Is ~K~KP a Luminous Condition?

Martin Smith

One of the most intriguing claims in Sven Rosenkranz's *Justification as Ignorance* is that Timothy Williamson's celebrated *anti-luminosity* argument can be resisted when it comes to the condition ~K~KP – the condition that one is in no position to know that one is in no position to know P (for some proposition P). In this paper, I critically assess this claim.

I. INTRODUCTION

The idea at the heart of Sven Rosenkranz's *Justification as Ignorance* is that one has justification for a proposition P iff one is in no position to know that one is in no position to know P. If we let J abbreviate 'One has justification for…' and K abbreviate 'One is in a position to know…' we can put the idea like this: JP <–> ~K~KP. Rosenkranz claims a number of benefits for this view – and one of the most striking is that it allows us to defeat Timothy Williamson's well-known *anti-luminosity* argument, and maintain that justification is a luminous condition. A condition is said to be luminous iff, whenever it obtains, one is in a position to know that it does. Justification will be a luminous condition iff we have the theorem JP –> KJP which, for Rosenkranz, corresponds to the theorem ~K~KP –> K~K~KP.

Williamson's argument – outlined in chap. 4 of *Knowledge and Its Limits* (2000) – purports to show that there are no non-trivial luminous conditions. According to Williamson, for any condition that obtains in some cases and not others, there will be a possible case in which it obtains but one is in no position to know that it does. A number of conditions have been supposed, by philosophers, to be luminous – phenomenal states, seemings, moral obligations, meanings and, indeed, *justification*, with epistemic 'internalists' claiming that we have special, privileged access to our own justificatory status[1]. If Williamson's argument is successful – and many think that it is – then a lot of traditional philosophical theorising turns out to be misguided. And if Rosenkranz has genuinely hit upon a way of resisting the argument, at least when it comes to justification, then this too would represent a very significant result.

I am inclined to think that the anti-luminosity argument, as standardly formulated, really *does* falter when it comes to ~K~KP. As I shall show, however, there is a fix available – the argument can be adapted to get around this problem. My primary aim here is to set out a new variant of the anti-luminosity argument, relying on slightly different assumptions to the original, which will work as effectively against ~K~KP as any other candidate non-trivial luminous condition. This new variant of the argument may be of some independent interest, and may be better able to withstand certain extant objections to the original – but I won't explore this here.

What is it to be *in a position to know* a proposition? Some take this to imply that one could come to know the proposition without needing to conduct further empirical inquiry – come to know the proposition purely by reflection, introspection, a priori reasoning etc. No detailed account of being in a position to know will be offered here, but I assume at a minimum that if one is in a position to know P, and one has done everything that one is in a position to do to determine whether P, then one

[1] In the taxonomy of Pryor (2001, section 3), this claim is characteristic of *access* internalism, while *simple* internalists claim only that one's justificatory status supervenes upon facts to which one has special, privileged access (a claim that would still presumably run afoul of the anti-luminosity argument).

knows P (Williamson, 2000, pp95, Rosenkranz, 2021, pp39). Call this PK_1. This already gives us the result that being in a position to know is factive – KP –> P.

I will table two further related assumptions, both of which are appealed to by Rosenkranz: First, if one has done everything that one is in a position to do to determine whether P, then one has also done everything that one is in a position to do to determine whether ~P. Second, if one has done everything that one is in a position to do to determine whether one is in a position to know P, then one has also done everything that one is in a position to do to determine whether P. In other words, doing everything that one is in a position to do to determine whether KP involves doing everything that one is in a position to do to determine whether P (plus, potentially, more). The former assumption, which we can call PK_2, might be regarded as trivial. The latter, PK_3, is not a triviality but is I think defensible[2]. In any case, I won't further discuss these assumptions here (see, Rosenkranz, 2021, section 3.2, where these assumptions correspond, respectively, to his 2a and 2b).

