Confidence Lost, Justification Reclaimed: A New Diagnosis for the Lottery Paradox

Consider the following formulation of the Lottery Paradox (adapted from Kyburg 1961):

(1.1) For all S, for all p, if p has high enough probability on S's evidence, then S is justified to believe that p (HIGH).

(1.2) For any ticket in a fair and large lottery, that ticket n lost (tn) has high enough probability on S's evidence.[1]

(1.3) S is justified to believe tn [1.1, 1.2]

(1.4) For all S, for all p, q, if S is justified to believe that p, and S is justified to believe that q, then S is justified to believe that (p and q). (CONJUNCTION)

(1.5) S is justified to believe that (ticket 1 lost, and ticket 2 lost, . . . , and ticket m lost), where m: total number of tickets. [1.3, 1.4]

(1.6) S is not justified to believe that (ticket 1 lost, and ticket 2 lost, . . . , and ticket m lost) [Knowledge that one ticket won]

Most of the existing reactions to the Lottery Paradox are revisionist with respect to epistemic justification. Typically, philosophers either suggest that epistemic justification is not closed under conjunction (see Kyburg 1961, Foley 1979, Klein 1985, Christensen 2004, Kroedel 2012), or propose that high evidential probability alone is not sufficient for epistemic justification (see Pollock 1990, but also Nelkin 2000, Smith 2010, 2016 among others). Independently of

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[1] The results have not yet been announced. And S has no insider knowledge apart from the fact that the lottery is fair and has one winner.

how the details are worked out, philosophers appear to agree that the paradox arises because of some problematic feature of our intuitive understanding of epistemic justification. And hence, the assumption goes, the pre-theoretical understanding thereof should be revised in one way or another. The common view is that one of the intuitively plausible principles about justification has to be wrong. The difference between the existing putative solutions to the paradox then turns on which principle is to be rejected (and probably revised) and how the initial appeal of the rejected principle is explained away.

Consider a thought that a considerable number of states that are not typically viewed as doxastic states can also be epistemically justified or unjustified (like, being worried that p, being hopeful that p, guessing that p, conjecturing that p, supposing that p, being worried that p, fancying that p, considering that p, speculating that p, surmising that p among others). The epistemic justification here is the same kind of property as in beliefs. The sameness of the property of justitifcation in belief and other states is commonly taken for granted in philosophy of emotions (cf. Deonna and Teroni 2012, Echeverri, forthcoming). The fact that expressions of the sort (i) "His belief was justified and his fear was justified" can be paraphrased without introducing an ambiguity as (ii) "Both, his fear and his belief were justified" also speaks in favor of the sameness thesis. Consider now, the following argument:

The Lottery Argument for Risk involving States

(2.1.) For any agent S, for all p, if a proposition p has high enough probability on S's evidence, then S is epistemically justified to be worried that p.[2] (HIGH-RISKY).

(2.2) For any ticket in a fair and large lottery, that ticket n lost (tn) has high enough probability on S's evidence.[3]

(2.3.) S is epistemically justified to be worried that tn. [2.1; 2.2]

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[2]Same for other risky states (being afraid that p, suspecting that p, etc.). Read the rest of the argument in the same sense: premises are not only about being worried that p, but about any risky state.

[3]Again we are assuming that S knows that the lottery is fair, has one winner, and S has no other insider information. The lottery has been drawn but results have not yet been announced.

(2.4.) For any subject S, for all propositions, if S is justified to be worried that p, and S is justified to be worried that q, then S is justified to be worried that (p and q). (CONJUNCTION-RISKY)

(2.5.) S is justified to be worried that (ticket 1 lost, and ticket 2 lost, ..., and ticket m lost). [2.3; 2.4]

(2.6.) S is not justified to be worried that (ticket 1 lost, and ticket 2 lost, ..., and ticket m lost). [Knowledge that one ticket won]

Contrary, to the Lottery paradox, here we see clearly where the problem lies. We know which premise has to go. Hence, there is no paradox. Namely, the premise (2.4), since justification is not closed under conjunction for risky states. Nancy cannot find her brother. From her being justified in being worried that he took the road A, and her being equally justified in being worried that he took the road B, it doesn't follow that she is justified in being worried that he took both, the road A and the road B. For one thing, she may just know that he didn't go both A and B.

However, if the source of the Lottery Paradox were our misunderstanding of the justification, we should expect that a similar paradox arises for these states. Notice also, that there is no (at least, not clear) paradox for no risk involving states, like knowledge and absolute certainty. The Lottery Paradox doesn't arise because we are somehow confused and in need of being corrected in our judgments about epistemic justification, but because we are somehow confused about belief itself.

A positive hypothesis that I propose here is that 'belief' is not precise enough. And it is imprecise in a way that philosophers have not yet fully recognized. In short, the idea is that 'belief' inherits its ambiguity from the ambiguity of 'being confident'. 'Being confident' has a specific dual life that philosophers have not yet noticed. Some recent work from linguistics on gradable adjectives will help us to see it better (see Kennedy and McNally 2005, Kennedy 2007 among others).