there are in the lottery (an uncountably infinite number). She also knows how many are winners (just one).

Philo has some kind of absence of evidence about whether the mystery ticket is a winner -- his evidential state seems to involve no evidence that is relevant to the question at hand. Sophie also has some kind of absence of evidence about whether the uncountable lottery ticket is a winner -- her state involves no evidence that supports her ticket being the winner rather than some other ticket in that lottery. Notice, however, that Sophie's kind of absence of evidence is different from Philo's.

Sophie knows more about the uncountable lottery ticket than Philo knows about the mystery ticket. Specifically, Sophie knows about the range of possibilities and the logical relationship that holds between those possibilities, while Philo doesn't. For example, Sophie knows that if her ticket is a winner, then none of the other tickets in that lottery are winners. Philo does not know (or believe) that about his ticket, so his evidential state is even more impoverished. Moreover, Sophie's situation involves the specific information that there are an uncountable number of options, only one of which is actual, distinguishing Sophie's evidential state from ordinary lottery cases. Let's call Sophie's kind of evidential absence *uncountable* and Philo's *mysterious*.

These two kinds are exclusive. If you have one kind of evidential absence, you will not have the other kind. This is true because to have a mysterious kind of absence is to lack information about the space of possibilities while to have an uncountable kind of absence is to have information about the space of possibilities generally and information about the uncountable nature of that space in particular. The former evidential state does not rule out any number as a candidate for the number of possible outcomes, nor fix a number of possible outcomes where the ticket is winner. The latter does -- none of the countable numbers are candidates for the number of possible outcomes and in only one possible outcome is the ticket a winner.

Now the crucial point to my second objection is this: *premiss 3 requires the uncountable kind of absence but the uncountable kind of absence makes premiss 2 implausible.* Premiss 3 requires the uncountable kind of absence because that is the situation of the Bayesian Superbaby or an agent in the ur-prior state. Superbaby has attitudes about all the relevant matters to effectively place it in the uncountable lottery case for every uncountable partition. For example, Superbaby would have an ur-prior of 1 that one and only one proposition of the form [T is n feet] is true and an ur-prior of 1 that there are an uncountable number of propositions of the form [T is n feet]. These other ur-priors are the extra information that serve to put Superbaby into an uncountable lottery ticket case. Therefore, the evidential absence mentioned in premiss 3 must refer to this

kind of absence. That is, it must count Superbaby's state as being absent evidence for the propositions of the uncountable partition that are assigned credence 0.

But premiss 2 seems false if it refers to the uncountable kind of absence. It fairs like the analogous norm for credences.

> **Absence of Evidence Norm #2:** In the absence of evidence for or against an ordinary contingent proposition p, it is epistemically permissible to have a credence greater than 0 and less than 1.

That's as intuitive as premiss 2 and yet false if 'absence of evidence' refers to the uncountable lottery case. Why wouldn't premiss 2 suffer the same fate?

Premiss 2 is at least *implausible* if it refers to the uncountable kind of absence. Reconsider the Intuitive Claim:

> **Intuitive Claim:** It isn't epistemically permissible to suspend on whether p while being maximally confident that p.

If premiss 2 refers to the uncountable kind of absence, then it would say that even in uncountable lottery cases where credence of 0 and 1 are required, it is permissible to suspend. That conflicts with the Intuitive Claim. Note that the Intuitive Claim does not beg the question. Acceptance of the Intuitive Claim is compatible with the rejection of the Extreme Views, and the Intuitive Claim is independently intuitive.

I contend that conflict with the Intuitive Claim is grounds for a premiss's being controversial and implausible. Anything that conflicts with the Intuitive Claim is in need of defense. Can Friedman defend premiss 2 in light of this conflict?

She gives two considerations that support premiss 2. The first is the norm's intuitive nature. If premiss 2 refers to just the mysterious kind of absence -- talking about cases like Philo's mystery ticket -- it does sound intuitive and uncontroversial. Even extending the reference to the kind of absence one has with coin flips and ordinary lottery cases produces a very intuitive norm. But those are all cases that do not produce maximal confidence about any outcomes, as does the uncountable lottery. We are looking for a defence of a norm that refers to uncountable lottery cases and the maximal confidence they generate. Such a norm cannot be defended on the grounds that a similar norm is intuitive that only refers to cases where maximal confidence is not required.