II. THE ANTI-LUMINOSITY ARGUMENT

There is no single, canonical way of presenting the anti-luminosity argument, with recent presentations departing from Williamson's original in various respects. The version I will focus on is close to the one used by Rosenkranz (section 4.3), though elaborated in the manner suggested by Srinivasan (2013). Let C be a candidate non-trivial luminous condition. Imagine a sequence of cases α_1, α_2 … linking a case in which C clearly obtains to a case in which ~C clearly obtains and which proceeds, through time, tracking minute, incremental changes to a relevant dimension, in such a way that adjacent cases can be made arbitrarily similar to one another[3]. The first assumption to be noted (call it AL_1) is that it is, in fact, possible to construct a sequence of this kind for condition C. Suppose that we do have such a sequence and suppose that, throughout the sequence, I am using the optimal available method to detect condition C, and am doing everything that I am in a position to do to determine whether it obtains. As a result, if I am in a position to know that C obtains in any given case in the sequence then, by PK_1, I *do* know that C obtains in that case.

The second assumption that drives the argument (call it AL_2) is that if I believe that C obtains in a case α_x, then I could easily believe that C obtains in the adjacent cases α_{x-1} and α_{x+1}. AL_2 is supposed to be motivated by the fact that our powers of discrimination are limited and, since adjacent cases can be made arbitrarily similar, there is some point at which I would simply have no reliable way of telling them apart. The third assumption of the argument (AL_3) is that if I know that C obtains in a case α_x, then I could not easily have falsely believed that C obtains in the next case α_{x+1}. AL_3 is supposed to be motivated by a kind of *safety* or margin-for-error requirement on knowledge – in order

[2] Suppose I'm sitting indoors, with the curtains drawn, and considering the proposition that there is currently a yellow car parked outside. Can't I easily tell that I'm in no position to know this, without doing everything I'm in a position to do to determine whether it's true – without, for instance, drawing back the curtains and looking out the window? What this sort of example highlights is that if 'being in a position to know' is interpreted purely in terms of reflective inquiry, then 'doing everything that one is in a position to do' must be interpreted in the same way. In this example, I can easily tell that I'm in no position to know *by reflection* that there is a yellow car outside – but there is nothing I can do *by reflection* to determine whether there is a yellow car outside, in which case the consequent of PK_3 is trivially satisfied.

[3] Cases are considered to be 'centered' possible worlds – triples consisting of a world, a subject and a time (Williamson, 2000, pp94). The cases in the sequence are distinguished only by the time variable, which changes in arbitrarily small increments while the world and subject are held constant.

for one to know a proposition P, it is necessary that one could not easily have believed P falsely, by the same method, in similar cases.

We now have the tools needed to prove that C cannot be a luminous condition. By classical logic, either C or ~C will obtain in each case in the sequence. As a result, there must be a last case in the sequence – call it α_n – in which C obtains, and which is adjacent to the first case – α_{n+1} – in which ~C obtains. If I don't believe that C obtains in α_n then I don't know it. But if I do believe that C obtains in α_n then, by AL_2, I could easily believe that C obtains in α_{n+1} from which it follows, by AL_3, that my belief in α_n does not qualify as knowledge. Either way, α_n is a case in which C obtains, even though I fail to know that it does.

Even if I believe that C obtains right up to α_n and then cease to believe it in α_{n+1} – that is, even if my belief switches at exactly the point that C does – this would just be good fortune. Given the limits on my powers of discrimination, I could easily have continued to believe that C obtains in α_{n+1} even if, in actual fact, I don't. Talk about what could 'easily happen' can be usefully understood as existentially quantifying over possibilities that are very similar to actuality. For any case in the sequence α_x, say that a possible case β_x is a *near duplicate* of α_x iff α_x and β_x are (i) identical with respect to whether C obtains, with respect to the underlying dimension that drives the sequence, and with respect to the fact that I'm doing everything I am in a position to do to determine whether C obtains and (ii) are very similar in all other respects. Note that, in any near duplicate of a case in the sequence, just as in the cases themselves, I will know that C obtains whenever I'm in a position to know that it does[4]. We can now translate talk about easy possibility into talk about near duplicates: what it means to say that I could easily believe that C obtains in a case α_x is that there is a near duplicate of α_x (which could be α_x itself) in which I *do* believe that C obtains.

