

## David Hume and the probability of miracles

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Section X of David Hume's *An Enquiry Concerning Human Understanding* is probably the most celebrated and most influential discussion of miracles in Western philosophical literature. That essay is unusually provocative and suggestive, not least because it is full of claims and arguments whose mutual coherence is immediately suspect.<sup>1</sup> In addition, it is suggestive as much for what it does not say as for what it does say. Hume's openly expressed conclusions are remarkably modest, at least when compared with the inferences which some later enthusiasts have drawn from the essay. In particular, it is noteworthy that the essay itself is explicitly restricted to the way in which *testimony* bears on the credibility of miracles. The maxim which Hume claims to have established is that "no human testimony can have such force as to prove a miracle, and make it a just foundation for any such system of religion."<sup>2</sup> Hume says nothing at all about whether people who were themselves *witnesses* of a miracle might thereby have a satisfactory ground for believing in that miracle, and perhaps even for making it the foundation of their religion. But if there were no witnesses of miracles, or at least no people who claimed to be witnesses, there would presumably be no miracle testimonies. We should not, therefore, hastily assume that testimonial evidence is the whole evidential story about miracles. In this paper, however, I will not further explore this particular avenue. Like Hume's essay, this paper is restricted to the bearing of testimonial evidence on the credibility of miracles.

The avenues which I do explore here are suggested to me by at least two factors. One is the fact that I believe that there have been some miracles in the history of the world, and that there are credible testimonies to some of these miracles. No doubt some of the readers of this essay will share this factor with me. Others, of course, will not. But the second factor may be more widely shared.

Hume's essay, it seems to me, gives rise to a profound cognitive dissonance entirely apart from its religious implications. On the one hand, the principles

and premisses to which Hume appeals in his argument strike one as plausible and reasonable or so, at least, they seem to me. Hume says that they lead to the conclusion quoted above. But the Humean principles (unlike his conclusions here) do not seem to have anything *special* in them about miracles or any other distinctively religious matters. They are general principles about evidence, reasonable credibility, probability, and the like. It looks as though they should be applicable outside the special field of religious belief. And indeed Hume himself puts them forward as general principles. Do we then conduct our own intellectual lives in accordance with these plausible principles, employed in the Humean way, in the ordinary course of affairs? Outside of religion, do we treat testimonial evidence in the way in which Hume's essay seems to suggest is the proper way? It seems to me clear that we do not.

I do not mean merely that we sometimes fall a little short of what we might think of as a Humean ideal. No, the fact is that our ordinary cognitive life is filled with *massive* counter-examples to what appears to be the Humean proposal. Think, for example, of reading an account of one of the games played in a bridge tournament, the sort of account which one may readily find in a newspaper. Such an account will often have a diagram showing just what cards were dealt to the four hands for that game. And now think of what is the antecedent probability which we would estimate for exactly that distribution of cards, making the estimate prior to having this testimony. There are a vast number of ways – millions I suppose – in which four bridge hands can be dealt from a shuffled deck, and this is just one particular way out of that enormous range of possibilities. When I think of being invited to bet, *beforehand*, that exactly this hand would be dealt, then the probability seems vanishingly small, so close to zero that I can hardly tell the difference. But when I have the newspaper article before me, then I judge it to be very likely – not absolutely certain, of course, but fairly probable – that exactly this set of hands was indeed dealt in that tournament. A single testimony, often by a reporter completely unknown to us, seems sufficient to convert a staggering improbability into something considerably more likely than not.

Our cognitive lives are filled with similar examples. Auto accidents happen every day, and are reported every day. But almost every one of those accidents is antecedently enormously improbable. Think of being invited to bet that exactly those drivers, accompanied by just those passengers, in those cars, would collide in that particular intersection, on that particular day – betting, that is, antecedently to having the report in hand.<sup>3</sup> Here again a single testimony seems to make an enormous difference to our estimate of the relevant probability.

That such dramatic reversals could occur on the basis of a single testimony, and that such reversals could be epistemically respectable, is not something

which would be suggested by a reading of Hume's essay. And yet almost all of us, at least when we are not thinking about religion, take these enormous reversals as a matter of course, and we have no doubt that they comport very well indeed with the canons of rationality. That dissonance – the initial plausibility of Hume's principles, and their apparently dismal record in everyday life – is the second source of the reflections I pursue here.

