

# DON'T KNOW, DON'T BELIEVE: REPLY TO KROEDEL

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**ABSTRACT:** In recent work, Thomas Kroedel has proposed a novel solution to the lottery paradox. As he sees it, we are permitted/justified in believing some lottery propositions, but we are not permitted/justified in believing them all. I criticize this proposal on two fronts. First, I think that if we had the right to add some lottery beliefs to our belief set, we would not have any decisive reason to stop adding more. Suggestions to the contrary run into the wrong kind of reason problem. Reflection on the preface paradox suggests as much. Second, while I agree with Kroedel that permissions do not agglomerate, I do not think that this fact can help us solve the lottery paradox. First, I do not think we have any good reason to think that we're permitted to believe any lottery propositions. Second, I do not see any good reason to think that *epistemic* permissions do not agglomerate.

**KEYWORDS:** the lottery paradox, justification, knowledge,  
Thomas Kroedel, epistemic permissibility

## Introduction

Lottery propositions are puzzling. It seems that you have exceptionally good reason to believe that the ticket you've been given will lose, and yet it seems you can't know that it will lose until the results of the drawing have been made public. This calls out for explanation. If held for good reasons and true, why wouldn't my belief that my ticket will lose constitute knowledge? It seems that you have exceptionally good reason to believe of any ticket that it's going to lose, and yet it seems you shouldn't believe of each ticket that it's going to lose. This also calls out for explanation. If it's permissible for me to believe any lottery proposition, why shouldn't it be permissible for me to believe every lottery proposition?

We have two puzzles, one that has to do with knowledge and another that has to do with proper or justified belief. In recent work, Kroedel tries to solve the justification puzzle.<sup>1</sup> In previous work, I've argued that his proposed solution

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<sup>1</sup> Thomas Kroedel, "The Lottery Paradox, Epistemic Justification, and Permissibility," *Analysis* 72 (2012): 57-60 and "The Permissibility Solution to the Lottery Paradox – Reply to Littlejohn," *Logos & Episteme* 4, 1 (2013): 103-11.

won't work. My earlier criticisms did not persuade him, so I shall try again.<sup>2</sup> A better approach, I shall argue, is a knowledge-first approach.

Permissions don't agglomerate. If you're permitted to take the gun and permitted to take the cannoli, it doesn't follow that you're permitted to take the gun and the cannoli. If epistemic justification is just a matter of epistemic permissibility, you might be permitted to believe that t1 lost, permitted to believe t2 lost, and permitted to believe t3 lost even if you're not permitted to hold all three beliefs. If you think that we shouldn't believe of each lottery ticket that it's going to lose, it doesn't follow that you don't have for each ticket a permission to believe that it loses. If you take the gun, you might lose the permission you had to take the cannoli. If you believe that t1 lost, you might lose the permission you had otherwise to believe t2 lost.

Kroedel wants to solve the justification puzzle by appeal to two assumptions that I happen to find quite plausible. The first is that justifications are permissions (J=P). The second is that permissions don't agglomerate (NA). With NA, you can straightforwardly explain why it wouldn't follow from the fact that you're permitted to believe t1 lost, permitted to believe t2 lost, ... permitted to believe t1,000,000 lost that you're permitted to believe t1-t1,000,000 lost. With this and J=P, you can the straightforwardly explain why it wouldn't follow from the fact that you have justification to believe t1 lost, justification to believe t2 lost, ... justification to believe t1,000,000 lost that you have justification to believe t1-t1,000,000 lost. While sympathetic to both J=P and NA, I don't see how J=P and NA could solve or dissolve our puzzle about justification.

If NA and J=P are going to do any explanatory work, we have to make the following assumptions:

Start. Feel free to add at least one lottery belief to your belief set (i.e., you can justifiably believe a lottery ticket will lose).

Stop. Don't add all the lottery beliefs to your belief set (i.e., you can't justifiably believe each of the tickets will lose).

Moreover, it seems there's a constraint on a fully adequate explanation:

AC. The permissibility solution should explain Start and Stop (i.e., why permissions/justifications don't agglomerate in this case).

We should want to know why the case of lottery propositions is a case in which permissions don't agglomerate (i.e., why it is permissible to believe some lottery propositions but not all of them).

