

*Knowledge and Lotteries*. By JOHN HAWTHORNE. (Oxford: Clarendon Press, 2004, Pp viii + 205. Price £ 25.)  
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Hawthorne's book shows that the issues surrounding skepticism arise in a much greater range of cases than most of us had thought. In particular, considerations about lotteries, which are an abstract representation of ubiquitous features of human life, can do much the same work as traditional brain-in-a-vat skeptical hypotheses. He uses this discovery both to make vivid the appeal of contextual approaches to knowledge, and eventually to conclude that they are unsatisfactory. The discussion of the variety of possible contextualist views is clearer than anything else in the literature. Though of course I shall have some criticisms of the book, I must say at the beginning that this is a must-read, indeed a must-study, for everyone interested in the concept of knowledge. ◇

The central discovery is this: although we usually deny that a person knows that a lottery ticket with a very small chance of winning will not be the winning ticket, even when that ticket will in fact win, we usually do not deny that the person has knowledge of many facts, her belief in which is based on the assumption that the ticket will not win. For example winning the lottery may be the only way a poor person could have an expensive vacation, and we take ourselves to know that she is not going to be on that cruise ship, even though we do not take ourselves to know that that ticket she has foolishly spent a much-needed five pounds on is a loser. So this is one way in which lotteries are like skeptical scenarios: they present issues about the closure of knowledge under entailment, since "she will not be on the cruise ship" (with other basic facts) entails "she will not win the lottery". In fact the resemblance to skepticism goes deeper than this formal point, since a large proportion of what we think we know would not be the case if various random processes whose causal structure is much like that of a lottery produced some extremely unlikely outcome. I take myself to know that I will be alive in fifteen minutes time. But if all the oxygen molecules in the room migrate in the next minute to the far end of the room and stay there for fourteen minutes, which the laws of physics allow but make extremely improbable, then I will be dead at the end of that time. And I do not take myself to know that the oxygen molecules will not migrate: after all, we're dealing with a random process and for all I know it could turn out that way. (The paradox here can be expressed without putting the weight on the word "know". It would be natural for me to say – at least in some conversational contexts – "I can't guarantee that all the oxygen molecules in this room won't randomly drift down to the far end in the next five minutes". But it would also be natural to say, almost in the same breath, "I'll have no problem meeting you at 5pm, in fact I guarantee I'll be there".)

Most of chapter one is devoted to laying out this situation, very carefully and precisely. In particular Hawthorne considers various versions of closure of knowledge under implication, including formulations with multiple premises, in enough detail to make it unlikely that subtleties about patterns of entailment will give an asymmetry between random processes and skeptical scenarios. In chapter two he makes the connection with contextualism. The connection is very natural. When we talk about a lottery in isolation we focus on the smallness of the probability of winning and that makes us, for reasons that contextualists have never made really explicit, draw the threshold for knowledge above that probability. But when we consider a practical situation in which the outcome of the lottery is one among many relevant facts we switch to considering what strengths of evidence it would be reasonable for someone to act on, and this inevitably lowers the thresholds. (Even though the probabilities are now usually lower than they were when the lottery alone was considered. The probability that I will meet you at 5 pm is less than the probability that all the oxygen molecules do not migrate away from me: my intention could be derailed by any one of many other very improbable events.) As Hawthorne makes clear here and later in the book, there is a crucial unclarity in the intuition here. Whose context? Standard contextualism tends towards the attributor's context, so if we are thinking about lotteries we will tend to say you don't know and if we are thinking about whether you are planning on going on a cruise we will say that you do know. But when we look for reasons why thresholds should vary we usually find factors that depend on the situation of the person in question: is this information you should rely on or commit to memory or tell others about, given your circumstances? And these considerations won't show that when we change the subject to brains in vats we should say that you, thousands of miles away, don't know where your head is. It is worth noting that the same issues arise with the standard contextualist comparison case of "flat": if you and I are talking about the mirror of a reflecting telescope we don't find ourselves denying that Kansas is a flat state. The fact seems to be that Kansas is flat enough to disappoint skiers and climbers while not flat enough to serve as a mirror; similarly many of your beliefs are well enough known to guide many of your actions, while not well enough known to banish all doubts; and these

facts about Kansas and your epistemic state are not suspended by the topic of any conversation in which we might mention Kansas or you.