I organize this paper around a single element, a crucial element, in Hume's argument – or rather in Hume's proposal for the rational conduct of our cognitive lives. Hume proposes a strategy for a rational thinker to use in considering miracle testimonies. He treats the credibility of miracles – at least insofar as that credibility involves some important appeal to testimony – as depending upon a comparison of probabilities. He wants to compare the probability of miracles with the probability of error and deception in human testimony. The desired outcome of this comparison – desired by Hume, that is – is that the probability of the miracle is always lower than the probability that the testimony is mistaken or lying.<sup>4</sup> Applying the principle which he puts forward early in the essay<sup>5</sup> – “A wise man, therefore, proportions his belief to the evidence” – he reaches the conclusion that the course of wisdom would be that of rejecting the testimony rather than accepting the miracle. And in order for this line of argument to be successful, it is necessary that the probability assigned to the miraculous should always be very low.

Of course, in order to make such a comparison we must somehow “have” the relevant probabilities. That is, we must make some estimate of the probabilities. I suppose that our probability judgments need not be precise, carried out to four decimal places. They can be rough estimates. But they must have enough substance in them to allow us, at least, to say something like “This is more likely than that.” If we don't have probability judgments which can sustain that minimum level of comparison, then there is no hope of carrying out the Humean strategy.

So we need two probabilities, one about miracles and one about testimony. Both of these generate interesting and important questions. In this paper I will focus on the probability of miracles, bringing in considerations about the other probability only peripherally. And I will be considering two questions, more or less concurrently. The first question asks for a clearer specification of just what it is for which we are trying to estimate a probability. So far I have tried to speak rather vaguely on this point – “the probability of miracles” and the like. But there are several distinct probabilities, not just one, associated with miracles, and some of these may be vastly different from the others. Which probability is relevant to the Humean project?

The second question concerns the way in which a reasonable judgment about that probability might be grounded. And here I will concentrate on

Hume's suggestion that probability judgments are properly grounded, in the end, upon experience. I will be asking whether it is plausible to suppose that Hume had any experience which was relevant to an appropriate probability judgment, and also whether we ourselves have any such experience.

We can begin the exploration by considering a hypothetical case which Hume himself puts forward:

When any one tells me, that he saw a dead man restored to life, I immediately consider with myself, whether it be more probable, that this person should either deceive or be deceived, or that the fact, which he relates, should really have happened. I weigh the one miracle against the other; and according to the superiority, which I discover, I pronounce my decision, and always reject the greater miracle. If the falsehood of his testimony would be more miraculous, than the event which he relates; then, and not till then, can he pretend to command my belief or opinion.<sup>6</sup>

The terminology of this passage is unfortunate, I think, in Hume's use here of the terms "miracle" and "miraculous." It seems obvious, from other things that Hume says in this essay, that he does not think that there is anything at all miraculous about the falsehood of human testimony. He does not, for example, think a mistaken or lying testimony is a transgression of a law of nature. It seems to me, therefore, that the only plausible way to make sense of this passage is to take the words "miracle" and "miraculous," when they refer to the possibility that the testimony is true, not in the sense which Hume defined, nor in the perhaps vaguer sense which they have in ordinary religious speech and writing, but merely as rhetorical surrogates there for "improbable."<sup>7</sup>

On the other hand, it seems probable that Hume really did think that "a dead man restored to life" would be a miracle in his defined sense, a transgression of a law of nature.<sup>8</sup> In fact, it seems probable that Hume's hypothetical case was intended to mirror the fact that many Christians believe that the resurrection of Jesus is the miracle *par excellence* in the Christian faith.

Reading the passage in this way gives us, I think, a pretty good idea of the core of the Humean strategy on this topic. That strategy consists, as I said, of comparing the probability of miracles with the probability of error and deception in human testimony.

Well, OK. That procedure seems to have at least some *prima facie* plausibility about it. We may not be ready to swallow the Wise Man's Principle just as it stands. Hume himself, we may notice, does not give any argument or reason in support of it. Even if we take evidence to be relevant to the rational propriety of belief we may not be ready to commit ourselves to the claim that it is the *only* relevant factor.<sup>9</sup> At least, I am not ready for that commitment.

But that is a line of criticism which I will not pursue here. I will go along, for the time being, with the initial plausibility of this Humean strategy.

So, let us try to get some feel for what this strategy involves by actually trying it on Hume's hypothetical example. We can begin by formulating a proposition asserting that a miraculous event, a resurrection, has occurred:

M: Henry was restored to life a few days after his death.