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<sup>2</sup> Clayton Littlejohn, "Lotteries, Probabilities, and Permissions," *Logos & Episteme* 3, 3 (2012): 509-14.

I'm skeptical of the permissibility solution because I'm skeptical of Start and skeptical of a view that combines Start and Stop. (If Kroedel did not accept Start, we do not need NA or J=P to explain anything. Similarly, if Kroedel did not accept Start and Stop, we would not need NA to explain anything.) Let me press two objections.

### **Don't: Start and Stop**

To motivate Start, Kroedel argues that we can have justification to believe some lottery propositions because their probability is so high. Understood one way, the probabilistic rationale for Start undercuts the combination of Start and Stop. Understood another way, the probabilistic rationale conflicts with AC.

Why should we accept Start? The standard answer is that the lottery propositions are very likely to be true given the evidence we have for them. If the high evidential probability gives you permission to believe  $p$ , you have permission/justification to believe any of the tickets in a lottery will lose. Kroedel's remarks suggest that he'd appeal to the following thesis to support Start:

High-PJ: If the evidential probability of  $p$  is sufficiently high, you have justification to believe  $p$ .

Here's a worry about putting High-PJ to work. The probability of each of the lottery propositions on your evidence is the same. If it's high enough for one, it's high enough for each of them. If it's high enough for each of them, why can't you justifiably believe all of them? The rationale offered thus far supports Start but threatens to undercut Stop.

Kroedel's response can't *just* be NA because we want to know specifically why this is a case in which you can't justifiably/permissibly take advantage of all the justifications/permissions you had before you started adding beliefs about lottery propositions to your belief set. It's at just this point where I think we need to get clear on which probabilities matter to the permissibility of the lottery beliefs added to your belief set. As you add lottery beliefs to your belief set, there's something that remains invariant and something that changes. You come to believe  $t_1$  is a loser and there's a perfectly good sense in which the evidential probability of  $t_2$  remains the same. You come to believe  $t_1$  will lose and there's a perfectly good sense in which the evidential probability of erring by adding a belief about  $t_2$  to your belief set changes. The risk of erring by adding a belief about  $t_2$  to a set that includes  $t_1$  is greater than the risk of erring by adding  $t_2$  to your belief set where that's your only belief about lottery propositions.

If Kroedel accepts High-PJ and wants to say that the case at hand is a case in which permissions don't agglomerate, he has to say that this second sort of

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probability is the relevant one when it comes to determining what can be justifiably believed. Thus, it looks like his solution to the lottery will incorporate High-PJ, the thesis that high evidential probability is sufficient for propositional justification, with a principle along these lines:

Risk-DJ: If the probability of acquiring an error-containing belief set would get too high by adding the belief that  $p$  to your belief set, you cannot justifiably believe  $p$ .

I can't see how the permissibility solution could satisfy AC unless something like Risk-DJ is assumed. Without it, it's hard to see why someone who has sufficient propositional justification to believe  $p$  couldn't come to justifiably believe  $p$  by basing her belief on the evidence that provides this justification.

There's good reason to reject Risk-DJ. We can imagine epistemically conscientious students in our epistemology lectures who start to reflect about their own fallibility for the first time. They appreciate that there's an incredibly high probability that they have belief sets that contain errors. According to High-PJ, they have sufficient justification to believe the following proposition:

FB: There is at least one false belief in my present belief set.

We might imagine that *prior* to contemplating FB, they had sufficient propositional justification for each of their beliefs. And we might imagine that each of their beliefs was justifiably held. (These are *very* good students!) Should they believe FB?

It seems obvious to me that they should. Indeed, it seems obvious to me that they *know* FB. If they can justifiably believe FB, they can justifiably take on a set of beliefs that obviously contains a falsehood. This is something they can easily work out for themselves. If they can justifiably believe FB, we have a counterexample to Risk-DJ. Without Risk-DJ, I don't think we have any explanation as to why we can't justifiably make use of all the justifications we (allegedly) have to believe the lottery propositions. I take it that one lesson to take from the preface paradox is that the kind of evidential probability that Risk-DJ concerns has no bearing on whether the beliefs one holds one holds justifiably. This is why we shouldn't endorse both Start and Stop. I can see endorsing Start and rejecting Stop. I can see rejecting both. I can't see any reason to stop once you start.

