Theism and evidence

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I

There are many areas where a philosopher may find a position unappealing without feeling an intense urge to refute the arguments leading to it. This may be the case in the context of an issue where one is unlikely to have a great amount of emotional involvement. For example, few people who have adopted the nominalistic view concerning the status of universals, perceive a proof for the opposing, realistic view, to be a threat to their sense of well being. In other instances the reason may be that the unpalatable position is too patently absurd to seem in the need of fully articulated rebuttal. For example, while if complete fatalism were true our attitude to life would have to undergo a painfully radical adjustment, an alleged proof of the doctrine of fatalism would cause little concern, since its falsity appears self-evident to all of us.

Theological issues belong to a different category. Most people are perturbed when their beliefs about religion, into which they feel having already invested a great portion of their lives, being imperiled by confuting arguments. At the same time, in contemporary society very few people feel their stand on theism to be beyond reasonable questioning. Hence there is considerable anxiety to defeat any attempt to question one’s favored position. Fortunately, however, as the history of our discipline indicates, there is hardly an argument in the philosophy of religion that cannot with a modicum of ingenuity blunted or even demolished. Virtually all arguments contain some vulnerable elements as well as elements that are impregnable by any attack. Obviously an essential ingredient of a successful assault on them is concen-
trating one's fire on the latter. Our point may instructively be illustrated by looking at Professor Martin's discussion of the question 'Does the evidence confirm theism more than naturalism?'

Martin reviews an argument of mine in *Religion and Scientific Method* which employed the following principle:

**Principle E:** When a given piece of evidence E is more probable on H than on H' then E confirms H more than H'.

The principle has been used to confirm theism (i.e., to show that in the light of existing evidence the probability of theism is considerably higher than would be in the absence of that evidence) in the following way. Let,

R: The laws of nature governing the universe and the initial conditions are such that creatures capable of responding to the Divine are permitted to exist.

Let also 'T' stand for the theistic hypothesis and 'N' for the naturalistic hypothesis, then \( p(R/T) > p(R/N) \). The reason is because on most traditional definitions of T it entails R, and thus \( p(R/T) = 1 \). On the other hand, since N is compatible with infinitely many universes in which creatures with a potential for religious sentiments and virtue do not exist, \( p(R/N) < 1 \). Thus by Principle E, R confirms T more than N.

There exist a variety of ways in which someone anxious to refute this kind of argument may attempt to do so. One of these is to claim that though R is true, it is also true that the universe has some features incompatible with T, and are thus much more likely to be present on N than on T. Part of Martin's paper is devoted to an attempt to establish the presence of such a feature and thereby nullify any of the effects my efforts to produce evidence in support of theism may have had. It seems, however, that the particular example he has chosen to use in his criticism makes his argument very unconvincing.

Martin maintains that it is highly unlikely that there exist laws protecting the human race from extinction through some global catastrophe, or laws protecting the evolutionary process that happened to result in the emergence of our species, from being
nipped in the bud. But on T, the probability of a universe devoid of human beings is zero, while on N it is of a finite value. Thus if we focus on this aspect of the universe we are forced to regard theism as strongly disconfirmed.

One of the reasons why this is a very feeble argument is that two pages earlier Martin explicitly mentions the problem of evil as well as my attempt to solve it, and declares that even if I am successful

... in this attempt, other evidence not considered by Schlesinger may confirm N more than T, and this may cancel out any confirmation of T over N and any other evidence brought up by Schlesinger. (p. 258)

I do not wish to attempt defending here that solution, but merely mention the undisputed point that if my solution is successful then the evil of the human race's extinction presents no more of a problem for theism, than anything else. Thus one of Martin's two examples fails to constitute any "other evidence", evidence I have neglected to consider.

What is more puzzling, however, that obviously human beings do in fact exist, and it is safe to assume that an omniscient being knew it all along that the evolutionary process was not going to be nipped in the bud. Why should it be of any concern to us if in some sense, our universe containing no humans, was possible? What do we care if there are no laws to have guaranteed the success of the evolutionary process, as long as it was successful? Surely Divine benevolence requires only that sentient being should be present in a God created world, but not necessarily that laws guaranteeing that they will be present, exist as well!