And we can also imagine the sort of testimony which might impel us to consider the possibility that the resurrection did indeed take place:

T: I saw Henry, alive and well, a few days after his death, we have had breakfast together a couple of times since then, I've gone fishing with him once, . . .<sup>10</sup>

And then we can think of assigning a probability to M – that is, the probability that M is true, that the event “should really have happened.” We can also assign a probability to T – the probability that the testifier really did have the experiences, etc., which he or she reports.<sup>11</sup>

When we have these values in hand then we can easily calculate probability values for the negations of both M and T. A standard rule for consistent probabilities stipulates that the probability of  $\sim M$  is simply  $1 - P(M)$ .<sup>12</sup> And the probability of  $\sim T$  (i.e., that the testifier “should either deceive or be deceived”) is  $1 - P(T)$ . So altogether we can get four probabilities, and then we can compare them by pairs.

Hume himself suggests that he compares the probability of M with that of  $\sim T$ . And he says that he will always “reject the greater miracle.” Presumably that means that he will reject whichever of this pair has the lower probability. And when he refers to something which would “command my belief or opinion,” perhaps he is also suggesting that he will accept whichever of this pair has the higher probability.

However, that project is complicated (and compromised!) by the fact that M and T are not logically independent propositions. That fact is not idiosyncratic to this example. Miracle assertions and the corresponding miracle testimonies are characteristically not logically independent. The content of a miracle testimony usually entails either the corresponding miracle assertion, or some closely related proposition. But the entailment often does not run in the opposite direction. So, in our example here, T entails M, and M does not entail T.

The entailment from T to M has an important probability consequence. M imposes a “probability cap” on T. In a consistent set of probability assignments, T cannot have a probability higher than M. That is, if Henry did not rise from the dead then the testifier did not have the reported experiences. So the probability that the experiences really transpired – breakfast with Henry a few days after his death, etc. – cannot be higher than the probability that

Henry really was restored to life. Looked at from the other side, T puts a “probability floor” under M. M cannot have a probability lower than that of T. So we can say that, in a consistent system.

$$P(T) \leq P(M)$$

$$P(M) \geq P(T)$$

Suppose then that Hume begins by assigning a low probability to M. (I suspect, indeed, that he did begin in that way.) That requires, if his probabilities are to be consistent, that the probability of T also be that low or lower. So if the assigned probability of M is less than 0.5, then the probability of T is also less than 0.5. But then the probability of  $\sim T$  must be greater than 0.5. Hume says that he compares the probability of M with that of  $\sim T$ , and he rejects whichever has the lower probability. But of course the probability of M (less than 0.5) turns out to be lower than that of  $\sim T$  (greater than 0.5). So Hume, proceeding in this way, would of course reject the miracle, and would presumably believe that the testifier was either deceived or deceiving.

I say, “proceeding in this way.” In fact, I suspect that Hume did proceed in this way. However, there is something misleading in saying that this procedure involves a genuine comparison of probabilities. For the first probability which is assigned generates arithmetically *all* the other values, including the one with which the first one will be compared. Thus, the result of the putative comparison is guaranteed by the assignment of that single probability. Surely there is something fishy in that.

Perhaps that fishy odor becomes a little stronger when we notice that we could just as easily have worked in the opposite direction, beginning instead with the assignment of a probability to T. Maybe, e.g. we have had a long experience with this testifier, and have found him to be moderately reliable. Suppose we estimate, on the basis of our past experience with him, that his reliability is about 0.7. So we assign that probability to T. Consistency then requires an assignment at least that high to M, so we give M also the value of 0.7. Arithmetic tells us that the probability of  $\sim T$  is 0.3. If we now make the Humean comparison, M against  $\sim T$ , we find that it is  $\sim T$  which has much the lower probability and is to be rejected. And so we accept M, and presumably T along with it.

The initial proposal had at least the appearance of plausibility and evenhandedness about it. We were to compare the probability of two propositions (or, perhaps, two possible states of affairs, etc.), and then we were to prefer, as a candidate for our belief, the one which had the higher probability. But it turns out that we can, to a large extent, manipulate the result of this putative comparison merely by a careful choice of which of the probabilities to assign first. And that seems to be epistemically (rationally, etc.) unsatisfactory.

It might be suggested, therefore, that the initial assignments of probability to both M and T really should be made independently of each other, with no concern over whether these assignments are mutually consistent. Concerns with consistency should be postponed to a later stage of the investigation, when we may have a (relatively) final set of probability assignments, with values perhaps radically revised from the initial estimates. The initial assignments would be, in some sense, “antecedent” probabilities, and the later assignments would be their “consequent” descendants.

