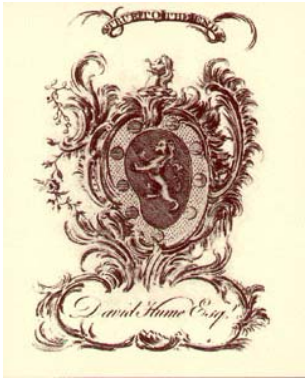

Hume, Miracles and Lotteries
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HUME, MIRACLES AND LOTTERIES

This paper addresses recent criticisms of Hume's skepticism with regard to miracles, by Sorensen[1] and Hambourger[2] who argue that there are counterexamples, illustrated by lotteries, to Hume's account of how the truth of reports of improbable events (either first or second hand) must be evaluated. They believe these counterexamples are sufficient to prove that Hume's argument against the believability of miracles, defined as violations of laws of nature caused by God, is unsound. Their arguments merit consideration not only in their own right but also on the basis of historical precedent, since they have in common an assumption that is found in Butler's criticism of Hume's predecessors in this debate.[3] The bulk of my paper deals with Hambourger, who presents the most detailed version of the 'Butler' criticism. Sorensen's version can be answered in light of the evaluation of Hambourger's argument.

Hume's Argument

Hume's argument is not against the possibility of miracles but against the possibility that it could ever be reasonable to believe a miracle had occurred.[4] His argument can be summed up as follows: in judging the credibility of a report of an improbable event, the probability of the event must be weighed against the probability that the report could be mistaken. The probability of an event is determined by the degree to which it conforms to known laws of nature. Laws of nature are formulated on the basis of uniform experience. Assuming that a miracle is a violation of laws of nature, any judgment that an event is miraculous presupposes a

judgment that there exists a uniform pattern of causation to which it is opposed, which pattern would constitute empirical proof against the miracle's occurrence. Testimony, on the other hand, is shown by experience not to be uniformly reliable. Consequently, no report of a miracle will have credibility since there will always be a uniform experience that is full proof against it, which therefore outweighs whatever merits testimony may have.[5] In Hume's words,

> [N]o testimony is sufficient to establish a miracle, unless the testimony be of such a kind, that its falsehood would be more miraculous, than the fact, which it endeavors to establish.... When anyone 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.... 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 (E 115-116).

Hambourger's Criticism

Hambourger maintains that Hume's argument depends on a principle which he calls the "principle of relative likelihood." He restates this principle as follows:

> Suppose that someone or, perhaps, a group of people testify to the truth of a proposition P that, considered by itself, is improbable. Then to evaluate the testimony, one must weight (sic) the probability that P is true against the probability that the informants are lying or mistaken. If it is more likely that P is true than that the informants are lying or mistaken, then, on balance, the

> testimony renders P more likely than not, and it may be reasonable for one to believe that P. However, if it is as likely, or even more likely, that the informants are lying or mistaken than it is that P is true, then, on balance, the testimony does not render P more likely true than false, and it would not be reasonable for one to believe that P.[6]

As a counterexample to this principle, Hambourger asks us to suppose that a lottery is held in which there are one million entrants, each of whom has a one in a million chance of winning, and that a reliable newspaper, the New York Times, reports that the winner of the lottery is Smith. He further asks us to suppose that the Times errs only once out of every 10,000 times. Thus, the probability that the Times' report is wrong is greater than the probability that Smith is a winner of the lottery. If we apply Hume's principle to this example, we must weigh the probability that Smith is a winner against the probability that the Times' report is wrong. Since there is a greater probability that the Times should be wrong than that Smith should win the lottery, then, following Hume's 'relative likelihood' principle, we should conclude that it is more probable that the Times' report is mistaken. But clearly, it is more probable that the Times' report is correct: the credibility of the Times' report should be assessed in terms of its track record for making correct reports; the statistical probability of the occurrence of the event it reports, whether it is one in fifty or one in a million, is irrelevant to the evaluation of its credibility. Therefore, Hume's principle of relative likelihood, Hambourger concludes, must be invalid.