Given this translation, AL_2 could be written as follows: if I believe that C obtains in a case α_x then there is a near duplicate β_{x+1} of α_{x+1} and a near duplicate β_{x-1} of α_{x-1} such that I believe that C obtains in β_{x+1} and β_{x-1}[5]. And AL_3 becomes: if I know that C obtains in a case α_x then I don't falsely

---

[4] A near duplicate of a case α_x in the sequence will feature a different possible world, but will still be centered on me (my counterpart if preferred) and on the same time as α_x. The two worlds in question will be highly similar overall and identical, at the specified time, with respect to whether C obtains, with respect to the underlying dimension, and with respect to the fact that I'm doing everything that I am in a position to do to determine whether C.

[5] Berker (2008, fn11) argues that a principle like AL_2 will lead to the result that there is a possible case in which ~C clearly obtains, but in which I nevertheless believe that C obtains, even though I am doing everything I am in a position to do to determine whether C obtains. If I believe that C obtains in α_n then, by AL_2, there is a near duplicate β_{n+1} of α_{n+1} in which I believe that C obtains. If AL_2 can also be applied to β_{n+1}, it then follows that there is a near duplicate γ_{n+2} of β_{n+2} in which I believe that C obtains, and so on through the sequence. If C is a good candidate for a luminous condition then one might think that it is simply not possible for me to believe that C obtains when it clearly does not, in which case we have good reason to reject AL_2.

It is important to keep in mind, however, that γ_{n+2} need *not* be a near duplicate of α_{n+2}. Even if I believe that C obtains in α_n, AL_2 is consistent with there being no near duplicate of α_{n+2} in which I believe this. The near duplicate relation is not transitive; the more of these relations that we traverse, the less similar the starting and end points may be. As a result, the case in which I believe that C obtains when it clearly doesn't may count as being extremely dissimilar from any actual case (as Berker acknowledges). I'm inclined to think that this takes the sting out of the objection – the case described should surely be regarded as farfetched, but I see no compelling reason to classify it as *impossible*. Whatever the truth, though, I won't mount a detailed defence of AL_2 here. If this assumption is rejected then the argument, as stated, will fail of course – not just for ~K~KP, but for any candidate luminous condition. For further discussion see Srinivasan (2013, pp304-305).

believe that C obtains in any near duplicate of α_{x+1}. We can now retrace the argument. If I don't believe that C obtains in α_n then I don't know it. If I do believe that C obtains in α_n then, by AL_2, there is near duplicate β_{n+1} of α_{n+1} in which I believe that C obtains. By the definition of a near duplicate, ~C obtains in β_{n+1} from which it follows, by AL_3, that my belief that C obtains in α_n does not qualify as knowledge. Either way, α_n is a case in which C obtains even though I fail to know that it does[6].

Following Williamson, the anti-luminosity argument is often illustrated with the example of *feeling cold* which, being a phenomenal, introspectable state, might be regarded as a paradigm example of a luminous condition. Suppose I wake at 6am feeling bitterly cold, but I gradually warm up throughout the morning until, at noon, I'm feeling uncomfortably hot. Suppose that, throughout this period, I am introspecting as hard as I can, focussing my attention on the question of whether or not I'm feeling cold. The 6 hours from 6am until noon can be divided up into, say, one millisecond intervals, giving us our sequence of cases. Over the course of a single millisecond, the change in how I'm feeling will be so slight that I would be in no position to reliably detect it. As a result, if I believe that I'm feeling cold at any point throughout the morning, I could easily believe it one millisecond later. Consider then the final millisecond at which I feel cold. If I don't believe that I'm feeling cold at this point, then I don't know it. If I do believe that I'm feeling cold at this point, then I could easily believe it, falsely, one millisecond later, in which case my belief does not qualify as knowledge. Either way, there is a point at which I'm feeling cold but do not know it.