If this suggestion is adopted, then it is important to remember that the Humean comparison must be made on the basis of the initial antecedent probabilities, even if these values are mutually incompatible. For Hume wants the comparison of probabilities to serve as a guide to the rational use of the testimonial evidence. If we are to be Humeans here, then we don’t know what to do with the testimonial evidence until *after* we have made this comparison. In the remainder of this paper I will assume that this is the project which we are attempting. And I will focus on just one half of that project, that of assigning a probability to the miracle side of the comparison *independently of making any judgment about the testimony*.

On what basis should we assign the miracle probability? Not on the basis of testimony, of course. We must, therefore, have a miracle probability which is “antecedent” to testimonial evidence. But perhaps it need not be antecedent to everything; perhaps the probability judgment can have *some* basis. Several times in this essay Hume suggests that we have to acquire the relevant probabilities from *experience*. It is a general maxim, Hume says, “that no objects have any discoverable connexion together, and that all the inferences, which we can draw from one to another, are founded merely on our experience of their constant and regular conjunction.”<sup>13</sup> And he explicitly applies this to our reliance on human testimony, which has no basis, he claims, other than our experience of the usual conjunction of testimony and truth.<sup>14</sup> And it is in the same way, by appeal to experience, that we judge that all men must die, that fire consumes wood, and so on.<sup>15</sup>

Well, what experience might Hume have had which would be relevant to assigning a low probability to the miraculous? Or, for that matter, what experience do *we* have which would be relevant to our assignment of such a probability? Hume makes some claims about human experience in general, and I will come to them shortly. But he does not, I think, say anything about his own experience specifically. Human experience in general, however, must be somehow a function of the experience of particular human beings. To begin, therefore, I want to speculate a little about what may have been Hume’s own experience with regard to miracles. This exercise is somewhat conjectural, but that need not trouble us much. For if we can recall and recognize some

experience of our own which seems more relevant than the experience which I attribute to Hume, then we can shift to consideration of that experience of our own. I must confess, however, that I do not recall any experience of my own which would be more relevant to Hume's purpose than the experience which I here attribute to him. And what if it turns out that neither Hume's experience nor ours is relevant? Well, that might be a significant result.

If we are to speculate about Hume's experience relative to some miracle, however, what miracle (or alleged miracle) shall we think about? I have no problem with supposing that Hume really did have some experience which would support his assigning a very low probability to the claim that a particular friend of his had been restored to life within a week of his death. And, for that matter, I think that I have some experience which would justify me in a similar assignment of probabilities with respect to some of my own acquaintances. But these cases are not of much interest, because nobody (so far as I know) has made them "the foundation of his religion." But there is a case which does generate just that sort of interest, and Hume no doubt had it in mind when he introduced the subject of resurrection into this essay. That case, of course, is the alleged resurrection of Jesus of Nazareth a few days after his execution. That putative miracle does play an important role in an actual religion, many of the followers of that religion count believing in that resurrection as one of their important religious beliefs, and it may in some sense be a "foundation" of that religion. I propose, therefore, to replace the hypothetical Henry of our previous example with Jesus. We thus get a miracle claim which is an element in an actual religion, one which is believed and professed by many people, and about which there apparently were actual testimonies.

J: Jesus of Nazareth was restored to life a few days after his execution.

What is the probability of that proposition? And on what basis might that probability be assigned?

I suppose that different people will give very different answers to the first of those questions. I, for example, assign a very high probability to it – maybe about as close to 1 as makes no difference. But in saying that, I suppose that I am not really being as "antecedent" as the Humean project requires. I might try to abstract, imaginatively, from my interaction with the biblical texts, the creeds, the church, etc., and to estimate what probability I would assign to it if I were to get back to some "bare bones" state. But in speculating about that I would not be much better off than in speculating about Hume.

I suspect that Hume thought that the probability of J is very low, maybe so close to 0 as to make no difference. But as a matter of fact, Hume (so far as I know) says nothing at all about assigning a probability directly to this proposition, or to any similar proposition. And, given his professed stance of relying on experience, that reticence is understandable. For the



resurrection of Jesus, if it happened at all, happened more than 1500 years prior to Hume's birth. And, if it happened, it happened somewhere in the vicinity of Jerusalem, far distant from Edinburgh. It is not hard to imagine that some first century resident of Judea might have had some ordinary experience which was directly relevant to the probability of J. Someone, for example, might have seen Jesus (or somebody who looked just like Jesus, etc.) walking about, eating, conversing, etc., a few days after the crucifixion. Or, for that matter, someone may have seen Jesus' corpse (or a corpse which looked just like Jesus, etc.) decaying over a period of three or four weeks. But it is hard to imagine that Hume might have had either of those experiences, or anything in the same ballpark. He just lived in the wrong place and time for that. And, of course, we are no better off than Hume in this respect. Neither Hume nor we seem to be in a good position to assign a probability *directly* to J on the basis of our own experience.