Applying these considerations to evaluating the credibility of testimonies about miracles,

Hambourger argues that what we want to know in order to evaluate the testimony is the non-relative likelihood that the testimony is true. Just as in evaluating the Times' report that Smith is the winner of the lottery we should ask, "How frequently are the Times' reports about lottery winners true?" and not, "What is the probability of the event reported actually occurring?" so too in evaluating testimony about a miracle we should ask, "How frequently are reports of miracles true?"[7] Hambourger concedes this is a question not easily answered, but argues that it cannot be answered, as Hume believed, by the principle of relative likelihood. Hume's principle, he explains, presupposes what it is meant to show: The relative likelihood principle asks us to weigh the probability of a miracle occurring against the probability that the testimony about the miracle is true. But one cannot "factor out the plausibility of what one reports, consider the remaining factors without it, and then, by weighing the two together, arrive at the probability that a report is true."[8]

A Historical Precedent: Butler

The point of Hambourger's counterexample is that Hume falsely assumes that the predictability of an event must have a bearing on the credibility of a report of the event once it has occurred. His criticism echoes Butler's criticism of the "alleged presumption" against miracles in his work, The Analogy of Religion.

Butler argues that miracles are no more improbable than particular historical events: Both are virtually unpredictable on the basis of general natural laws. Just as low degrees of predictability have no bearing on the credibility of particular historical occurrences, so too they should have no

bearing on the credibility of miraculous occurrences. Thus Butler writes:

> There is a very strong presumption against common speculative truths, and against the most ordinary facts before the proof of them, which yet is overcome by almost any proof. There is a presumption of millions to one against the story of Caesar, or of any other man. For suppose a number of common facts so and so circumstanced, of which one had no kind of proof, should happen to come into one's thoughts, every one would, without any possible doubt, conclude them to be false. And the like may be said of a single common fact; and from hence it appears, that the question of importance ... is concerning the degree of the peculiar presumption supposed against miracles; not whether there be any peculiar presumption at all against them. For, if there be the presumption of millions to one against the most common facts, what can a small presumption additional to this amount to, though it be peculiar? It cannot be estimated and it is as nothing.[9]

The above passage by Butler indicates that counterexamples of the type Hambourger outlines are extremely common: one need not cite odds in a lottery, odds regarding rolls of dice, or other such mathematically quantifiable probabilities. Butler's point is that even the most common facts of life are improbable in the sense that they are unpredictable, but are not, for all their unpredictability, incredible occurrences. From this he concludes that the unpredictability of miracles based on uniform experience similarly has no bearing on their credibility.

Undoubtedly familiar with Butler's work, Hume decided against including an essay on miracles in the Treatise, as he originally intended. Desiring that

his first work receive approval from Butler, whose approbation, he may have speculated, would assist its literary success, Hume wrote to Henry Home, confessing cowardice, that he was "cutting off its nobler parts, that is, endeavoring it shall give as little offense as possible; before which I could not pretend to put it into the Dr.'s hands."[10] However, if Hume was concerned about giving offense, it is unlikely that it was because he believed Butler's criticisms undermined his own version of the argument. Had he believed Butler's criticisms were valid, he would not have gone ahead with publishing it later in the Enquiry, trumpeting the argument, as he had done, as "an everlasting check to all kinds of superstitious delusion, ... useful as long as the world endures" (E 110). More likely, Hume found Butler's objections irrelevant, and with good philosophical reasons.

Two Senses of Probability

Butler's argument and its reincarnation in Hambourger overlook two senses of probability: probability pertaining to events qua unique occurrences and probability pertaining to events qua instances or tokens of event types.[11] This distinction approximates that made by Hume in the Treatise between "probability of chances" and "probability of causes" (Bk. I, Pt. III, Sect. XII and XIII). Hume's argument against the believability of miracles invokes the second sense, whereas the Butler/Hambourger argument invokes the first. Following the first sense of probability, the likelihood of an event is measured by its degree of predictability as a unique occurrence; following the second sense, it is measured by its degree of conformity to causal laws applicable to events of its

type. An event having low predictability may be credible provided it conforms to relevant causal laws. The credibility, for example, of Caesar's crossing the Rubicon has little to do with its degree of predictability, i.e., its probability qua unique event. Clearly, the availability of reliable historical testimony concerning the event's occurrence also depends in part upon the causal probability of the event it reports, i.e., the conformity of the event to causal laws pertaining to events of its type. The story of Caesar is a credible one in part because his crossing the Rubicon is not said to have involved any violations of known natural laws: he did not cross by walking on water, parting the river through prayer, or other means that might be considered miraculous.