III. ROSENKRANZ ON THE LUMINOSITY OF ~K~KP

What happens if we try to run the argument for the condition ~K~KP (for some proposition P)? To begin, we need to imagine a sequence that proceeds, via arbitrarily minute increments, from a case in which ~K~KP clearly obtains to a case in which K~KP clearly obtains. Is such a sequence possible? While it is not straightforward to think up a viable example, perhaps the following might work… Suppose I leave my car in a parking lot, and head off to do some shopping. 15 minutes later I have good reason to believe (P) that my car is where I parked it, and I'm in no position to know that I'm in no position to know this (~K~KP). Suppose, at this point, I'm standing by the side of a street, when I see a car approaching in the distance. At first, I can't make out any of the details of the car but, as it gradually draws closer, I notice first the colour, then the make, then the bumper stickers, then the license plate… all of which strike me as very familiar. Two minutes later, the car is driving right past me and it is obvious to me that this is either *my car* or a near perfect facsimile. At this point, it's clear that I am in a position to know that I'm in no position to know that my car is still where I parked it (K~KP). This two-minute period can be divided up into arbitrarily small intervals – milliseconds, nanoseconds etc. The shorter the intervals in question, the smaller the change in my visual impression of the car during each. It's very plausible that this narrowing will eventually lead to intervals that are witness to so slight a change that I would be in no position to reliably detect it.

In any case, Rosenkranz is willing to accept the relevant instance of AL_1, and grant that we can set up a sequence of the required kind. Suppose, then, that we have our sequence, and suppose that I am, throughout the sequence, using the optimal available method and doing everything that I am in a position to do to determine whether ~K~KP. Let α_n be the last case in which ~K~KP and α_{n+1} be the first case in which K~KP. If I believe ~K~KP in α_n, does that mean that I could easily believe ~K~KP in

[6] The initial formulation of the argument, in terms of 'easy possibility' aligns with the version given by Rosenkranz (2021, section 4.3). When spelled out in terms of near-duplicates, the argument is close to the version offered by Srinivasan (2013, section 4) which, for my money, is the most persuasive version currently on offer.

α_{n+1}? According to Rosenkranz it does not. In α_{n+1}, like every other case, I am doing everything that I am in a position to do to determine whether ~K~KP. By PK_2 and PK_3, this involves doing everything that I am in a position to do to determine whether ~KP. But, since K~KP holds in α_{n+1}, this means that I must *know* ~KP in α_{n+1} by PK_1. Further, it would be irrational for me to believe ~KP and believe ~K~KP at the same time and, in order for the former belief to qualify as knowledge, I could not simultaneously hold the latter belief.

Given the way the example is described, and the assumptions PK_1, PK_2 and PK_3, I could not believe ~K~KP in α_{n+1}. And the same is clearly true of any near duplicate of α_{n+1}. After all, any near duplicate of α_{n+1} will also be a case in which K~KP and in which I am doing everything that I'm in a position to do to determine whether ~K~KP. In fact, by Rosenkranz's reasoning, there is *no possible case* in which these conditions are met and in which I erroneously believe ~K~KP. Assumption AL_2 fails, then, when it comes to the condition ~K~KP – even if I believe ~K~KP in α_n, I could not easily (indeed could not *possibly*, given the set up) believe ~K~KP in α_{n+1}. Thus, if I believe ~K~KP in α_n, AL_3 presents no obstacle to this belief qualifying as knowledge[7].