It does not follow immediately, however, that the Humean project must be a failure. For there may be an *indirect* way of basing such a judgment on experience. And that is where some generalization about resurrections may become relevant. For consider the following generalization:

R: There are some resurrections (i.e., at least one) in the history of the world.

And also its contradictory

NR: There are no resurrections in the history of the world.

J entails R (thought not *vice versa*). And is logically incompatible with NR. And so, in a consistent system of probabilities, R imposes a probability cap on J. Therefore, if Hume's experience (or ours) could directly justify assigning a low probability of R, then it would also indirectly justify at least that low a probability for J. And a high probability for J would imply a high probability for R. (The entailments do not run in the opposite direction. E.g., a high probability for R does not entail a high probability for J.) Of course, a low probability for R is equivalent to a high probability for NR. So we get corresponding relations between the probabilities for J and NR.

Generalizations about miracles, resurrections, etc., are attractive for the Humean project because of the interaction of two factors. First, Hume (and we also) really do have experiences which can plausibly ground probability judgments about some such generalizations. And second, some such generalizations really do have a bearing on the probability of relevant singular claims, such as J. We must remember, however, that apart from their bearing on some important singular claim, generalizations about miracles, resurrections, etc., would seem to be of little importance to Christianity.<sup>16</sup> And so it would be, I suppose, with most religions.

What then would be the relevant feature of Hume's experience? I think it is the fact that in his own experience he had never come across a miraculous event. Or, at any rate, he had never come across an event in his own experience which he took to be miraculous. More specifically, with reference to this particular case, the relevant feature of Hume's experience would be that he had never himself personally witnessed a resurrection. Various of his friends and acquaintances had, I suppose, died by the time he wrote this essay. But he had not seen a single one of them restored to life. Leaving aside, for the moment, the general experience of the human race, this would be the feature of Hume's own personal experience which might seem relevant to assessing the probability of miracles, or at least to assessing the probability of this particular miracle, a resurrection from the dead.

I focus on this conjecture for the time being for three reasons. First, I have no reason to doubt that Hume's experience really did have this negative feature. Second, I share that negative experience with Hume. Like him, I have never witnessed a case of a dead person restored to life. And I think that many of you who read or hear this paper will say the same about yourself. And third, I think that this negative experience, on Hume's part and on our own, is indeed relevant to probability judgments about miracles.

But just how is it relevant? Perhaps this is the most important question we can ask about Hume's strategy here. Hume, we have supposed, never observed a resurrection. I have not observed one, and perhaps you have not either. How do facts like that bear on the probability of a resurrection – on the probability, that is, of R? Here I can put forward what is perhaps the central thesis of this paper.

*These negative experiences, Hume's and yours and mine, are (for all practical purposes) completely irrelevant to the probabilities of R and NR.*

And the reason is simple and straightforward. Hume's sample is just too small to support, to any significant degree, any probability judgment at all about propositions R and NR. And so is your sample and mine.

There have been, I suppose, at least several billion human deaths in the history of the world. R and NR are propositions whose truth value might be determined by the presence or absence of a *single* quick resurrection within that vast panoply of cases. Now, suppose for the moment that there was, in fact, one resurrection in the history of the world. In that case R would be true and NR would be false. But what is the likelihood that Hume's sample of deaths and their immediate aftermath – 20 cases, 40, even 100 – would have caught that one anomalous event? In the absence of any reason to suppose that Hume was in a specially advantageous position to observe that event, if it happened, it seems to me that the probability of his catching it is almost infinitesimally

small. The experience which I have here attributed to Hume is, of course, just what we should have expected it to be if NR is true, i.e., if there are no resurrections at all. But it is also just what we should have expected it to be if R is true, and the number of resurrections is very small – maybe one, or two, or half a dozen. Because these two different assumptions make only a tiny, practically infinitesimal, difference to the likelihood of Hume’s observing a resurrection, his failure to observe one makes no significant difference to the probability of one rather than the other. But they are contradictories. So Hume’s negative experience is irrelevant to their probability.<sup>17</sup> And so, of course, is your negative experience and mine, and for the same reason.