The kind of risk that figures in Risk-DJ provides the wrong kind of reason to refrain from continuing to add beliefs about lottery propositions to your belief set. The kind of risk that evidential probability measures provides the right kind of reason to refrain from continuing to add beliefs about lottery propositions to your

belief set. That's why I think it's easy to explain why you shouldn't believe your ticket will win.

In response to my criticism, Kroedel suggests that I've committed some sort of fallacy because I've endorsed a kind of factual detachment. Not at all. To commit that fallacy, I'd have to try to derive the conclusion about what you ought to believe from a premise about what you do believe and a wide-scope 'ought' (e.g., Since you ought to believe that the world is created in less than a week if you believe it was created in six days and you happen to believe the world was created in six days, you ought to believe that it was created in less than a week).<sup>3</sup> I couldn't have done that because I didn't claim that the permissions at issue *do* combine to give you a permission to believe all the lottery propositions, only that we haven't seen yet why why don't. The point I was making was dialectical. To explain why you shouldn't believe all the lottery propositions, the permissibility solution needs something like Risk-DJ. Unfortunately, it looks like the principle it needs is false. Thus, I say, the solution doesn't meet AC.

### Don't Start

I do have a persisting worry about Start. (Even if this worry is baseless, we might still reject the permissibility solution to the lottery paradox.) If Start is false, there's nothing for the permissibility solution to solve. We needn't worry about why epistemic permissions don't combine if we don't have any right to believe lottery propositions in the first place.

Because he accepts Start, Kroedel thinks that there's some maximum number of lottery propositions  $n$  that you can justifiably add to your belief set where  $n$  is greater than 0 and less than the number of tickets,  $m$ . Let's suppose that Coop believes  $n$  lottery propositions. Coop thinks, say,  $t_1$  will lose,  $t_2$  will lose,  $t_3$  will lose, ...,  $t_n$  will lose, and so will, if asked, believe that the winning ticket will be found in the set of remaining tickets. Let's call these sets the L-set and W-set. Coop hasn't yet thought of things in just this way, yet. He's simply come to believe that a handful of tickets, say, held by his friends, will lose. We explain to Coop what the L-set and W-set are and ask him if he knows where the winning ticket is. He says this:

(\*) No, I don't know where the ticket is, but it's in the W-set.

I think this is an incredibly odd thing to say. Kroedel agrees, but thinks that we might just chalk this up to the assertion. We might simply disagree on this point, but I think that the oddity isn't limited to the saying.

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<sup>3</sup> The example is from John Broome, 'Normative Requirements,' *Ratio* 12, 4 (2002): 398-419.

Before we introduce the notions of the W-set and the L-set to Coop, he has no views on whether the ticket is in the W-set or the L-set. When he considers the question, 'Is the winning ticket in the L-set or the W-set,' it seems he might answer by 'telling himself' that the ticket is in the L-set, the ticket is in the W-set, or by telling himself that he doesn't know.<sup>4</sup> If he tells himself he doesn't know, it seems he simply suspends judgment on the matter. To suspend judgment on the matter and then judge that it's in the L-set or the W-set is a very odd way to be. Most of us think that if this is possible to have a mental life like this, it's only because the subject who has a mental life like this is deeply irrational. If it's deeply irrational to believe (\*), it's hard to see how it could be justifiably believed.

If you shouldn't believe what you don't know and you cannot know lottery propositions, Coop is right that he can't know where the winning ticket is found and has no right to believe that it's found in the W-set. You don't need the knowledge norm of belief to understand why you shouldn't believe the winning ticket is in the W-set or why you shouldn't believe of any ticket that it's a loser. You really just need the much weaker assumption that when you know you're not in a position to know p, you shouldn't believe p. The guiding idea here is that if you know you're not in a position to know p, you know that your epistemic position is too weak for you to take a stand on the issue. If you came to believe what you knew you weren't in a position to know and it turned out that your belief was correct, we'd still criticize you for having formed your belief. We wouldn't say that you shouldn't have believed p for failing to meet the truth or belief requirement on knowledge. By elimination, it seems that the grounds of criticism would have to do with the inadequacy of your justification or with some purely Gettier-type feature of your situation. Intuitively, the case of the lottery proposition doesn't feel like a Gettier-type case. If it's not a Gettier-type case, it seems that the reason you're in a good position to know that you aren't in a good position to know whether a ticket will lose is precisely because there's something wrong with the justification you have to believe. If you think that knowledge is the norm of belief, you can use that to try to explain (\*), but you can also try to explain (\*) using far less demanding norms.