While it's straightforward enough to follow Rosenkranz's reasoning in the abstract, it is somewhat unclear just where it leaves us when it comes to concrete cases. Think again of the above example in which there is a gradual, dawning realisation that an approaching car looks exactly like mine. Are we to think that, at the very nanosecond (indeed the very instant) that K~KP becomes true, I am perfectly attuned to this change in such a way that I can't possibly make the mistake of believing ~K~KP from this point on? Since a nanosecond is too short for me to reliably notice any change in the visual appearances, how am I supposed to manage this? When properly understood, though, Rosenkranz's argument doesn't show (of course) that we have some mysterious power to detect K~KP from the moment it becomes true. Rather, the set-up of the example ensures that there is a kind of *constitutive connection* between the obtaining of this condition and our beliefs about it[8]. Provided that I'm doing everything I am in a position to do to determine whether ~K~KP, my believing ~K~KP would, given PK_1, PK_2 and PK_3, *prevent* K~KP from obtaining.

---

[7] It's interesting to observe that Rosenkranz's reasoning will apply equally to the condition ~KP. Suppose we have a sequence running from a case in which ~KP clearly obtains to a case in which KP clearly obtains and suppose I am doing everything I am in a position to do to determine whether ~KP obtains. Let α_n be the last case in which ~KP and α_{n+1} be the first case in which KP. Since, in α_{n+1}, I'm doing everything that I'm in a position to do to determine whether ~KP it follows, by PK_1, PK_2 and PK_3, that I know P in α_{n+1} in which case I don't believe ~KP in α_{n+1} (or any near duplicate). If I believe ~KP in α_n, AL_3 won't prevent this belief from qualifying as knowledge. By Rosenkranz's reasoning, the anti-luminosity argument, as formulated here, won't work against the condition ~KP – and yet, ~KP is obviously *not* a luminous condition, as Rosenkranz himself acknowledges (Rosenkranz, 2021, p58). This should already make us very cautious about concluding that ~K~KP may be luminous simply because this version of the anti-luminosity argument fails to show otherwise.

[8] Some have attempted to circumvent the anti-luminosity argument by positing constitutive connections between certain conditions and our beliefs about them. Weatherson (2004), Berker (2008) and Ramachandran (2009) all suggest something along the following lines: if one has done everything that one is in a position to do to determine whether one feels cold, then it is necessarily the case that one believes that one feels cold if and only if one does feel cold. It's highly contentious of course whether there really are such constitutive connections between feeling cold and believing that one feels cold – but, if this is accepted, then the argument can be resisted. In a way, the claim that there is a constitutive connection between K~KP and one failing to believe ~K~KP, mediated by the fact that I'm doing everything that I'm in a position to do to determine whether ~K~KP, is *less* contentious – it follows from the initial assumptions PK_1, PK_2 and PK_3 (none of which seems overly controversial) along with a relatively weak condition on knowledge.

IV. ADAPTING THE ARGUMENT

One possible way to reinstate the anti-luminosity argument would be to strengthen AL_3 as follows: if I know that C obtains in a case α_x, then there is no near duplicate of α_{x+1} in which C is false and in which I invest an at-most-slightly-lower degree of confidence in the proposition that C obtains. This can be motivated by a kind of 'confidence-safety' requirement on knowledge – if one knows a proposition P then there are no similar cases in which P is false and, using the same method, one invests an at-most-slightly-lower degree of confidence in P[9] (see Williamson, 2000, pp101, Berker, 2008, section 4, Srinivasan, 2013, section 5). This may work as a general strategy against those who would seek to undermine the anti-luminosity argument by positing constitutive connections between a given condition and our beliefs about it (Srinivasan, 2013, section 5). In any case, I won't consider this further here. The new variant of the argument that I will offer doesn't involve any modification of AL_3 – but, rather, a modification of AL_2.