In the last two chapters of the book Hawthorne considers “invariantist” alternatives to contextualism, in which the thresholds for knowledge are independent of conversational context. Skepticism is an invariantism. For Hawthorne the greatest objection to it is the consequence that nearly all our assertions are improper – since to assert something is to claim to know it - and that all our actions are inappropriate – since one should not act on what one does not know. Hawthorne’s preferred view, though the book should not be taken as an argument for this as much as an assessment of the costs of many positions, is “sensitive moderate invariantism” in which the standards of knowledge are allowed to be sensitive to details of the person’s situation (and perhaps the person’s purposes), but are independent of conversational context. The advantages of this position lie mostly in what it avoids. In particular it avoids strange consequences of the form “It is not true that I know that p but in five minutes it will be true”.

Some forms of contextualism can, it seems to me, avoid such consequences. For the way we talk about truth often has an adjustment to the circumstances of utterance built into it. Suppose that I am now, in Edmonton, pointing to the sky, and just about to get on a plane for Sydney. I say, truly, “this direction is up”. But relative to tomorrow’s situation that direction will be down. But the assertion “it is true that this direction is up, but tomorrow it will be false” is still bizarre. Our normal talk of truth seems to set some parameters to the moment of utterance even when we are discussing things said at other times. (Defeasibly: it would not be bizarre to say “... but tomorrow I will be able to say truly of that direction that it is down”. And it seems to me at any rate less bizarre to say “...and in five minutes I will be able to say truly of this belief that it is knowledge.”)

◊ This example also shows how we lurch between ascriber-relativity and object-relativity. For at the north pole we could discuss a rocket being launched at the south pole and say “it is going that direction – straight down from here – towards the constellation C”, and we could also say “the boosters are now falling away, and are coming down to earth” even though the direction they are coming is up from our perspective. Perhaps if we fuse the semantics of “up” and the semantics of “flat” we will get something like the semantics of “know”. ◊

Focusing on the situation of the knower, it is plausible to think that some of the differences between knowledge and ignorance concern the ways information can be a basis for action. I think Hawthorne misses something here. He tends to write as if action is normally based on what we take to be knowledge. But in fact we often act on things we don’t take ourselves to know, because we must act and have no better information. In fact, one central function of attributions of knowledge is to signal such cases. It is clearest with shared activities. You are asked whether p and you say “Yes - I think so - but I don’t know?”, which means “for the purposes of our shared enterprise we may have to act on this basis, but it would be better if we could get some better information.” (Skeptics should say that we only make such qualified assertions, though for simplicity we go along with the conversational myth.) One situation in which one is especially prone to label assertions as non-knowledge is when much better evidence will soon become available, so “don’t know” has the force of “if we can afford to, let’s wait and see”. So, given a lottery where the winning ticket will soon be announced, we are somewhat more inclined to withhold the K-label because instead of making up our minds now we can wait. According to my suspect intuitions we are somewhat less reluctant to say that someone does not know that a ticket will not win a lottery when either the outcome will never be announced or the agent is acting out of necessity on the assumption that a ticket will not win, making the best choice that she can. (Somewhat, only: this is not meant to be a solution to the puzzle. But note also that we should keep separate our reluctance to believe that a ticket will win and our reluctance to call it knowledge when someone does truly so believe.)

The main effect of this book will be to make clear the relevance of lottery-like situations to a wide variety of questions in epistemology. So the number of observations of the form “but wait, here’s something else to consider” is enormous. That’s a sign of how stimulating it is. Read it.

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