Why Epistemic Permissions Don't Agglomerate – Another Reply to Littlejohn

Thomas KROEDEL

ABSTRACT: Clayton Littlejohn claims that the permissibility solution to the lottery paradox requires an implausible principle in order to explain why epistemic permissions don't agglomerate. This paper argues that an uncontentious principle suffices to explain this. It also discusses another objection of Littlejohn's, according to which we're not permitted to believe lottery propositions because we know that we're not in a position to know them.

KEYWORDS: agglomeration, epistemic permission, lottery paradox

According to the permissibility solution, the lottery paradox can be solved if epistemic justification is assumed to be a species of permissibility.[1] The paradox arises from the following three claims, which seem individually plausible but jointly inconsistent:

(1-J) For each ticket, I'm justified in believing that it will lose.

(2-J) If, for each ticket, I'm justified in believing that it will lose, then I'm justified in believing that all the tickets will lose.

(3-J) I'm not justified in believing that all the tickets will lose.

If justification is taken to be a species of permissibility, then the first two claims are ambiguous. They both come out true if we disambiguate them as follows:

(1-Narrow) $\mathbf{Pe}Bt_1 \,\&\, \mathbf{Pe}Bt_2 \,\&\, \ldots \,\&\, \mathbf{Pe}Bt_n$.

(2-Wide) If $\mathbf{Pe}[Bt_1 \,\&\, Bt_2 \,\&\, \ldots \,\&\, Bt_n]$, then $\mathbf{Pe}B[t_1 \,\&\, t_2 \,\&\, \ldots \,\&\, t_n]$.

(In the symbolism, n is the number of tickets in the lottery; '$\mathbf{Pe}\phi$' stands for 'It is permissible for me that ϕ'; '$B\psi$' stands for 'I believe that ψ'; and, for $1 \leq i \leq n$, 't_i' stands for 'Ticket

[1] See 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 and Episteme* 4 (2013): 103–111.

number *i* will lose'.) The third claim of the paradox is unambiguously true; we can rephrase it in terms of permissibility as

(3-Unamb) $\sim\mathbf{Pe}B[t_1 \,\&\, t_2 \,\&\, \ldots \,\&\, t_n]$.

The rationale for (1-Narrow) is that I'm permitted to believe what is sufficiently probable on my evidence:

(High) If the probability that it is the case that *p* is sufficiently high on my evidence, then I'm permitted to believe that *p*.[2]

Given that, for a given ticket, the probability that it will lose is sufficiently high on my evidence, it follows from (High) that I'm permitted to believe that it will lose; repeating this reasoning gives us all of the conjuncts of (1-Narrow). The rationale for (2-Wide) is a plausible closure principle for (epistemic) permissibility: if I'm permitted at once to believe this, to believe that, etc., then I'm permitted to have a single belief whose content is the conjunction of the contents of the former beliefs.

The crux of the permissibility solution is that (1-Narrow) doesn't entail the antecedent of (2-Wide), and thus doesn't entail the negation of (3-Unamb), because epistemic permissions don't agglomerate. That is, I might be permitted to believe this, permitted to believe that, etc., without being permitted to have all those beliefs together. (Agglomeration is different from the closure principle from the previous paragraph: the former is about the scope of the permissibility operator, while the latter is about the scope of the belief operator.)

While acknowledging that permissions don't agglomerate in the non-epistemic case, Clayton Littlejohn demands an explanation of why epistemic permissions fail to agglomerate. He holds that a principle similar to the following one is required by the permissibility solution:

(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*.[3]

---

[2] See Kroedel, "The Permissibility Solution to the Lottery Paradox," 106 and Clayton Littlejohn, "Lotteries, Probabilities, and Permissions," *Logos and Episteme* 3, 509–514, 512.

He also holds that (Risk-DJ) has implausible consequences.

Whether or not (Risk-DJ) has implausible consequences, the permissibility solution needs nothing like (Risk-DJ) in order to explain why epistemic permissions don't agglomerate. All that is required in addition to what the permissibility solution itself provides is the following principle, which Littlejohn himself agrees is in the spirit of the permissibility solution:

(Low) If the probability that it is the case that *p* on my evidence is sufficiently low, then I'm not permitted to believe that *p*.[4]

To see that no additional principle other than (Low) is needed to explain why epistemic permissions don't agglomerate, assume that the probability that it is the case that *q* on my evidence is sufficiently high, as is the probability that it is the case that *r*, while the probability that it the case that both *q* and *r* is sufficiently low on my evidence. (Claims *q* and *r* may or may not be about lottery tickets.) From (High), we get that I'm permitted to believe that *q* and that I'm permitted to believe that *r*. In sum:

(4) **Pe***Bq* & **Pe***Br*.

