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What is a Miracle?*

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You have kindly asked me to open this series on miracles by examining the question of what a miracle is. Clearly when later lecturers go on to examine the question of whether and when miracles have occurred, you will need to be clear on what it is to say that a miracle has occurred.

I do not think that there is in modern 20th-century usage one clear unambiguous sense of the English word 'miracle'. Sometimes indeed the word is used with no religious connotation at all. People talk of 'miracle drugs' meaning only thereby drugs with surprisingly beneficial effects. But a religious sense of the word is primary, and of course, the only one of interest to us in this context. The trouble is that there is more than one religious sense of the word. For some writers, a miracle is simply any event of deep religious significance. A definition of this kind is given by the influential Protestant theologian Paul Tillich. He writes:

'A genuine miracle is first of all an event which is astonishing, unusual, shaking, without contradicting the rational structure of reality. In the second place it is an event which points to the mystery of being, expressing its relation to us in a definite way. In the third place it is an occurrence which is received as a signevent in an ecstatic experience. Only if these conditions are fulfilled can one speak of a genuine miracle."

By this definition such events as Jesus overthrowing the tables of the money changers, and above all the crucifixion, would be miracles. They have not however usually been so described by Christian writers. Tillich does not seem to me to capture the central sense of the English word 'miracle' or words normally so translated into English. This is not to deny that Tillich's sense might be a useful sense.

Nevertheless Tillich would seem to me to be right in that to be a miracle in a more normal sense an event does have to have some religious significance, but wrong in supposing that that is all that is

^{*}Much of the material used in this lecture is taken from my book *The* Concept of Miracle, London, 1971. The book also discusses, as well as the main issue discussed in this lecture, the question of what is good evidence for the occurrence of a miracle. I am most grateful to the publishers of *The Concept* of Miracle, MacMillan and Co. Ltd., for permission to use material from the book.

necessary. Clearly however unpredictable by scientists, however contrary to the structure of things which science can discover, one would hesitate to call an event a miracle unless it had religious significance. The mere swerving of an atom, contrary to all that science could ever explain, would not be a miracle unless there was some religious point to it. The religious point might be only that it showed the character of God (e.g., his compassion in healing the sick) or the high favour which he had bestowed on some holy man (e.g., that he brought about the miracle after the petition of some saint).

What else then is necessary? It seems clear to me that in a normal sense of the word an event certainly would be a miracle if this condition and both of two further conditions were all fulfilled. The first is that it should constitute a 'violation' (or 'transgression') of natural laws; and the second is that it should be brought about by God or gods. If these conditions as well as the condition of deep religious significance are all fulfilled, clearly we have a miracle. The history of the use of the word 'miracle' and words normally so translated into English would seem to me to show beyond doubt that men have always considered any event which they judged to be a violation of natural laws brought about by a god with deep religious significance to be a 'miracle'. Take a typical healing miracle, Suppose a man to be dying of cancer one day and suddenly the next day to be entirely better without showing a trace of the cancer, and suppose that this occurs after prayer to God. Those religious persons who believe that this occurrence violates natural laws (because if natural laws had brought about their normal effects, the man would have died of cancer), that God brought it about, and that it had deep religious significance would certainly call it for those reasons a 'miracle'. This sense of the word 'miracle' seems to me to be the central sense in which religious men have used it (and words normally so translated) down the ages. However, round this central sense there seems to be a large penumbra. Events which for various reasons almost but not quite satisfy these three conditions have sometimes, and sometimes not, been called 'miracles'. For example, as regards the first, some men would consider an extraordinary coincidence which accorded with natural laws to be a miracle, so long as the other two conditions were fulfilled. Again, as regards the second, St. Thomas Aquinas so defined 'miracle' that God alone could work miracles. Others however have allowed that gods postulated by other religions (if such were to exist) or angels or even men, so long as the latter were given the power by God, could on occasion work miracles. There are one or two stories in Acts of the Apostles which are not unnaturally termed miracle stories in which the agent of the miracle is unquestionably man and not Godconsider the story in Acts 3, where Peter heals a lame man. Some

writers have ignored the third condition. The 18th-century philosopher David Hume who argued so powerfully that it would never be rational for a man to believe that miracles occur, understood by a miracle anything which satisfied the first two conditions. Hume wrote that:

'A miracle may be accurately defined, a transgression of a law of nature by a particular volition of the Deity, or by the interposition of some invisible agent.'²

I shall in this lecture try to analyse carefully what it is for an event to be a miracle in what I have termed the central religious sense, and shall argue that this is a perfectly coherent notion—there may or may not ever have been miracles in this sense, but it is coherent, or logically possible, to suppose that there have been. I shall however concentrate on analysing the first two conditions, and say nothing further about my third condition, that the events have religious significance—not because I do not think it needs analysing, but because I suspect that people are less confused about what constitutes satisfaction of this conditions.

If we can get clear about this central sense, we can get clear about other and related senses. For example we have a sense of 'miracle' derived from the central sense in which anything is a miracle which satisfies the last two conditions. If we are clear as to what it is to satisfy all three conditions, we shall be clear as to what it is to satisfy just two of them. I do not in general wish to pronounce on what is the Old Testament or New Testament understanding of a miracle—that is a task for later lecturers—or what is the most useful understanding for Christians today, only to offer you some clear and coherent alternative possibilities. However, I concentrate on the central sense, because wider senses can easily be derived from it by modifying or abandoning one of the conditions, and because it seems to be beyond doubt the sense in which 'miracle' has been understood by most Christian theologians during many of the Christian centuries-e.g. the Middle Ages. However, as I have a faint although perhaps unjustified feeling that some in this audience will not feel that satisfaction of the first condition is of any relevance to religion today, I will just add this remark. There is an order of nature in which events largely, though perhaps within limits (e.g., the Quantum limit) follow each other in accordance with deterministic laws. This order, some of you may believe, is brought about by God. Now if the only events which happen in the world are those which accord with natural laws, then if God is responsible for them, his action in bringing about just those events rather than some others is to be dated to the beginning of the Universe. He will of course be currently responsible for keeping the Universe going, but which events take place will be

largely a matter of a prearranged plan. God's responsibility for the events which happen would be like that of the designer of a planetarium—which events happen are all preplanned, simply because whatever natural laws operate, always have been operating. Yet it has often been considered a central doctrine of the Christian faith that God responds to man, changes his actions because of the choices which men make; and if the latter are not predetermined, the former cannot be either. If God's reaction to man is not prearranged, it will sometimes involve upsetting any prearranged order, violating his own natural laws. If there are not sometimes violations of natural laws, I cannot see how God can respond to human action and human prayer. For all these reasons I consider it not unprofitable to investigate the first as well as the other conditions which I have set out.

So, then, what is it for an event to be a violation of a law of nature? First, what is a law of nature? A law of nature is, I suggest, a true lawlike statement. A lawlike statement is a statement of the form 'of physical necessity events of type A are (or are followed by) events of type B'. For perfectly satisfactory examples of true lawlike statements we shall have to wait for the work of scientists of the future. But we can be reasonably confident that the science of our day can tell us what are, to a high degree of approximation, true lawlike statements-e.g., 'material bodies attract each other with forces proportional to the product of their masses and inversely proportional to the square of their distance apart', 'material bodies near the surface of the Earth are subject to a gravitational attraction towards the centre of the Earth of c.32 ft/sec², 'all material bodies travel slower than light'. These can be expressed clumsily, but accurately, in the form which I have just given-e.g., 'of physical necessity a material body being at one place is followed t secs later by its being at a place less than ct km distant' (where c is the velocity of light in km/sec). Note that laws are concerned with events of some one kind being followed by events of some other kind-with what follows 'iron being placed in nitric acid' or 'a material body being at a place', of which kind there is no limit to the number of logically possible instances. It follows that there is no limit to the number of times that lawlike statements can be tested. Laws are never concerned as such with events picked out by a description which only one event could satisfy-'this bit of iron being placed in that nitric acid at 12 midday on Wednesday 23rd April 1975'. Note further that laws do not merely describe what does happen, but say what has to happen. The evidence that some lawlike statement is a true one is provided by its accounting simply and coherently for (almost all) known data and by its subsequent predictions coming off. Our evidence that 'all planets move in ellipses with the Sun at one focus' is that we have many recorded past planetary positions.

almost all of which lie, for each planet, on an ellipse with the Sun at one focus; that a simple hypothesis about the future behaviour of planets is they will continue to move in ellipses, rather than in more complicated curves; and that subsequent predictions from our hypothesis are successful.

