Berker – Luminosity Regained

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TW's anti-luminosity argument derives a contradiction from the conjunction of five premises:[1]

(LUM) $(\forall_i, 0 \leq i \leq n)$(c obtains in $\alpha_i \supset$ PKC obtains in α_i)

(POS) $(\forall_i, 0 \leq i \leq n)$(PKC obtains in $\alpha_i \supset$ KC obtains in α_i)

(MAR) $(\forall_i, 0 \leq i \leq n)$(KC obtains in $\alpha_i \supset$ c obtains in α_{i+1})

BEG) c obtains in α_i

(END) c does no obtain in α_i

Argument:

> By (LUM), if c obtains in α_0, then PKC obtains in α_0. By (POS), if PKC obtains in α_0, then KC obtains in α_0. By (MAR), if KC obtains in α_0, then c obtains in α_1. Therefore from these three conditionals and (BEG), it follows that c obtains in α_1. Moreover, by a similar chain of reasoning, we may conclude that c obtains in α_2, that c obtains in α_3, and so on, until we reach the conclusion that c obtains in α_n. But this contradicts (END). Thus one of the argument's five premises must be false. Williamson claims that (POS), (MAR), (BEG), and (END) are all unassailable, so he infers that (LUM) is the premise responsible for our reaching a contradiction. Conclusion: the condition *that one feels cold* is not luminous – one can feel cold without being in a position to know that one feels cold. (4)

The argument is valid. The crucial premises are (LUM) and (MAR); which to reject?

Berker: in order to avoid intuition-mongering, we require independent motivation for (MAR).[2,3]

Williamson motivates (MAR) with a Safety principle. But which one, and how exactly does it establish (MAR)?

TW discusses two distinct safety principles:

- *Coarse-grained safety* involves categorical belief
- *Fine-grained safety* involves graded belief

[1] Here 'PKC' $=_{df}$ *is in a position to know that c*, 'KC $=_{df}$ *knows that c*; below 'BC $=_{df}$ *believes that c*.

[2] It's especially important to avoid intuition-mongering in areas where intuitions are unreliable, as they are when considering vague predicates (see: sorites paradox)

[3] Note the important stage-setting that Berker accomplishes here. In demanding independent motivation for (MAR), but not for (LUM), the burden of proof is on TW. Every battle is won before it's ever fought.

Coarse-grained Safety

(c-safety) In case α one knows that p only if, in all sufficiently similar cases in which one believes that p, it is true that p.[4]

Berker neither concedes nor denies the truth of (c-safety), but argues that it doesn't imply (MAR):

> It is crucial to notice that (c-safety) is not itself a margin-for-error principle. According to a given margin-for-error principle, one does not know that p in some case if, in a certain sufficiently similar case, it is false that p. According to (c-safety), one does not know that p in some case if, in a sufficiently similar case, it is false that p and one believes that p. For all (c-safety) says, one might know that p in some case αdespite its being false that p in an extremely similar case α^*, provided that one does not believe that p in α^*. It is only nearby false belief that, according to (c-safety), blocks one from having knowledge, not nearby falsity of what is actually believed. (6)

In other words, suppose (c-safety) is equivalent to:

(SAF) $(\forall_i, 0 \leq i \leq n)$[KC obtains in $\alpha_i \supset$ (BC obtains in $\alpha_{i+1} \supset$ c obtains in α_{i+1})]

That doesn't imply (MAR):

(MAR) $(\forall_i, 0 \leq i \leq n)$(KC obtains in $\alpha_i \supset$ c obtains in α_{i+1})

...without an auxiliary premise. First proposal:

(BEL) $(\forall_i, 0 \leq i \leq n)$(BC obtains in $\alpha_i \supset$ BC obtains in α_{i+1})

Problem: (BEL) is a sorites premise.

- From the stipulation that you believe that you feel cold at dawn it follows that you feel cold at noon, which is stipulated to be false.
- This illicitly exploits putative vagueness of 'believes' just as sorites arguments exploit vagueness of 'heap' or 'bald'
- So, (BEL) is false
- So, if TW's argument relies on (BEL), then the argument is unsound

[4] To support this reading, Berker points to the following passages from KAIL: 'if one believes p truly in a case α, one must avoid false belief in cases sufficiently similar to αin order to count as reliable enough to know in α' (p. 100); 'in case αone is safe from error in believing that c obtains if and only if there is no case close to αin which one falsely believes that c obtains' (pp. 126-7); 'if one knows, one could not easily have been wrong in a similar case. In that sense, one's belief is safely true' (p. 147).

