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## Epistemic Justification

By Richard Swinburne

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Given the relative vagueness – or, as some might say, richness – of the everyday concept of epistemic justification, it may not be so surprising that in the past century or so a great many different theories about this concept have been proposed. While these theories are typically thought of as rivals, Swinburne in his new book argues for the bold and original thesis that many of them are not rivals at all, but describe *different* kinds of justification, many of which are worth having. The reason for the latter, Swinburne explains, is that it holds for many theories of justification that, if a belief is justified according to the theory, then that belief is highly probable. So, for instance, if a person is justified in holding some belief on a deontological theory of justification, according to which being justified is having done one's epistemic duty, then, Swinburne argues, the belief is very often true. But the same holds if she is justified on a reliabilist theory of justification, according to which being justified in a belief is a matter of having acquired that belief through a reliable method.

Clearly, the plausibility of this claim will to a large extent depend on how we understand the phrase 'highly probable'. This can mean different things, depending on the interpretation of probability that is assumed. According to one popular view of probability, for instance, for a belief to be highly probable is just for the holder of the belief to be very confident about it, provided the believer's degrees of confidence in the various propositions expressible in her language are representable by a probability function. Given such a 'subjectivist' understanding of probability, it would be hard to see how Swinburne's claim could be true. After all, on this understanding wildly divergent assignments of degrees of confidence are permitted. Well aware of this, Swinburne proposes to interpret the phrase 'highly probable' as 'highly probable in a logical sense'. Much of his book is devoted to elaborating and defending this logical view of probability.

Swinburne's thesis that a 'logical' notion of probability is defensible is again a bold thesis. But this one is not original (nor does Swinburne claim it is). In fact, the thesis has a long and quite problematic history. From the beginnings of probability theory in the seventeenth century up to Carnap's *Logical Foundations of Probability* (Chicago 1950), both mathematicians and philosophers have tried to defend the existence of a logical notion of probability, or at any rate that there is a viable notion of probability stronger than the subjectivist one just alluded to. Let me briefly explain the basic problem all approaches in this direction have tried to solve.

The mathematical theory of probability allows us to derive *more* probabilities once we have *some* probabilities. To give a simple example, given a probability of  $x$  for proposition  $P$ , the theory tells us that the probability of  $\neg P$  equals  $1 - x$ ; but it does not provide the probability of  $P$ , or  $\neg P$ , or any other proposition *ex nihilo*. These probabilities we have to start with, and that are not provided by probability theory itself, are usually called the *prior probabilities* or just *priors*. How do we come to our priors? This question is differently answered by subjectivists and those hoping for some kind of logical interpretation of probability. According to the former, our priors are just our subjective degrees of confidence. These, of course, may be vastly different for different individuals, but so be it. Those in favour of logical probability hold that there is some objective, or at least more objective, way of determining prior probabilities. It has been suggested, for instance, that the prior probability of a given proposition can be determined on the basis of the syntactical structure of the sentence expressing that proposition, a suggestion that, however, led already to insurmountable difficulties for very simple artificial languages. Other suggestions have proven equally problematic.

Apparently not discouraged by these failures, Swinburne presents a new theory of logical probability. In his view, the notion of simplicity occupies centre stage. Basically the idea is that ‘other things being equal, a simpler hypothesis is more probably true and so the simplest hypothesis is the one most probably true’ (p. 82). This suggestion has been made before – as Swinburne acknowledges – but Swinburne is to be commended for going much further in elaborating it than other authors have been able (or have cared about) to do. Still, though I found much that Swinburne has to say on this point illuminating, he has not quite been able to convince me of the tenability of the idea that simplicity is indicative of truth. I shall briefly note some of my misgivings. It should be noted that the difficulties to be mentioned *specifically* pertain to Swinburne’s view. I shall not mention some general worries concerning the idea of simplicity as a guide to truth – such as for instance that it presupposes the *prima facie* problematic metaphysical thesis that our world is simple rather than complex – which have already been stated with sufficient vigour in the literature but which, in my view, Swinburne does not always adequately address.

First of all, a traditional worry with the suggestion has been that simplicity orderings may not be language invariant, i.e. it may be that, while one hypothesis ranks as simpler than a second when both are formulated in language  $L_i$ , the opposite is the case when both are formulated in some other language  $L_j$ . To avoid this objection, Swinburne proposes that we say that ‘One hypothesis is simpler than another if (and only if) the simplest formulation of the former is simpler than the simplest formulation of the latter’ (p. 87). ‘Simplest possible formulation’: in all actual languages or in all possible languages? Swinburne does not say, but I submit he intends the latter, since logical probability is the probability assigned to a hypothesis by a logically omniscient being, who, we may presume, can survey all possible formulations of some hypothesis in all possible languages in which it can be formulated. Of course one may wonder whether a thus idealized notion of probability can still be of relevance to us ordinary mortals. But even if we let

this pass, there is the problem that it is by no means guaranteed that there is such a thing as a simplest possible formulation. Given all possible languages, it may well be that for every possible formulation of a hypothesis there is one that is even simpler.

Secondly, Swinburne's formulation of logical probability contains a *ceteris paribus* clause ('*other things being equal*, a simpler hypothesis is more probably true ...'). In many real-life situations, however, this *ceteris paribus* clause will not be met; very often, things 'are not equal'. In such situations, we will have to weigh simplicity against such properties as scope and coherence with background assumptions. That there is a *right* way to weigh these properties against one another is clearly presumed by Swinburne but never argued for, even though it is a far from evident claim.

Finally, it is quite significant that Swinburne's book does not contain a single example of the determination, however approximate, of the logical probability of some hypothesis. What it does contain are some examples in which hypotheses are being compared with one another and in which one hypothesis is judged simpler and, on the basis of that, more logically probable than a second hypothesis. Indeed, it seems to me that Swinburne's considerations about simplicity at most permit us to make comparative judgements of one hypothesis being simpler than a second. But, granting that simplicity judgements should guide probability assignments, comparative judgements leave the probabilities of hypotheses still largely undetermined. After all, given an ordering according to their relative simplicity of hypotheses  $H_1, \dots, H_n$ , there are infinitely many ways to assign probabilities to these hypotheses such that  $p(H_i) < p(H_j)$  exactly if, according to our simplicity ordering,  $H_j$  is simpler than  $H_i$ , and all of which yield very different results. For instance, for all Swinburne tells us, we may map the hypotheses into the interval  $[0, 1]$ , but we may just as well map them into the interval  $[\cdot 9, 1]$ . If simplicity is to secure, or at any rate to add substantially to, the objectivity of our judgements, then, I submit, more needs to be said about how simplicity can be assessed in an absolute sense.

For these and other reasons, then, I believe Swinburne's theory of logical probability ultimately fares no better than previous attempts by others. As indicated above, the tenability of Swinburne's claim concerning the peaceful co-existence of many of the extant theories of justification crucially hinges on the availability of some 'more than merely subjective' notion of probability. Swinburne's failure to defend logical probability of course does not prove that it is indefensible, let alone that no notion of probability except (perhaps) the subjective one is defensible. Absent such a defence, however, the tenability of the former claim must remain an open issue.

For all that, these brief remarks hardly do justice to the richness of Swinburne's book. Swinburne discusses virtually all important issues in contemporary epistemology, and does so with exceptional clarity. And even though, as noted, I am not convinced of the tenability of Swinburne's new theory of probability, I know of few, if any, discussions of this topic as instructive as Swinburne's. I therefore consider the book to be a valuable contribution to analytic philosophy.