Evaluation of Hambourger's Argument

Granting that Hume's argument invokes the second sense of probability, i.e., probabilities regarding event-types, we can now see why Hambourger's lottery example does not prove to be the counterexample to Hume's principle of relative likelihood he believed it to be. The principle is to be invoked only when evaluating reports of events that do not conform to general rules or laws pertaining to events of its type. But Smith's winning the lottery is not an exception to rules governing lotteries: although Smith's chances of winning are only one in a million, the 'laws of lottery' make it certain that some individual will win the lottery and that Smith has a chance equal to any other lottery ticket-holder of winning. Thus, in evaluating the Times' report that Smith is a winner, one would not invoke the principle of relative likelihood but would instead, as Hambourger himself

points out, ascertain the reliability of the Times in making such reports or seek further evidence that would corroborate the Times' report.

However, it is possible to construct an example involving lotteries that would require an application of Hume's principle of relative likelihood. We would want this example to be analogous to the problem of evaluating the credibility of a report of an improbable event, improbable not in the sense that the statistical odds are against it, but in the sense that the event reported does not conform to causal regularities pertaining to its type. Moreover, this example should be analogous to our situation with respect to having knowledge of the laws of nature. The secret springs and principles of nature, Hume often wrote, are unknown to us. The farthest we can go towards knowing these secret springs and principles is to form generalizations based on observed uniformities in nature. To set up an analogous situation involving a lottery, we must suppose a type of lottery for which the precise rules of the lottery are unknown to its players. Knowledge of the rules of the lottery would be derived by generalizing from observed uniformities in the way the lottery is conducted. Therefore, we would want there to be several examples of the lottery on which to base these generalizations. In order to meet these conditions, let us suppose there exists a small country, call it Lottovania, that has sponsored a lottery every month for the past hundred years. It is known that the governors of Lottovania print up an indefinitely large number of tickets each month, but distribute only some of them. Each month a winning ticket number is announced, but as it happens, in all the one hundred years of the Lottovania Lottery,

there has never been a citizen with a winning ticket. That is, while there has always been a winning ticket, the winning ticket has always been selected from one of the undistributed tickets. Based on the observation that in every known drawing the winning ticket has been selected from among the undistributed tickets, one would reasonably infer that one of the 'rules of lottery' is that all winning tickets are undistributed tickets.

Now suppose that a newspaper, the Lottovania Times, reports that Smith of Lottovania won this month's lottery. Suppose that the Lottovania Times has a good track record of accurate reporting, say, erring only once in every 10,000 reports. In reporting that there is a winner of the Lottovania Lottery the Lottovania Times would be reporting an event which is not consistent or conformable with past experience, and hence, an improbable event (the fact that it is Smith or anybody else is not relevant to its improbability). How do we determine whether the Lottovania Times' report should be believed? In this case, the probability that the report is correct or in error is not to be determined by its track record alone, although it may be a relevant factor. We should also want to know if the event it reports is an instance of a regular pattern or type known to occur. While it may be possible that either the governors of Lottovania changed the rules or the rules were not what they were thought to be, the fact that the event the Times reports does not conform to past experience provides grounds for adopting a cautious skepticism regarding the report. To determine the credibility of the report, we would want to know if there is additional confirming evidence that the report is true.

The Principle of Relative Likelihood Applied to Miracles

Now let us consider how the principle of relative likelihood can be applied to the evaluation of reports of miracles. Hambourger maintains that it may be reasonable to infer a miracle actually has occurred provided an event is (1) sufficiently well testified to warrant the belief that the event has occurred, (2) without any plausible natural explanation and (3) the type of event which would be appropriate for God to cause.[12] While not advancing an argument supporting the adequacy of these conditions, he provides hypothetical examples that he believes intuitively establish his case, one of which is the following:

> If all records and accounts from the beginning of the last century agreed that on January 1, 1800, in all parts of the earth, the clouds of each region began to spell out the Old Testament with perfect precision and in the language of the region, and that they continued to do so for several weeks until the new Testament was completed, then I think it would be hard to escape the conclusion that a miracle had occurred. Thus I believe that, at least in principle, testimony could give one adequate reason to believe in a miracle.[13]

To simplify matters, let us grant straight off that the event Hambourger describes could have occurred and that the amount of testimony said to be available would provide sufficient grounds for believing the event did occur. Doing so would be consistent with Hume's own views (see E 127-128). The question remains whether it would be reasonable to believe that the event, admittedly anomalous, is a miracle. This is a question about the nature or cause of the event rather than about the occurrence

of the event. We are asking whether it is more reasonable to believe that such an event has a supernatural, as opposed to natural, cause. Criteria (1) and (3) together are not sufficient justification for believing an event is miraculous because even the most ordinary natural events can meet these conditions. The two criteria thus do not by themselves provide a means for rationally discriminating between the natural and the miraculous. This leaves criterion (2) for identifying events as miraculous. But an event that has no ready natural explanation is not necessarily an event that has no natural cause. To be a miracle an event must be inexplicable not in terms of what appears to us to be laws of nature but in terms of what laws of nature actually are. On what grounds would it be reasonable to infer that this condition is met in Hambourger's hypothetical example?