As before, let C be a candidate luminous condition, and suppose we can set up a sequence linking a case in which C clearly obtains to a case in which ~C clearly obtains and in which adjacent cases can be made arbitrarily similar. Suppose that, throughout the sequence, I am using the optimal method and doing everything that I am in a position to do to determine whether C obtains. As before, we accept an appropriate safety condition on knowledge and endorse AL_3: if I know that C obtains in a case α_x then I don't falsely believe that C obtains in any near duplicate of α_{x+1}.

Instead of AL_2, however, we now introduce a new assumption AL_4: if I do not believe that C obtains in a case α_x then there is a near duplicate β_{x+1} of α_{x+1} and a near duplicate β_{x-1} of α_{x-1} such that I do not believe that C obtains in β_{x+1} or β_{x-1}. AL_4 can, I think, be motivated by the same considerations as AL_2 – namely, that our powers of discrimination are limited, while the potential similarity of adjacent cases is not[10]. AL_2 implies that, whenever I stop believing that C obtains, I could easily have stopped a moment *later*, while AL_4 implies that, whenever I stop believing that C obtains, I could easily have stopped a moment *earlier*. Both thoughts are plausible for the same reason – the changes from moment to moment are too slight for my beliefs to be perfectly attuned to them.

We now have the tools needed to prove that C cannot be a luminous condition. Let α_n be the last case in the sequence in which C obtains and α_{n+1} be the first case in which ~C obtains. If I believe that C obtains in α_{n+1} then, by AL_3, I don't know that C obtains in α_n. If I don't believe that C obtains in α_{n+1} then, by AL_4, there is a near duplicate β_n of α_n in which I don't believe that C obtains and, thus,

---

[9] Given the set-up, it's plausible that my confidence in the proposition that ~K~KP will gradually decrease as the sequence progresses. By Rosenkranz's reasoning, I cannot believe ~K~KP in α_{n+1}. And yet, if α_{n+1} is the first case in which I cease to believe ~K~KP it's plausible that my confidence in this proposition will be just below the threshold needed for outright belief (or, at the very least, that there is a near duplicate of α_{n+1} in which my confidence in this proposition will be just below the threshold needed for outright belief). Since it's also plausible that my confidence in ~K~KP in α_n would be only just above the threshold for outright belief, by the confidence-safety version of AL_3 this belief would not qualify as knowledge. I won't explore this version of the anti-luminosity argument here. For what it's worth, I'm inclined to think that the 'confidence-safety' condition is problematic, and the most persuasive versions of the anti-luminosity argument are those that steer clear of this commitment.

[10] AL_4 could still be accepted by someone who is persuaded by Berker's argument against AL_2 (discussed in footnote 5). AL_4 will imply, by a kind of mirror image of Berker's reasoning, that there is a possible (but potentially highly dissimilar) case in which C clearly obtains but I fail to believe that it does. This may be significantly easier to accept than the existence of a possible case in which I believe that C obtains even though it clearly does not. The former case, unlike the latter, need involve no *error* or misjudgment on my part.

don't know it. Either way, we have a case (α_n or β_n) in which C obtains, even though I fail to know that it does.

Rosenkranz's argument against the relevant instance of AL_2 hinged on the fact that, as long I am doing everything that I am in a position to do to determine whether ~K~KP, K~KP will be incompatible with my believing ~K~KP. No such argument can be mounted against the relevant instance of AL_4 – at least, not on the basis of the assumptions PK_1, PK_2 and PK_3. Perhaps we could motivate other assumptions about being in a position to know that would serve this purpose, but these three, relatively minimal, assumptions are not enough – they are perfectly compatible with ~K~KP being true, and with my failing to believe ~K~KP, even if I am doing everything that I am in a position to do to determine whether ~K~KP.