I said above, however, that these negative experiences really are relevant to some generalizations about resurrections, and about miracles more generally. Think, for example, of the following claim:

CR: Speedy resurrections are very common in the history of the world (more than half of all human deaths are followed by a restoration to life within a week, etc.).

And the contrasting claim:

RR: Speedy resurrections, if they occur at all, are extremely rare in the history of the world.

Hume’s negative experience, it seems to me, really is relevant to assigning probabilities to these propositions. (And so also is our experience.) And the reason is the mirror image of the reason for the earlier irrelevance. If resurrections were really common occurrences, then it is quite likely that Hume would have come across one or more of them in his own experience. I too would probably have noticed one, and so would you. But in fact Hume did not observe any resurrection, I have not, etc. So it is unlikely that resurrections are common occurrences. That is, the probability of CR is very low. And the probability of RR is high.

But what does that have to do with any actual religion? Well, for Christianity at least, very little. No Christian that I know of asserts CR, or anything remotely resembling CR. None of them would be disturbed by the claim that CR is very improbable. (They might, I suppose, wonder who it was who thought that CR was probable.) And what if someone claimed that RR was probable? Well, RR might well strike the Christians as what they have always believed. No surprises there, no problem for them.

It is, of course, crucial to recognize (and to remember) that RR is not the same proposition as NR. NR is incompatible with J, and so a high probability for NR entails a low probability for J. But RR is not incompatible with J, and so a high probability for RR need not impose a low probability on J. The world is chock-full of things which are rare, but which nevertheless really do happen. Take quintuplets, for example. The birth of quintuplets is very rare

among humans, averaging only one out of many thousands of pregnancies. A lot of my friends have children, but none of them have quints. So far as I know, none of my friends are themselves part of a set of quints. For quintuplet births, the analogue of RR has an extremely high probability. We have very good experiential evidence that quintuplet births are very rare. But the analogue of J also has a very high probability. For we also have good evidence – for a few of us experiential, and for the rest of us testimonial – that there really are some quintuplet births. And that is by no means an uncommon pattern in the world. The world is full of unlikely events.

This point sometimes gets obscured by an unfortunate way of speaking. Sometimes a person will say something like

QU: Quintuplets are unlikely.

And this is the analogue of

RU: Resurrections are unlikely.

I suppose that people who say QU probably do not mean to say that it is unlikely that there are any quints in the history of the world. Probably they believe, like most of the rest of us, that there have been some actual quintuplet births. But what then do they mean by QU? Sometimes, I think, QU is used just as a stylistic variant of the statement that quintuplets are rare. And sometimes it really does express a probability judgment, a judgment which is based on that rarity. If you think, for example, of picking out a pregnancy pretty much at random – the first woman to give birth in Ann Arbor’s St. Joseph Mercy Hospital in 2001, say – and you think of betting that the upshot will a quintuplet birth, then you probably will think that such a bet is very unlikely to win. And you would, I suppose, be right. QU is sometimes used, I think, to express a probability judgment like that one.

RU has the same form as QU. And it can be used to say the analogous sorts of things. It can, I think, mean merely that resurrections are rare, which is just what RR says. Or it can mean that a randomly selected death is unlikely to be followed by a speedy resurrection. And that would not be disputed by many Christians. But RU is that it might also be taken to mean something quite different, i.e., that it is unlikely that there are any resurrections. It might be taken, that is, as expressing the judgment that the probability of R is very low. There is nothing wrong with expressing that judgment. But it is unfortunate and misleading when the plausibility of RU *in its other senses* gets transferred, perhaps without our noticing it, to this last sense.

We really do have to be on guard against this transference. If someone says to me, “But doesn’t your own experience suggest that resurrections are unlikely?”, then I feel right away like saying, “Yes, of course it does.” What I’m doing in that response is taking his question in one (or both) of the first senses above – a question about rarity, or about the probability for

a random case. If the interlocutor goes on to say, "But isn't that just what Hume is saying?", then I have to say, "No. Or at least, it's not what he needs to say. What Hume needs is the claim that it is unlikely that there are any resurrections in the world. not just that resurrections are rare. And that's not what I'm saying."