Given this understanding of a law of nature, what is meant by a violation of a law of nature? I think that those who, like Hume. have used this or a similar expression have intended to mean by it an occurrence of a non-repeatable counter-instance to a law of nature. Now events contrary to predictions of lawlike statements which we had good reason to believe to be laws of nature often occur. But if we have good reason to believe that they have occurred and good reason to believe that similar events would occur in similar circumstances, then undoubtedly we have good reason to believe that the lawlike statements which we previously believed to be laws of nature were not in fact such laws. For then the real laws of nature will, we can best suppose, be the old purported laws with a modification for the circumstances in question. There cannot be repeatable counterinstances to genuine laws of nature, that is, counter-instances which would be repeated in similar circumstances. Repeatable counterinstances to purported laws only show those purported laws not to be genuine laws. Repeatable counter-instances to the Boyle-Charles show only that it is not a genuine law.

But what are we to say if we have good reason to believe that an event E has occurred contrary to the predictions of a lawlike statement L which otherwise we have good reason to believe to be a law of nature, and we have good reason to believe that events similar to E would not occur in circumstances as similar as we like in any respect to those of the occurrence of E. Maybe we have good reason to believe that one day a planet moved off its elliptical path, but reason to believe that that would not happen again in similar circumstances. E would then be a non-repeatable counter-instance to L. In this case we could say either (as before) that L cannot be the law of nature operative in the field, since an exception to its operation has occurred, or that L is the law of nature operative in the field, but that an exceptional non-repeatable counter-instance to its occurrence has occurred. The advantage of saving the former is an obvious one. At first sight there seems a formal incompatibility between 'of physical necessity A's are B's' and 'this is an A but not a B'. Both statements cannot be true together, the argument goes; if there is an exception to its operation, then the purported law cannot be a true law. The advantage of saving the latter is however this. Ex hypothesi, the evidence shows that we cannot replace L by a more successful law allowing us to predict E as well as other phenomena supporting L. For any modified formula which allowed us to predict E would allow us to predict similar events in similar

circumstances (since lawlike statements always say that events of a certain kind happen under certain circumstances) and hence ex hypothesi, we have good reason to believe, would give false predictions. Whereas if we leave the formula L unmodified, it will, we have good reason to believe, give correct predictions in all other conceivable circumstances. Hence if we are to say that any law of nature is operative in the field in question we must say that it is L. The only alternative is to say that no law of nature operates in the field. Yet saying this does not seem to do justice to the (in general) enormous success of L in predicting occurrences in the field.

For these reasons it seems not unnatural to describe E as a nonrepeatable counter-instance to a law of nature L, and thus to give sense to the notion of a violation of a law of nature. If we do say this we have to understand the *operation* of a universal law of the form 'of physical necessity so-and-so's are such-and-such' as logically compatible with 'this is a so-and-so and is not such-andsuch'. So to say that a certain such lawlike statement is true, that it is a law, is to say that in general its predictions (observed and unobserved) are true and that any exceptions to its operation cannot be accounted for by another formula which could be taken as a law (by the criteria stated earlier). One must thus distinguish between a lawlike statement being a law *and* its being a law which holds without exception.

I believe this second account of the way to describe the relation between a formula which otherwise we have good reason to believe to be a law of nature, and an isolated exception to it, to be more natural than the first, that is, to do more justice to the way in which most of us ordinarily talk about these matters. However that may be, it is clearly a coherent way of talking, and it is the way adopted by those who talk of violations of natural laws. For if any exception to its operation was incompatible with a lawlike statement being a true law, there appears to be no ready sense which could be given to 'a violation of a law of nature'.