As noted above, Rosenkranz doesn't mean to ascribe us any mysterious power to perfectly detect the condition ~K~KP – it is the constitutive connections between ~K~KP and our beliefs about it that enable us to answer the original anti-luminosity argument. But for ~K~KP to be a genuinely luminous condition may, after all, require a mysterious power on our part. Constitutive connections may ensure that my belief in ~K~KP cannot outrun its truth as we progress through the sequence. If I am doing everything I am in a position to do to determine whether ~K~KP then I cannot make a *type II* error, and believe that ~K~KP obtains when it doesn't – for the belief is, in a way, self-fulfilling. But it is less clear that there are any constitutive connections which will guarantee that the *truth* of ~K~KP cannot outrun my *belief*. Even if I am doing everything I am in a position to do to determine whether ~K~KP, it is less clear whether there are any constitutive connections guarding against the possibility of a *type I* error[11].

Rosenkranz's attempt to save ~K~KP from the anti-luminosity argument may, in the end, be unsuccessful. But there is, nevertheless, much that we learn by carefully thinking this through. Most obviously, we learn something about the anti-luminosity argument itself, and the kinds of assumptions that can be used to drive it. And perhaps we learn something significant about knowledge and justification as well. When it comes to ~K~KP – which is equivalent to JP on Rosenkranz's theory – it may be that a certain kind of mistake really is impossible. If one is using the optimal method to determine whether this condition holds then it cannot deliver a false positive.

---

[11] Some of Rosenkranz's reasoning from 4.2 might be deployed to try and show that I could not fail to believe ~K~KP in a case in which ~K~KP holds, and in which I am doing everything that I am in a position to do to determine whether ~K~KP. Consider a case in which I have done everything that I am in a position to do to determine whether ~K~KP, but I do not believe ~K~KP. What is my attitude to the embedded proposition ~KP? If I've done everything that I am in a position to do to determine whether ~K~KP then, by PK_2 and PK_3, I've done everything that I am in a position to do to determine whether ~KP. Thus, if I do believe ~KP it looks as though this belief will count as *safe*, by the reasoning in n7. If I have done everything that I am in a position to do to determine whether a proposition holds and have arrived at a safe belief in that proposition, then one might argue that my belief should count as knowledge (this is something like Rosenkranz's (6) – pp54-55). It would then follow that K~KP must hold in this case. What if I don't believe ~KP? One might argue that I should then be in a position to know that I don't believe it and, thus, to know that I don't know it, giving us K~k~KP. If we assume that I must also be in a position to know that I have done everything that I'm in a position to do to determine whether ~KP then, from the fact that I don't know it, I could conclude that I'm in no position to know it, giving us K~K~KP. But if I'm in a position to know ~K~KP and I've done everything that I'm in a position to do to determine whether ~K~KP then I must know, and believe, ~K~KP contrary to stipulation. If I have done everything that I am in a position to do to determine whether ~K~KP, but I do not believe ~K~KP, then the only possibility, it seems, is that K~KP holds. Whatever we ultimately make of this reasoning, though, it's important to emphasise that it relies on assumptions that are far more substantial, and far more controversial, than PK_1, PK_2 and PK_3.

Acknowledgements

This paper was presented at a symposium on *Justification as Ignorance* held in July 2021. Thanks to all of those who participated on this occasion. Thanks also to Sven Rosenkranz and to an anonymous referee for helpful written comments on earlier drafts of this material.

References

Berker, S. (2008) 'Luminosity regained' *Philosophers' Imprint* v8(2), pp1-22

Pryor, J. (2001) 'Highlights of recent epistemology' *British Journal for the Philosophy of Science* v52(1), pp95-124

Ramachandran, M. (2009) 'Anti-luminosity: Four unsuccessful strategies' *Australasian Journal of Philosophy* v87(4), pp659-673

Rosenkranz, S. (2021) *Justification as Ignorance* (Oxford: Oxford University Press)

Srinivasan, A. (2013) 'Are we luminous?' *Philosophy and Phenomenological Research* v90(2), pp294-319

Weatherson, B. (2004) 'Luminous margins' *Australasian Journal of Philosophy* v82(3), pp373-383

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