Other hypotheses would be possible. The event could be evidence that the laws of nature are not what we thought them to be. Perhaps someone or some group of people, not God, without anyone else's knowledge, could have learned the true causes of cloud formation and used this knowledge to produce some amazing effect, like spelling out the Old and New Testaments. Or the event could be of a different nature than it is thought to be. Perhaps the clouds were not really clouds but laser images produced by creatures from outer-space. Perhaps these space-creatures were carrying out a religious mission, or perhaps they were simply toying with the gullibility of a less intellectually advanced species. Applying Hume's principle of relative likelihood, one must ask if it is always more likely, i.e., conformable to experience, that those claiming the event to be a miracle are mistaken rather than that the event is a

genuine violation of a law of nature. Counter-instances of what are taken to be natural laws are not by themselves evidence establishing that no natural law could possibly explain them: at most they provide grounds for revising our formulations of natural laws or seeking an improved understanding of the nature of the phenomena in question. At the very least they provide grounds for suspending judgments about the nature of their cause until more evidence is available. On the other hand, past experience shows that what are at one time considered violations of natural laws are frequently found at some later time not to be so. Proportioning belief to evidence, therefore, it is more reasonable to believe that the claim that an event is a miracle is mistaken than it is that the event is a violation of natural law.[14]

It might be objected that insisting that the weight of evidence will <u>always</u> be against inferring that laws have been violated through divine agency is merely a dogmatic rejection of supernatural causation: if one assumes that God exists, that it is consistent with divine nature to intervene with nature, and that a certain event, having no ready natural explanation, is the type of event that is appropriate for God to cause, then it would be reasonable to hypothesize a divine origin for the event. The difficulty with this argument is that it justifies too much. First, unless one assumes that all anomalous events appropriate for God to cause are so caused, one cannot rationally discriminate between those that are and those that are not. Second, one can no more reasonably assume that an anomalous event is caused by God given a set of assumptions about the existence and nature of God any more than one can say the event is caused by unknown alien life-forms,

gremlins, demons, fairies or any other fanciful creature given a similar set of assumptions about their existence and imagined pattern of behavior. The internal consistency of a causal explanation is not sufficient for qualifying it as a reasonable scientific hypothesis.

Sorensen's Criticism

Sorensen provides a different version of the Butlerian argument which, initially at any rate, appears to avoid the shortcomings of Hambourger's lottery example. Case by case, Sorensen grants, it may be more probable that those reporting a miracle are either lying or mistaken than that the miracle has occurred. Yet the amount of testimony about the occurrence of miracles may make it probable that at least one miracle has occurred, even if one does not know which alleged miraculous event is truly miraculous. Lotteries, he explains, provide a clear illustration of this possibility: the probability that a given lottery ticket is the winning ticket is quite low, yet it is highly probable, in fact certain, that one of the tickets is a winning ticket, even if one does not know which one it will be. Just as case-by-case skepticism concerning whether a given ticket is a winning ticket does not entail skepticism concerning the existence of a winning ticket, so too case-by-case skepticism of miracles is not sufficient to establish a complete skepticism concerning the existence of miracles. Sorensen concludes that in order for Hume to establish this stronger form of skepticism, he must show that the low probabilities of individual testimonies being true do not 'add up' to make probable the existence of at least one miracle.

Evaluation of Sorensen's Argument

Sorensen, like Hambourger, overlooks the two-fold sense of probability; probability pertaining to events qua unique occurrences and probabilities pertaining to events qua tokens instantiating event-types. Whether the low probabilities of a lottery ticket being the winning ticket can 'add up' to a high probability that there is at least one winning ticket depends upon the reason for which these probabilities are low.