The crucial question however is what would be good reason for believing that an event E, if it occurred, was a non-repeatable as opposed to a repeatable counter-instance to a lawlike statement L which we have on all other evidence good reason to believe to be a law of nature.

Recall that the evidence that L is a law of nature is that it accounts for (almost all) known data simply and coherently and that its subsequent predictions come off. Now it seems that what counts as a simple formula in this context is relative to the quantity of data. A formula of the complexity of Einstein's field equations would only be a simple extrapolation from a vast quantity of data. Or, to take an artificial example, the formula 'y = x + (x - 1) (x - 2) (x - 3) (x - 4)(x - 5)' would not be a simple formula when our only data were that observations of values x of a variable X had been found correlated with values y of a variable Y at points (1, 1), (2, 2), (3, 3), (4, 4), and (5, 5). This is to say that the small quantity of data give no grounds for supposing that the cited formula is a true law of nature, even though the observations are as predicted by the formula. Yet if many more observations conformed, to the cited formula, we should have grounds for believing it to state a true law of nature.

Now to have evidence that E is a non-repeatable counter-instance to a law L, it is clearly necessary that we do not currently have any rival formula L¹ which is sufficiently simple relative to the available data to be regarded as a law of nature, sufficiently simple for us to have grounds to believe its predictions where they differ from those of L. But merely not having a formula L¹ is insufficient. We need evidence that no such formula could be constructed to account for all past and future data in the field. Now since simplicity is relative to data we can never have conclusive evidence that there is no such formula. However complex a formula L¹ may be in itself new data could keep on turning up in accordance with it, so that it eventually proves a simple extrapolation from those data. In other words, however odd an event E may be relative to our present knowledge of other events, new events may always turn up of such a character that E fits into their pattern. However we may have good inductive evidence to suppose that they won't. We can have evidence that any law L¹ which would account for E would have to be of such complexity as on *a priori* and empirical grounds it is very unlikely that a law will be.

Let me show by an example how we could have this kind of evidence. Suppose E to be the levitation (i.e. rising into the air and remaining floating on it, in circumstances where no known forces other than gravity-e.g., magnetism-are acting) of a certain holy person. E is thus a counter-instance to otherwise well-substantiated laws of nature L (viz., the laws of mechanics, electro-magnetism, etc.) which together purport to give an account of all the forces operating in nature. If there were a fairly simple lawlike statement L^1 which predicted E as well as all past and future gravitational phenomena, that would be the true law and so E would not be a violation of a law of nature. L' might differ from L in postulating the operation of an entirely new kind of force, e.g., that under certain circumstances bodies exercise a gravitational repulsion on each other, and those circumstances would include the circumstances in which E occurred. We cannot conclusively show that there is no such formula L^{1} . However we can have good reason for believing that there is no such formula. First, we may have simple inductive evidence. All the formulae which predict E as well as other data which we test prove to be worse predictors than L in areas where their predictions differ from L. Further, we may be able to prove that any formula which

did predict E as well as other known data would have to be of at least a certain kind of complexity. The more complicated a formula, relative to our present data, the less likely it is to be true. Thus we might be able to show that any such amended gravitational laws would have to postulate something like relaxations of the gravitational law at 2,000-year intervals in the regions of people with a reputation for sanctity. But to postulate this is to postulate a complexity in our laws of gravitation which makes them laws of a very different kind from our other physical laws, so that the set of all natural laws would form a very complex ill-fitting set. The evidence in that case would be overwhelmingly against any formula which predicted E as well as other known data being a true law of nature. If simplex sigillum veri, then complex sigillum falsi.