In footnote 11 Berker considers a second route from (SAF), (QUAL), and (BEL′) to (MAR):

(BEL′) $(\forall i, 0 \leq i < n)$(BC obtains in $\alpha_i \supset (\exists\beta$ similar to $\alpha_i)[Q(\beta) = Q(\alpha_{i+1})$ & BC obtains in β])

(SAF) $(\forall_i, 0 \leq i \leq n)$[KC obtains in $\alpha_i \supset$ (BC obtains in $\alpha_{i+1} \supset$ c obtains in α_{i+1})]

(QUAL) $(\forall\alpha,\beta)[Q(\beta) = Q(\alpha) \supset$ (c obtains in α iff c obtains in β)][5]

[5] This encodes the assumption that whether or not one feels cold in a case supervenes on how one feels qualitatively.

(BEL′) & (SAF) & (QUAL) entail (MAR):

(MAR) $(\forall_i, 0 \leq i \leq n)$(KC obtains in $\alpha_i \supset$ c obtains in α_{i+1})

Problem for (BEL′)

- because the *similarity* relation is no transitive, A might be similar to B, and B similar to C, but A *dissimilar* to C
- in extreme cases, A and C might be very, very different
- Example: one might start out feeling cold, at the next moment feel slightly warmer... and in the end feel as hot as one would at the center of the sun, but each link in that chain is similar to the adjacent links

So if (BEL′) is true, we can construct a string of cases just like TW's, except you start out cold and end up as hot as if you were inside the sun, but you still believe that you're cold

Berker finds it extremely implausible that 'there could exist a being who counts as having beliefs and experiences, and yet whose beliefs and experiences are as wildly at odds with one another as they would be in β. To think otherwise is to think that the cognitive and phenomenal realms can come apart from each other to an unacceptable degree.' (7-8)

Interlude from Srinivasan's (AS) 'Are we luminous?':

AS considers a similar approach utilizing (BEL*) (= (BEL′)):

(BEL)* If in case α_i S believes she feels cold, then there exists a sufficiently similar possible case β_{i+1} in which S's cold-feelings are a phenomenal duplicate of her cold-feelings in α_{i+1} and in which S believes she feels cold.

(BEL*) is supported by her 'doxastic disposition premise', an *empirical assumption* about how beings like us function:

(DOXDIS) If in condition R, S believes she is F, then for any condition R′ very similar to R, S has some disposition in R′ to believe she is F.

Intuitive idea: the relation between stimulus and the beliefs formed in response to that stimulus isn't random, it's governed by dispositions. Very similar stimuli produce the same doxastic response. It's possible that non-human agents could react differently, but this is true of human agents, and we know it based on empirical observation.

So what about Berker's argument that (BEL*) leads to absurd consequences?

> Is it really so hard to countenance such a possibility? The similarity relation is intransitive, so a case in which one felt extremely hot but believed oneself to feel cold would be a case very dissimilar to the one imagined in Cold Morning. In particular, the intransitivity of ?very similar method' means that, in such a case, one might very well be using a method very different from the one a normally functioning person uses to form beliefs about her feelings of cold. One could, for example, be the victim of prolonged psychological priming, or in the grip of a certain philosophical picture of the mind that makes one systematically distrust one's inclinations to judge one's own phenomenal state. Is it really so hard to imagine some- one in these conditions coming to believe she feels cold when she actually feels extremely hot? These possible cases might be remote, no doubt. But their existence – like the existence of bad sceptical worlds – does nothing to undermine S's ability to know in normal situations. That (BEL*) implies that they are possible is thus no knock against it. In any case, as Berker himself notes, this objection to (BEL*) seems motivated by a view on which the phenomenal and the doxastic enjoy a constitutive connection. Such a view is not my target here, and (BEL*) will not feature in my argument against it. (305)

[Back to Berker]

Berker proposes a second possible route from (c-safety) to (MAR), this time using (KNO):

(KNO) $(\forall_i, 0 \leq i \leq n)(\text{KC obtains in } \alpha_i \supset \text{BC obtains in } \alpha_{i+1})$

Problem: (KNO) is implausible.