Well, where are we now? What we've come to is that neither Hume's experience nor ours gives us any good direct ground for assigning a low probability to J. (Of course, it doesn't give us any ground for a high probability there either.) On the other hand, Hume's experience (and ours) does give us grounds for probability judgments about some generalizations concerning resurrections. But those generalizations do not support a low probability for J. There is a generalization which would have that consequence, but our experience does not give us a ground for thinking that generalization to be probable. So far Hume's project looks unpromising.

It might be suggested, of course, that we have been looking too narrowly, just at Hume's personal experience and ours. But might we not expand the sample by adding to our own experience the experiences of other people? Of course. And indeed in this essay Hume appears to make just that attempt. He makes repeated references to human experience in general.

This attempt, however, generates at least two related problems. I will mention the first here, but I will not say very much about it. A person who attempts to estimate the probability of some proposition may know what his or her own experience has been, and may then try to assess the relevance of that experience to the task at hand. But if one wants to cast a wider net, and to include the experience of others, then how can one get in touch with those experiences which are not one's own? It would seem that the normal way—perhaps the only way available to human beings—is by way of the testimony of those other people. But Hume's strategy here seems to require us to decide upon whether to accept a testimony by *first* comparing the probability of its falsehood with the probability of the event which the testimony reports. That would seem to require us first to estimate the probability of the event on, at best, the evidence of our own limited experience, and then, if that probability is low, we would be required to reject contrary testimony. It is hard to see how Hume, if he were consistent, could ever take seriously the wider body of experience which would give him a sounder basis for a reasonable probability estimate.

The second (and related) problem, about which I will say a little more, is this. If we do try to expand the sample beyond Hume's own personal experience (or mine or yours), then what do we find? What do we find, that is, not by armchair theorizing but by actually examining that expanded sample? Well, Hume seems eager to tell us what the result of that trial is. He says

that “it is a miracle that a dead man should come to life; because that has never been observed in any age or country. There must therefore be a uniform experience against every miraculous event . . .”<sup>18</sup> So Hume’s picture of things seems to go like this. His own personal experience has the negative feature of not including any observation of a resurrection. And when he expands the sample to include the experience of the whole human race he gets the same negative result. The miraculous event, Hume tells us, “has never been observed in any age or country.”

But why should we believe Hume on this point? Why, that is, should we believe that the universal experience of the human race has uniformly been devoid of any experience of the miraculous? I have no problem with accepting pretty much whatever negative feature Hume may want to claim for his own experience. But I am not at all inclined to believe him when he assigns that same negative feature to the experience of the whole human race. He says not merely that he has never observed a resurrection, but that a resurrection has never been observed in any age or country. But he suggests absolutely no evidence at all for this latter claim. Of course, the claim might possibly be true. But why should we suppose that it is? The clearest fact in this whole area would seem to be that *the testimony about resurrections, and other apparently miraculous happenings, is not uniform*. Some people, like Hume, profess not to have observed any such things. Well and good. Perhaps they have not. But the fact is that some other people profess that they have personally observed just such events. When it comes to resurrections, for example, there have apparently been some people who claimed to have seen Jesus a few days after his execution, alive and well, talking with them, eating with them, and so on.

Where does that leave us? We can, if we want, choose to rely entirely on our own personal experience. A consequence will be that, in many important cases, that body of experience which belongs to us personally will be too small to provide a reasonable basis for the kind of probability judgments which we want to make. Or we can try to expand the base by adding to our own experience the experiences of a large number of other people. But our only way of carrying out that expansion is by appealing to the testimony of those other people. In that case, at least if we are to proceed empirically, we have to take the testimonies as we actually find them. We cannot just make up testimonies to suit ourselves. *Nor can we properly leave out testimonies just to suit ourselves*. In the case of miracles, the fact that there are these other troubling minority testimonies, the testimonies of those who claim to have experienced miracles themselves, becomes part of the data with which we must deal.<sup>19</sup>

It might, of course, turn out that the whole Humean project is flawed at some deeper level than I have examined here. Maybe, for example, Hume’s

attraction to a radical empiricism is at fault, leading him to ignore some other essential features of a viable intellectual life, features which have more of an *a priori*, or innatist, flavor about them. Maybe, for example, there are some probability judgments which are important to our cognitive life, but which are not based on experience. Here I have said nothing for or against this conjecture, or any other alternative to Hume's own professed project. In any case, however, the project to which he seems to commit himself in this essay provides no sound basis for assigning a low probability to the general thesis that there are some miracles in the history of the world. Nor does it provide a sound basis for assigning a low antecedent probability to singular miracle claims, such as that of Jesus' resurrection. Consequently, probability comparisons which involve any of those probabilities as one of the terms need not be expected to be always unfavorable to the miracle claims.