It seems that the cost of saying that you can justifiably believe what you know you can't know is too high a cost to embrace the permissibility solution. Let me note one further worry, one that has to do with NA. We need NA to understand how Start and Stop could be true. I don't want to defend the view that permissions agglomerate here because I think that it's clear that the practical cases show that the right to do A and the right to do B doesn't constitute or provide the

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<sup>4</sup> John Gibbons, *The Norm of Belief* (Oxford University Press, Forthcoming).

right to do A and B. Are there cases in which *epistemic* permissions don't agglomerate? I think this is an interesting question. I don't think the answer is obvious.

Consider the hypothesis of epistemic permission agglomeration:

EA: If you're permitted to believe p and permitted to believe q, you are permitted to believe p and to believe q. [NB: The right to believe p and to believe q might not be the right to believe p&q.]

If it's false, there should be a counterexample. What might a counterexample to EA look like?

Suppose there's a body of evidence that lends some support to p, some support to q, but p and q are incompatible. You might think that if the degree of support afforded p is sufficient and the degree of support afforded q is sufficient, you still shouldn't believe p if you believe q. After all, you might think, you shouldn't believe two incompatible propositions. I don't think this could be a counterexample to EA because I don't see how a single body of evidence could provide an adequate degree of support to two incompatible propositions. A body of evidence has cannot provide adequate support to believe p unless the evidential probability of p exceeds the evidential probability of  $\neg p$ . That condition isn't met in this case. If the evidential probability of p exceeded that of  $\neg p$ , the evidential probability of q wouldn't be high enough to receive adequate support.

If this is right, the potential counterexamples have to involve cases in which there are pairs of *compatible* propositions that receive perfectly adequate evidential support that shouldn't be believed in combination. These would be cases in which there's a sufficiently high degree of evidential probability where you can't justifiably add one of the beliefs to your belief set when the other one is added. My general worry about the possibility of such cases is that if they have the kind of structure that the lottery case has, we'd only regard them as counterexamples to EA insofar as we bought into a principle along the lines of Risk-DJ. The problem with that principle is that it implies that you cannot know or justifiably believe FB.

Consider a case that's structurally unlike a lottery case. Maybe your evidence supports q and you have further evidence that you're not competent at handling the evidence that bears on whether q (e.g., evidence that you've been drugged or that you've been dealing with issues too complex for you to work out competently on your own). Could this evidence be sufficient to justify believing q and sufficient to justify believing that you're not competent at handling the evidence that bears on whether q? I don't see why not. It does seem, however, that you shouldn't believe both propositions. Have we found our counterexample

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to EA? It's possible, but I have some reservations about this sort of case. If this truly were a case in which you'd be permitted to believe  $q$ , we'd have to assume that the evidence that provides an adequate degree of support to believe that you're not competent to respond to the evidence doesn't undermine the justification you have to believe  $q$ . That doesn't ring true. It might be that the evidence undercuts without undermining the permission, but I don't see why we'd have to describe the case that way. Even if this is a counterexample to EA, it doesn't give us any reason to think that the lottery case involves the failure of permissions to agglomerate.

If counterexamples cannot be found to EA, the permissibility solution cannot be made to work. Even if such examples exist, if they aren't structurally like the lottery, the failure of EA shouldn't encourage us to try to solve the lottery by appeal to EA. I don't see why the practical cases should call into question EA. The adequacy of practical and theoretical reasons turns on very different considerations. Maybe epistemic permissions agglomerate even if practical permissions do not.

### **Conclusion**

The aim of this paper wasn't to show that there's a decisive objection to the permissibility solution that Kroedel offers, but only to show that the set of assumptions needed to develop his proposal in full detail are quite problematic. In the meantime, I think we can take some comfort in the thought that the justification puzzle might be easily dissolved. If, as I've suggested, you shouldn't believe what you know you can't know and you know you can't know lottery propositions, we needn't worry about permissions agglomerate because we shouldn't start believing lottery propositions in the first place.