Assuming a lottery whose rules require that there will be at least one winning ticket, what makes the probabilities low is, among other things, the number of tickets distributed and, among these, the number of possible winning tickets distributed. Here the low probabilities can 'add up' to a high probability that there is at least one winning ticket, but that is because the rules predetermine that there will be at least one winner. But if we assume a lottery whose rules are unknown, like the Lottovania Lottery, one for which it is not known whether there is a winning ticket, then the low probabilities are determined by quite different criteria: past outcomes of the lottery. In this case the probability of any given ticket being the winning ticket is low because the event-type of which it is a possible instance is one that is contrary to past experience. Consequently, the low probabilities will not 'add up' to a high probability that there is at least one winning ticket since past outcomes of the lottery independently establish this event-type as a low probability.

Similarly, in the case of reports of miracles, the probability that there is at least one true report of a miracle is not determined by the cumulative probabilities that given reports are true,

but by the empirical evidence proving the existence of a miracle. Hume argues against the believability of even at least one miracle by arguing that belief must be proportioned to what is conformable to experience. This principle is an axiom for assessing any possible belief. A miracle is by definition not so conformable. The low probabilities of each particular report of a miracle being true can never add up to a high probability that there is at least one miracle since what makes each miraculous event improbable is not the odds against its being the one thing realized out of a set of possibilities of which at least one will be realized, but its lack of conformity to any observable causal pattern. Sorensen's argument from lotteries, like Hambourger's, misses this fundamental point: Hume's argument does not rely on the calculus of chances but on an analysis of the meaning of a miracle.

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References to Hume's Enquiries Concerning the Human Understanding and Concerning the Principles of Morals, edited by L.A. Selby-Bigge 3rd. ed. revised by P.H. Nidditch, (Oxford: Clarendon Press, 1975) are cited as 'E' followed by the relevant page number(s).

1. Roy A. Sorensen, "Hume's Skepticism Concerning Reports of Miracles," Analysis 20 (1983): 60.

2. Robert Hambourger, "Belief in Miracles and Hume's Essay," Nous 14 (1980): 587-604. An argument analogous to Hambourger's involving rolls of dice was given by R.M. Burns in 1981 to criticize the views of W.A. Wollaston, Hume's predecessor in the debate on miracles. Burns maintains that his criticism applies equally to

Hume's argument. See R.M. Burns, The Great Debate on Miracles: from Glanville to David Hume (Lewisburg: Bucknell University Press, 1981), pp. 92-93. To my knowledge the first criticism of Hambourger's argument to appear in print is Keith Chrzan's "Vindicating the Principle of Relative Likelihood," in International Journal for Philosophy of Religion 16 (1984): 13-18, which is in turn criticized by Bruce Langtry in "Miracles and Principles of Relative Likelihood," International Journal for Philosophy of Religion 18 (1985): 123-131.

3. Butler, Analogy of Religion, 1736, Part II, section II. It is not clear to what version of the a priori argument against the believability of miracles Butler is addressing himself. He refers to the argument as a line of reasoning "commonly supposed," without mentioning any of its advocates by name. The argument also received attention seven years earlier in Sherlock's The Trial of the Witnesses of Jesus (1729). Their common source is likely to have been William Wollaston in The Religion of Nature Delineated (1722). Burns, however, argues that neither Butler nor Sherlock take into account the specific form in which Wollaston casts the argument and speculates that there is likely to have been an earlier version of the argument which anticipates Hume's version more closely than Wollaston's (op. cit., p. 122).

4. In this paper I am assuming the traditional interpretation of Hume's essay is correct, that is, that it was Hume's intention to provide an a priori demonstration of the impossibility of rational belief in miracles. This interpretation went unchallenged until Flew came forward with persuasive arguments showing that Hume does leave open the possibility of rational belief in miracles. See Antony Flew, "Hume's Check," in Philosophical Quarterly 9 (1959): 1-18 and in Chapter 8 of his book, Hume's Philosophy of Belief: A Study of His First Enquiry (New York: The Humanities Press, 1961), pp. 185-186. A particularly strong passage supporting Flew's interpretation is the following: "I beg the limitations here made may be remarked, when I say, that a miracle can never be proved, so as to be the foundation of a system of religion. For I own, that otherwise, there may possibly be miracles, or violations of the usual course of nature, of such a kind as to admit of proof from human testimony" (E 127).