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### Notes

1. Compare, for example, what Hume says about the quality of miracle testimonies in the first part of Part II, pp. 78–80, with what he says about the reports of miracles associated with the tomb of Abbè Paris (pp. 83–85). The quotations in this paper, along with the page citations and footnote citations, are taken from the edition of the *Enquiry* edited by Eric Steinberg (Indianapolis: Hackett Publishing Company, 1977). The *Enquiry* was first published in 1758.
2. Part II, p. 88.
3. Almost any driver, I would suppose, who judged that there was even a 50-50 chance that they would have a serious accident if they were to drive on a given day, would almost surely refrain from driving on that day. I would, anyway.
4. If the probability of the miracle were not always lower than the probability that the testimony is false, then Hume's strategy would sometimes yield a belief in a miracle.
5. Part I, p. 73.
6. Part I, p. 77.
7. But elsewhere in the essay Hume really does seem to use "miracle" in more or less the sense which he defines – "a transgression of a law of nature by a particular volition of the Deity, or by the interposition of some invisible agent." Part I, p. 77.
8. Or that it at least satisfies the first clause of that definition. Perhaps Hume here, like many later interlocutors, simply ignores the second clause of the definition. Or maybe he thinks that the second clause is really redundant, implied by the first.
9. William James is, of course, famous for an additional suggestion in "The Will to Believe."
10. I express both of these propositions without using the word "miracle," and that is deliberate. I take it that a person might give a miracle testimony without using that word, and indeed without having any concept of a miracle. Or he might have that concept and believe that the event he was reporting did not satisfy that concept and hence was not a miracle. But

if the event as described does in fact satisfy that concept, then the testifier is testifying to the occurrence of a miracle, regardless of whether he recognizes that significance in his testimony. Whatever his own evaluation of his report may be, that report might give *us* reason to believe that a miracle had occurred.

11. This is not, of course, the probability that the testifier *thinks* that he or she had these experiences. We are not assessing the sincerity of the testifier, but rather the reliability of the testimony. Cf. Hume's concern that the testifier may be either deceiving or deceived.
12. Where  $P(M)$  is the probability of  $M$ , etc. We need not have numerical values for these probabilities in order to make the relevant "calculations." If we judge that the probability of  $M$  is simply *very low*, then we will also judge that the probability of  $\sim M$  is *very high*.
13. Part I, p. 74.
14. *Ibid.* Hume's Scottish contemporary, Thomas Reid, put forth an alternative view, that there is an innate human disposition to accept testimony, and that human intellectual life could not get under way without this disposition. Was Hume aware of this dissenting voice?
15. Part I, p. 76.
16. In the SPR discussion, this point was strongly urged by Professor Paul Draper. My thanks to him for stressing it.
17. This is, of course, the line of reasoning which is formalized in Bayes' Theorem.
18. Part I, p. 77.
19. It might be suggested that the wider experience of the human race provides us with something stronger than merely a collection of testimonies – it provides us with well-grounded laws of nature. And so perhaps "no resurrections" is a law of nature, or a consequence of some more general and fundamental laws of nature. And maybe it is (I'm inclined to think so myself). But that cannot help with this project.

Either a law of nature logically allows for a few exceptions (i.e., Humean "transgressions") in the actual course of events, or else it does not. If it allow for a few actual exceptions, then establishing "When you're dead, you stay dead" as a law of nature will have no bearing on the probability of  $R$  and of  $NR$ , and hence no bearing on the probability of  $J$ .

Some philosophers – e.g. Alastair McKinnon, "'Miracle' and 'Paradox'," in *American Philosophical Quarterly*, vol. IV (1967), pp. 308–314 – have argued that the idea of a violation of a law of nature is logically incoherent. A law of nature cannot (logically) have any exceptions; the law just is whatever actually happens. That seems to me implausible, but I will not argue it here. (But cf. the discussion by Richard Swinburne in *The Concept of Miracle* (London: MacMillan, 1970), Chap. 3.) In any case, this way of construing a law of nature will leave us with roughly the same difficulty, though perhaps in a different place. We cannot use the "no resurrections" thesis to rule out  $R$  (and thus to rule out  $J$ ) until we know whether it is indeed a (McKinnon-type) law of nature. But we cannot know that it is a law of nature of that sort until we have a way of ruling out the minority testimonies, the testimonies to a resurrection.

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