And of course, the total extinction of mankind is by no means an established fact. Not only is it quite possible that out of the several billion members of our species, a handful will survive even after a major nuclear holocaust, but according to many scientists the probability of the existence of creatures at least as developed as ourselves somewhere in the many millions of galaxies, is virtually one.
Now we come to Martin's major objection, which seems to me was
doomed from the start. He argues in some detail that Principle E,
contrary to my claim, is not reasonable; indeed it strikes him as
being absurd. He proposes to demonstrate the untenability of that
principle with the aid of counterexamples. Martin concedes that I
might be able to defend myself against the first of his examples,
but the following he believes to be fatal:

Let

\[ h = 99\% \text{ of all ravens are black}, \]
\[ h' = k & l = \text{All ravens are black and some roses are red}, \]
\[ e = \text{Of the five ravens hitherto observed all were black}. \]

Martin then goes on to argue:

Surely there is nothing initially less credible about \( h' \) than \( h \).
Nevertheless, since
\[ p(e/h') > p(e/h), \] then \( e \) confirms \( h' \) more than \( h \).
But this seems absurd.

I conclude that, despite Schlesinger's assurances that Principle E
should appear very reasonable, it is not a reasonable principle and
should be rejected. (p. 261)

Now Martin is certainly right about the inequality, since the left
hand side equals 1, while the right hand side is less than 1. On the
other hand, the relative value of the prior probabilities of \( h \) and
\( h' \) is of no interest whatever, for regardless what it might be,
Principle E commits us to saying that \( e \) confirms \( h' \) more than \( h \).
And he is absolutely wrong in suggesting that there is anything
absurd with that. I shall explain.

Let me put \( p(h) = \alpha, \ p(k) = \beta, \ p(1) = \gamma \), without making any
assumptions about the values of \( \alpha, \beta, \gamma \). By Bayes theorem:
\[ p(h/e) = \frac{p(e|h) \times p(h)}{p(e)} \], and since \( p(e/h) = .99 \times .99 \times .99 \times
.99 \times .99 \approx .86 \), \( p(h/e) \approx .86 \times \alpha/p(e) \). Thus the ratio between
\( p(h/e) \) — the probability of \( h \) after \( e \) has been given — and the
initial probability \( p(h) \), is approximately \( .86/p(e) \). This ratio is
the degree of increase in the probability of \( h \) owing to \( e \), or the degree to which \( e \) confirms \( h \).

On the other hand, \( p(e/h') = 1 \), since \( p(e/k) = 1 \), and therefore:

\[
p(h'/e) = \frac{p(e/h') \times p(h')}{p(e)} = \frac{\log \gamma}{p(e)}
\]

and thus

\[
\frac{p(h'/e)}{p(h')} = \frac{1}{p(e)}.
\]

It is thus clearly seen that the rate of increase in the probability of \( h' \) due to \( e \) is greater (is \( 1/\log \gamma \) times greater, to be exact) than the rate of increase of \( h \) due to the same evidence. Hence, what is absurd, is to deny that \( e \) confirms \( h' \) more than \( h \).

It is plausible to suggest that what may have misled Martin was the fact that \( h \) makes almost the same assertion as \( k \) — the first conjunct of \( h' \) — while the second conjunct \( l \), has nothing to do with \( e \), and thus its credibility cannot be affected by \( e \). This may have created the impression that if anything, it is the probability of \( h \), rather than that of \( h' \), that should rise in consequence of \( e \). Yet, after a moment's reflection one should be able to see, even without the use of our brief, elementary formal argument, that this must be a mistake. After all, everyone is bound to be aware of the fact that \( e \) raises the probability of \( k \) more than that of \( l \). But then, as long as \( e \) has no effect on \( l \), it obviously also raises precisely that much more the probability of the conjunction of \( k \) and \( l \).

Martin's attack would not have been doomed from the beginning if, instead of trying to show that Principle E is not a valid theorem about the relative increase of probabilities, he would have attempted to argue that the principle cannot be used to assess the relative confirmation of hypotheses like theism and naturalism. As we know, there have been philosophers who maintained that the concept of a theoretical hypothesis's degree of credibility is not to be equated with the notion of probability. Of course, to be convincing, Martin who insists that an observation statement, entailed by theism and not by naturalism, does
not have the effect of confirming the first relative to the second, would also have had to explain what kind of evidence — if any — does count as adequate evidence for that purpose? Even so, proceeding along such lines would not have been totally unrealistic, as was the attempt to refute Principle E, which after all derives directly from the Conjunctive Axiom of probability.

Notes

2. I am not using the original notation.