- lack of belief in similar cases is no barrier to knowledge in the actual case

> Though knowledge might indeed require a protective belt of cases in which one does not falsely believe, it is extremely implausible to sup- pose that, in addition, knowledge requires a protective belt of cases in which one believes. (8)

General problem for both (BEL) and (KNO):

> ...if one knows that p in some case, (c-safety) has nothing to say about similar cases in which one does not believe that p; at some point during the morning one will stop believing that one feels cold; so (c-safety) has nothing to say about whether one really does feel cold from that point on... The basic purpose of (MAR) in Williamson's anti-luminosity argument is as a bridge principle between cases. From (LUM) and (POS) it only follows that if some condition obtains in a given case, then some other condition obtains *in that same case*; with (MAR), on the other hand, we can deduce that because a certain condition obtains in case α_i, a certain other condition must obtain in the successive case α_{i+1}. However, (c-safety) will be unable to fully undergird (MAR), since (c-safety) can act as a bridge principle between successive cases α_i and α_{i+1} only if one believes that one feels cold in both; as this will not be true for all integers i such that $0 \leq i \leq 1$, we will need some *other* bridge principle to secure (MAR) in those cases, and I claim that whatever this additional principle is, it will be implausible.[6] (8)

[6] Any non-implausible proposals?

Proposed response in defense of TW:

- (BEL) and (KNO) are only needed to support (MAR)
- (MAR) is only needed to establish that there is some case one falsely believes that one feels cold
- Maybe we can just skip all that and just assert that such a problem-case exists[7]

[7] Berker doesn't really flesh out this last step.

Response: sympathy for (LUM) often comes from the idea that there's a *constitutive connection* between feeling and belief:

(CON) If one has done everything one can to decide whether one feels cold, then one believes that one feels cold only if one feels cold

Agents satisfying (CON) cannot be in a problem-case

> Of course one might doubt that there exists a constitutive connection of this form between feeling cold and believing that one feels cold, but then we need some independent argument against the possibility of such a connection, which the anti-luminosity argument by itself does not provide... typically it is precisely because they think that there is a

> tight connection between certain mental states and beliefs about those states that some philosophers claim the mental states in question to be luminous. So to simply assume that (LUM) is false would beg the question against the defender of luminosity. (9)

Fine-grained Safety

(c-safety) deals in all-or-nothing belief

But sometimes TW motivates (MAR) with considerations around partial belief:

> Consider a time t_i between t_0 and t_n , and suppose that at t_i one knows that one feels cold. Thus one is at least reasonably confident that one feels cold, for otherwise one would not know. Moreover, this confidence must be reliably based, for otherwise one would still not know that one feels cold. Now at t_{i+1} one is almost equally confident that one feels cold, by the description of the case. So if one does not feel cold at t_{i+1}, then one's confidence at t_i that one feels cold is not reliably based, for one's almost equal confidence on a similar basis a millisecond earlier that one felt cold was mistaken. In picturesque terms, that large portion of one's confidence at t_i that one still has at t_{i+1} is misplaced. Even if one's confidence at ti was just enough to count as belief, while one's confidence at t_{i+1} falls just short of belief, what constituted that belief at ti was largely misplaced confidence; the belief fell short of knowledge. One's confidence at t_i was reliably based in the way required for knowledge only if one feels cold at t_{i+1}. (p. 97 of KAIL)

This seems to depend upon (f-safety):

(f-safety) In case α one's belief that p with degree of confidence c is reliably based in the way required for knowledge only if, in any sufficiently similar case α^* in which one has an at-most-slightly-lower degree of confidence c^* that p, it is true that p

From the description of the case we have:

(CONF) For every integer $i (0 \leq i < n)$, if in α_i one has degree of confidence c that one feels cold, then in α_{i+1} one has an at-most-slightly-lower degree of confidence c^* that one feels cold

(f-safety) and (CONF) together entail:

(MAR) For every integer i $(0 \leq i < n)$, if in α_i one knows that one feels cold, then in α_{i+1} one feels cold

Problem:

- (f-safety) is TW's attempt at formulating a reliability requirement for knowledge
- but '(f-safety) deems as unreliable belief-forming mechanisms that appear to be as reliable as they could possibly be' (12)

Berker's way of making the point is unnecessarily complicated.

His case illustrating the problem has the following features:[8]

1. how cold one feels is measured in 'freezons', and there's a threshold for when one feels cold (full stop): $\geq$30 freezons and you feel cold, <30 freezons and you don't feel cold
2. belief is measured by degreee, and there's a threshold for when one believes (full stop): $\geq$.8 and you believe, <.8 and you don't believe
3. one feels cold iff one believes that one feels cold[9]
4. (1) and (2) establish scales for feeling cold and believing that one feels cold (respectively), (3) ensures that the cut-off points of the scales match up. In pictures:

Lesson:

> [in such a case] Williamson's fine-grained safety requirement (f-safety) implies that one's degree of confidence that one feels cold in α_j is too unreliable to constitute knowledge, since in α_{j+1} one's level of cold as measured in freezons slips just below the threshold of what counts as feeling cold (so that it will be false in case α_{j+1} that one feels cold). However, this charge of unreliability seems daft: in α_{j+1} one's level of cold as measured in freezons does indeed slip just below the threshold of what counts as feeling cold, but at precisely the same point one's degree of confidence that one feels cold slips just below the threshold of what counts as believing that one feels cold. Should we then follow Williamson in saying that, 'in picturesque terms', the large portion of one's confidence at t_j that one still has at t_{j+1} is misplaced? I think not. (14)

Conclusion: (f-safety) is not a necessary condition on knowledge

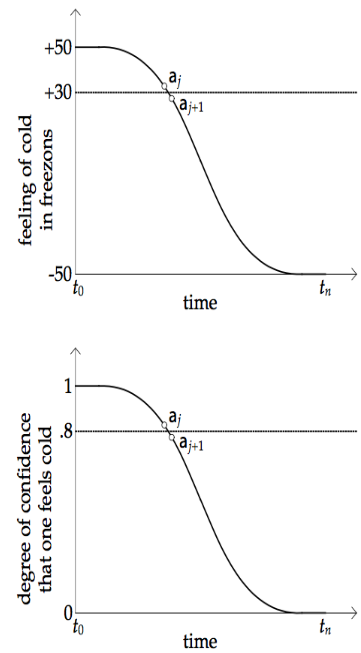

Figure 1

8

9 SB follows Fine in calling this a 'penumbral connection'.

Interlude from Srinivasan:

SB's isn't a case of perfect calibration. Consider another case:

> **Glass Half Full.** Henry likes watching empty glasses slowly fill with water until they are full. In normal conditions and when he is paying close attention, Henry's confidence that a given glass is at least half full is directly correlated with how full the glass is, rising slowly from 0% to 100% confidence as the initially empty glass is slowly filled to the brim. Moreover, Henry believes that glasses are at least half full if and only if they are indeed at least half full. It thus follows that the confidence threshold for outright belief is 50%. The only proposition Henry entertains about a glass as it fills is *that the glass is at least half full.*

> [Is this] a ?perfect calibration situation'? ...When the glass is only a fifth full... Henry still has a 20% confidence that the glass is at least half full. And when the glass is four-fifths full...Henry has only an 80% confidence that the glass is at least half full... [that's] hardly a maximally reliable possibility. The suggestion that Henry, or Berker's freezons subject, represents a ?perfect calibration situation' is thus misguided. So [neither] case constitutes a counterexample to [(f-safety)]. (312)

AS offers the following case in *support* of (f-safety):

> **Receding Fake Barns.** Mirra is looking at two rows of what look like barns in the distance. The first row is made up of real barns; the second row is fake. In situations like this, Mirra only forms beliefs about the proposition *that is a row of barns*[10] and she reliably forms only true beliefs about that proposition. The threshold for outright belief is 70% confidence. Of the first row, Mirra believes with 70% confidence that it is a row of barns. Of the second row, Mirra believes with 69% confidence that it is a row of barns.

> Mirra's belief that the first row is a row of barns is reliably true; she could not have easily had the untrue belief that it is a row of barns. But it nonetheless seems somewhat odd to say that Mirra knows that the first row is a row of barns. After all, Mirra has a 69% confidence that the fake barns right behind the real barns constitute a row of barns.[11] This suggests that safety requires more than the absence of nearby untrue belief; it requires the absence of nearby untrue almost-belief. If so, then luminosity requires not only that our phenomenal beliefs satisfy [(c-safety)]; it requires that our phenomenal beliefs further satisfy [(f-safety)]. Since the former but not the latter can be satisfied by beliefs that enjoy a constitutive connection to their phenomenal contents, it seems that no non-trivial mental conditions are luminous. (314)

[10] Note that the sentence expressing the proposition uses the demonstrative 'that' to refer to its subject. Sentences like that don't express propositions at all until the referent of 'that' is specified, and that only happens within a case/ possible world. So what is the proposition Mirra believes? Is it allowed to differ between the various nearby worlds? Does the reference of 'that' refer to the same row of barns in every nearby case, or is it allows to sometimes refer to the row of fake barns further back? Is this important, or just an unfortunate incidental complication?

[11] What happened to Mirra's believe that *that is a row of barns*?

Back to Berker

Proposed response in defense of TW:

> ...concede the point, but then try to find some alternative to (f-safety) that could still do the work necessary in justifying (MAR). The basic idea would be to argue that, even if [fig1] depicts the freezon and degree-of-confidence profiles of a creature for whom the condition that one feels cold is luminous, humans can never have such profiles, even when they do everything they can to decide whether they feel cold, and so the condition in question is not luminous for creatures like us.