However, this passage must be read in its full context. Following this passage Hume goes on to give an example of what he has in mind, concluding with a statement that takes back everything given in the previous one: "It is evident, that our present philosophers, instead of doubting the fact, ought to receive it as certain, and ought to search for the causes whence it might be derived" (E 128). Hume is saying that while testimony can be sufficient to warrant belief in the occurrence of an event that appears to have no natural explanation, we must not conclude that it can have no natural explanation whatsoever. Rather, we should continue to search for a natural explanation, perhaps in the process revising what we take to be a law of nature. For a detailed evaluation of Flew's position, see Burns, The Great Debate on Miracles, pp. 142-158.

5. Hume's argument can be traced back to Locke's notion that in assessing the probability of the reports of others we must take into account not only the reliability of these witnesses, but also the intrinsic credibility of the event reported. (Locke, An Essay Concerning Human Understanding, Bk. IV, Chap. 15.) Like Hume, Locke believed that the measure of the credibility of an event is its conformity to uniform experience (ibid., section 6). But unlike Hume, Locke believed that miracles are a unique exception to this rule since, being regarded as supernatural, not natural events, they are rendered credible by virtue of realizing ends suitable to divine nature (ibid., Chap. 16, sections 13-14). Hume's argument implicitly assumes that suitability to divine nature is not a sufficient condition for the miraculous and, consequently, that the credibility of miracles first depends on providing grounds for believing that an event is genuinely inexplicable by natural laws.

6. Hambourger, p. 590.

7. Hambourger, p. 599.

8. Hambourger, p. 599.

9. Butler, The Analogy of Religion, with an introduction by Ernest C. Mossner (New York: Frederick Ungar Publishing Co., 1961), pp. 147-148.

10. The Letters of David Hume, ed. J.Y.T. Greig (Oxford: Oxford University Press, 1932; rpt. 1969), I: 25.

11. Critics of Butler generally believe that it is he, not Hume, who has confused credibility with degree of predictability. The nature of this confusion has been expressed in different ways. One early critic of Butler, H. Hughes, argues he confuses "probabilities arising from ignorance and probabilities that have their source of knowledge." See H. Hughes, A Critical Examination of Butler's Analogy (London, 1898), p. 149. Mill accused Butler of "overlooking the distinction between (what may be called) improbability before the fact and improbability after it: or (since as Mr. Venn remarks, the distinction of past and future is not the material circumstance) between the improbability of a mere guess being right and the improbability of an alleged fact being true" (Logic, ii: 173). Venn discusses Butler's idea in The Logic of Chance, Chaps. XII and XVII. This line of criticism against Butler is most recently advocated by Anders Jeffner in Butler and Hume on Religion (Stockholm: Diakonistyrelens Bokforlag, 1966), pp. 122-23. My interpretation of Butler's error is closer to Gladstone's, who argued that the bishop confused two categories of events, namely, events that fall within the normal range of experience which determines the kind of events that are probable and improbable, on the one hand, and those events that are unique and unparalleled in experience, on the other. See Right Hon. W.E. Gladstone, ed., The Works of Joseph Butler, vol. I: The Analogy of Religion (Oxford: Oxford University Press, 1896), p. 306. Recent defenses of Butler on this point are given by Burns in (op. cit., pp. 127-128) and Colin Brown, Miracles and the Critical Mind (Grand Rapids: William B. Eerdmans Publishing Co., 1984), pp. 62-63. Both argue that Butler intended to make the point he is accused of failing to make. Even granting that Butler does not make this error, it is wrong to assume that Hume is making it. Thus Hume could, in good conscience, while aware of Butler's criticism of earlier versions of the a priori argument against believability of miracles, assert the soundness of his own version, believing that Butler's criticism would not apply.

12. Hambourger, p. 600.

13. Hambourger, p. 603.

14. Perhaps anticipating this line of criticism, Hambourger maintains that miracles need not be violations of laws of nature nor even extraordinary or unusual occurrences (p. 602). The most important factor in deciding whether an event is miraculous, he argues, is whether it is the sort of event that is appropriate for God to cause. Following this criterion, sudden religious conversion, 'answered' prayers, awe-provoking coincidences and the like, can reasonably be judged to be miraculous, even if they could also result from natural causes (p. 602). If occurrences that are not extraordinary or unusual can be judged to be miraculous, he concludes, then there is no reason to think that testimony cannot establish the occurrence of miraculous events that are extraordinary. Because Hambourger here advocates a different conception of the miraculous than does Hume, a complete evaluation of his argument would take us afield from an examination of Hume's argument. Hambourger's characterization and defense of the miraculous is similar to that given by R.F. Holland in "The Miraculous," American Philosophical Quarterly 2 (1965): 43-51.