Friedman's second means of support for premiss 2 is an appeal to a stronger claim that entails premiss 2:

> **No Belief:** A priori belief in ordinary contingent propositions is impermissible.

Presumably, if Superbaby believed, it would believe a priori. Therefore, suspension would be required in Superbaby's evidential absence, and therefore also be permissible.[10]

I grant that it is intuitive that belief in ordinary contingent propositions is not permissible a priori. But again, stretching this claim to apply to Superbaby undermines its intuitive nature. Another claim is equally intuitive: namely, a priori maximal confidence in ordinary contingent propositions is impermissible. Superbaby upends intuitions about which attitudes are permissible a priori or in the unqualified absence of evidence. Superbaby must have maximal confidence in ordinary contingent propositions a priori. Once we see this, there is no reason to think that our intuitions about a priori contingent beliefs apply to Superbaby. Indeed there is reason to think they do not. For if No Belief referred to Superbaby's state, the Intuitive Claim would be false, and worse, an even more intuitive claim would be false.

> **More Intuitive Claim:** It is epistemically permissible to believe p if it is epistemically permissible to be maximally confident that p.

Given these conflicts, No Belief is far from credible and is not a sufficient defence for premiss 2.

One might wonder, why should the Intuitive Claim and More Intuitive Claim refer to Superbaby's situation when other intuitive claims do not? Intuitions about which attitudes are permissible/required by particular evidential states don't seem to extend to Superbaby. But our intuitions about coherence considerations do. Indeed the only universally acknowledged constraint on Superbaby is coherence, and the intuitive claims I've used are coherence constraints, suggesting they may well extend to Superbaby.

However, they need not. The argument is undermined if premiss 2 -- when referring to the uncountable kind of absence -- is undermined. Even if coherence intuitions do not trump intuitions about which attitudes are reasonable in the absence of evidence, the mere conflict of these intuitions seems enough to undermine premiss 2.

Finally, notice that the following is compatible with the Extreme Views:

> **Absence of Evidence Norm #3:** In the absence of evidence for or against an ordinary contingent proposition p, where p is part of an uncountable partition and the truth of p is considered, it is epistemically permissible to suspend on p.

---

[10] No Belief could also be the basis for a rejoinder to my first objection, but, as I show here, this claim should not be thought to apply to Superbaby.

This norm is compatible because we can, presumably, consider only a countable number of propositions. A countable number of propositions can all be assigned some credence between 0 and 1 without any incoherence. But, crucially, since ur-priors are not countable nor 'considered judgments,' this norm cannot serve Friedman's argument. This norm's similarity and al difference from what the argument requires further undermines any sense that the required premiss ought to be believed.

If premiss 2 is not plausible with reference to the uncountable kind of absence, and premiss 3 requires reference to the uncountable kind of absence, then premiss 4 does not follow from plausible premisses. It cannot be concluded that there is some case where a proposition must be assigned credence 0 and suspension on that proposition is permissible.

Therefore, I conclude that the argument against the Extreme Views is unsuccessful on two counts. On the first count, the plausible readings of premisses 2 and 3 employ equivocal notions of epistemic rationality. On the second count, the plausible readings of these premisses refer to incompatible kinds of evidential absence.[11]

References

Clarke, R. 2013. Belief is credence one (in context). *Philosophers' Imprint* 13: 1-18.

del Rio, A. forthcoming. Suspending belief in credal accounts. *Noûs.*

Friedman, J. 2013. Rational agnosticism and degrees of belief. In *Oxford Studies in Epistemology: Volume 4*, eds. T. Gendler and J. Hawthorne, 57-81.

Greco, D. 2015. How I learned to stop worrying and love probability 1. *Philosophical Perspectives* 29 (1): 179-201.

Monton, B. 1998. Bayesian agnosticism and constructive empiricism. *Analysis* 58 (3): 207-212.

Worsnip, A. 2018. The conflict of evidence and coherence. *Philosophy and Phenomenological Research* 46 (1): 3-44.

Worsnip, A. 2022. Making space for the normativity of coherence. *Noûs.* 56 (2): 393-415.