BTM: it's hard to reconstruct this idea in a way that's faithful to the text, but here's a version of what he seems to have in mind:

The goal is to recast TW's argument as an attack on the luminosity of mental conditions *that humans could actually be in*, rather than as an attack on any possible luminous mental condition, i.e. to attach (LUM*) rather than (LUM):

(LUM) $(\forall_i, 0 \leq i \leq n)$(c obtains in $\alpha_i \supset$ PKC obtains in α_i)

(LUM)* $(\forall_i, 0 \leq i \leq n$ **and for any condition c that a human could actually be in**)(c obtains in $\alpha_i \supset$ PKC obtains in α_i)

This weaker target allows us to replace premise (MAR) with weaker premise (MAR*):

(MAR) For every integer i $(0 \leq i < n)$, if in α_i one knows that one feels cold, then in α_{i+1} one feels cold

(MAR)* For every integer i $(0 \leq i < n)$ **and any condition that a human could possibly be in**), if in α_i one knows that one feels cold, then in α_{i+1} one feels cold

We could then support (MAR*) with (f-safety*), weaker than (f-safety):

(f-safety) In case α one's belief that p with degree of confidence c is reliably based in the way required for knowledge only if, in any sufficiently similar case α^* in which one has an at-most-slightly-lower degree of confidence c^* that p, it is true that p

(f-safety)* In **any case** α **centered on a human**, one's belief that p with degree of confidence c is reliably based in the way required for knowledge only if, in any sufficiently similar case α^* in which one has an at-most-slightly-lower degree of confidence c^* that p, it is true that p

Now if we simply deny that any human could have a freezon and degree of confidence profile as depicted in fig1.

In that case there can be no counterexample to (f-safety*), so (MAR*) is supported, so we can conclude that (LUM*) is false.[12]

end BTM

Problems:

Why think that no human's freezon and degree of confidence profile can be depicted as in fig1?[13]

Why not think there's a *constitutive connection* between graduated feelings of coldness and degrees of belief about those feelings of coldness: a fine-grained constitutive connection?

> Of course, one might doubt that such a constitutive connection exists. But simply to assume that it does not, without offering any arguments in support of that assumption, would once again beg the main question at issue, since defenders of luminosity are typically motivated by the thought that there is a tight connection between the obtaining of certain conditions and our beliefs, at least upon reflection, about the obtaining of those conditions. So even if a suitable replacement for (f-safety) could be found – which itself is highly doubtful – then the brunt of the argumentative work in establishing that conditions such as that one feels cold are not luminous would still be left to be done.

Do the relevant constitutive connections obtain?

BTM: not much of interest in this section, except for one interesting claim:

> ...even if Williamson were somehow able to prove that the relevant constitutive connection does not hold between the obtaining of the condition that one feels cold and one's believing that the condition obtains, in order to extend his anti-luminosity argument to other conditions he would need to argue, on a case by case basis, that an analogous constitutive connection does not exist for each condition to which he applies the argument. (18)

Is that right? Certainly it's *possible* that there's a constitutive connection between feeling cold and believing that one feels cold, but that there's no constitutive connection between feeling warm and believing that one feels warm.

More generally, wouldn't you expect the relationship between belief and mental states to be the same in each case? Or the same for each class of mental state?

[12] As noted, this isn't very true to the text, since SB seems to think that (f-safety*) is going to support the stronger (MAR). I don't see how that's possible.

[13] NB that this is essentially Steup's point from last week's paper: why think that feelings of coldness and beliefs about those feelings can come apart in the first place? Isn't that the very point in question?

Coda: the lustrous and the luminous

Recall: the luminosity thesis is:

(LUM) $(\forall_i, 0 \leq i \leq n)$(c obtains in $\alpha_i \supset$ PKC obtains in α_i)

In contrast, the Lustrousity thesis is:

(**) For every case α, if in αcondition c obtains, then in αone is in a position to justifiably believe that c obtains.

Berker: even if TW's argument works against the *luminosity* of non-trivial mental conditions, an analogous argument doesn't work against their *lustrosity*

Such an argument would require (j-mar) as a premise:

(j-mar) For every integer $i(0 \leq i < n)$, if in α_i one is justified in believing that one feels cold, then in α_{i+1} one feels cold.

(j-mar) is much less plausible than (MAR)[14]

[14] Which simply replaces 'is justified with believing' with 'knows'.