If we apply the closure principle that provided the rationale for (2-Wide) to our case, we get that I'm permitted to believe that *q* and *r* if I'm permitted separately to believe *q* and to believe *r*:

(5) If **Pe**[*Bq* & *Br*], then **Pe***B*[*q* & *r*].

By assumption, the probability that it is the case that both *q* and *r* is sufficiently low on my evidence. Substituting '*q* & *r*' for '*p*' in (Low), it follows that I'm not permitted to believe that *q* and *r*:

[3] Clayton Littlejohn, "Don't Know, Don't Believe: Reply to Kroedel," *Logos and Episteme* 4 (2013), 231–238, 234.

[4] See Littlejohn, "Lotteries, Probabilities, and Permissions," 512; my formulation of (Low) differs slightly from Littlejohn's, but in irrelevant respects.

(6) $\sim\mathbf{Pe}B[q \,\&\, r]$.

By modus tollens, from (5) and (6) we get that I'm not permitted both to believe that *q* and to believe that *r*:

(7) $\sim\mathbf{Pe}[Bq \,\&\, Br]$.

Claims (4) and (7) yield an instance of non-agglomeration for epistemic permissibility: I'm permitted to believe that *q* and permitted to believe that *r*, but I'm not permitted both to believe *q* and to believe *r*.

Notice that, even if we assume that I do in fact believe that *q*,

(8) Bq,

it does *not* follow that I'm not permitted to believe that *r* after all (which, together with our assumption that it's highly probable that *r*, would contradict (High)). Claim (7) is equivalent to the claim that it's obligatory for me that if I believe that *q*, then I don't believe that *r*,[5]

(9) $\mathbf{Ob}[Bq \supset \sim Br]$.

But claims (8) and (9) by themselves don't license an inference to the conclusion that I'm obligated not to believe that *r*,

(10) $\mathbf{Ob}\sim Br$,

which would be equivalent to the conclusion that I'm not permitted to believe that *r*,

(11) $\sim\mathbf{Pe}Br$.

The conclusion would follow only if we assumed the principle of factual detachment. That principle is implausible, however, and Littlejohn himself doesn't endorse it.[6]

[5] See Kroedel, "The Permissibility Solution to the Lottery Paradox," 108. In the additional symbolism in (9) and (10), '$\mathbf{Ob}\phi$' stands for 'It is obligatory for me that ϕ'.

[6] See Littlejohn, "Don't Know, Don't Believe," 235.

Littlejohn makes a second objection, drawing on the claim that no matter how probable it is on my evidence that my ticket will lose, I don't know that it will lose. Indeed, it seems that, if I'm sufficiently reflective, I know that I'm not even in a position to know that it will lose. Littlejohn holds that this rules out that I'm permitted to believe that my ticket will lose. More generally, he endorses the following principle:[7]

(Knowledge) If I know that I'm not in a position to know that *p*, then I'm not permitted to believe that *p*.

The principle (Knowledge) conflicts with (High), as is witnessed by propositions that are sufficiently probable on my evidence but of which I know that I'm not in a position to know them, such as the proposition that my ticket will lose. Littlejohn argues for (Knowledge) by claiming that believing that *p* despite knowing that I'm not in a position to know that *p* would be "deeply irrational".[8]

Instead of arguing from (Knowledge) against (High), however, one can argue from (High) against (Knowledge). Prima facie, (High) seems no less plausible than (Knowledge). And proponents of an account of epistemic justification in terms of permissibility are likely to find it congenial to conceive of rational acceptability in terms of permissibility as well.[9] Thus, given (High), they have a principled reason to reject Littlejohn's claim that believing a lottery proposition while knowing that one isn't in a position to know it would be irrational, "deeply" or otherwise.[10] [11]

[7] *Ibid*., 236.

[8] *Ibid*.

[9] See Kroedel, "The Lottery Paradox, Epistemic Justification and Permissibility," 59.

[10] For further discussion of rational belief in the absence of knowledge, see Aidan McGlynn, "Believing Things Unknown," *Noûs* 47 (2013), 385–407.

[11] Thanks to Beau Madison Mount for helpful comments and suggestions.