We have today to some extent good evidence about what are the laws of nature (at any rate in certain familiar fields and to some degree of approximation) and some of them are so well established and account for so many data that any modifications to them which we could suggest to account for the odd counter-instance would be so clumsy and ad hoc as to upset the whole structure of science. In such cases the evidence is strong that if a purported counterinstance occurred it was a violation of the law of nature. There is a good reason to believe that the following events, if they occurred. would be violations of the laws of nature; levitation; resurrection from the dead in full health of a man whose heart has not been beating for twenty-four hours and who was dead also by other currently used criteria; water turning into wine without the assistance of chemical apparatus or catalysts; a man getting better from polio in a minute. Of course we might be mistaken. Maybe such events would not violate natural laws. But then we can only at any time believe and act on the evidence then available. And the evidence now available makes it highly probable that such events if they occurred would constitute violations of natural laws.

(If you are going to be influenced strongly by the 'we might be mistaken' into being over-sceptical about claims about miracles, you should bear in mind that 'we might be mistaken' in supposing that a number of events which have happened in this room since the beginning of this lecture do not violate laws of nature. In fact they might be gross violations of natural laws, which our ignorance of what are the true laws of nature prevents us from seeing. 'We might be mistaken' is a knife which cuts both ways.)

So much for what is a violation of a law of nature. The concept seems a coherent one. Whether there are such violations is another matter. We have considered the evidence that events of certain kinds (e.g., levitations), if they occurred, would be violations. But there is the further question of how we can show that a particular event of such a kind occurred. Now Hume argued that we never could have good

evidence that a particular violation E of a law of nature L occurred. For to hold that L was a law of nature we should need a lot of evidence that on all other occasions when observations had been made L operated. But this evidence would show that it was very likely that L would operate on any other occasion, including the occasion when E was supposed to have occurred. Against this we may have evidence of observers who claim to have seen E occur. But there will only be one or two observers here compared to the host of observers who claim to have observed that L operated on other occasions. The weight of evidence will therefore, Hume argued, always be against the occurrence of E. I believe that this argument about weight of evidence is mistaken. There are occasions when it is rational to believe the testimony of two or three witnesses (or one's own eyes!) to what happened on a particular occasion, despite evidence that that sort of thing has never happened on other occasions. However I am afraid that for my argument on this I must refer you to my book. To discuss in detail what kind of evidence there could be that a particular violation occurred would take us beyond the main topic set for this lecture.

I pass therefore to consider my second condition for an event being a miracle-that it must be brought about by God or gods. I understand by a god a very powerful and knowledgeable non-embodied person (i.e., a spirit). God, with a capital 'G', is obviously a very special sort of god-an omnipotent, omniscient, perfectly good, necessary being, Creator and sustainer of the Universe. Discussion of what is meant by the words which I have just used and whether the concept of such a being is a coherent one are clearly matters which would take us far beyond the narrow topic of this lecture. I shall therefore assume that the concept of God is a coherent one which you understand, and I shall concentrate rather on what it is for a person to 'bring about' some state of affairs. It is very important to do this because you might suppose that the only kind of bringing about that there is is the kind formulated in scientific laws. If you did this you would be adopting Hume's account of bringing about or causing. On this account (very roughly) causing is a relation between events (or states of affairs). An event C₁ brings about an event E_1 if and only if C_1 is followed by E_1 and C_1 is an event of a kind C, E₁ an event of a kind E, and it is a law of nature L that C's are followed by E's. Thus the liberation from constraint of a stone 16 ft. above the Earth in vacuo subject to no forces except gravity brings about its hitting the ground one second later-because the first event is followed by the second event, the first event is an instance of a body being free in Space x ft. above the Earth in vacuo and subject to no forces except gravity when the second event is an instance of a body being $x = \frac{1}{2}$ g t² ft. nearer to the Earth t seconds later, and it is a law of nature that free bodies (subject to no forces except

gravity) near the surface of the Earth travel $\frac{1}{2}$ g t² ft. towards the centre of the Earth in t seconds. Now if that sort of bringing about was the only sort of bringing about that there was, then clearly anything which an agent brought about would be explicable by scientific laws and so not constitute a violation of such laws; for, on this view, bringing about is just a matter of following a scientific law.

However, Humean or scientific causation is not the only kind of causation or bringing about, and Humean scientific explanation is not the only kind of explanation. There is another kind of explanation which we use frequently and recognize as a perfectly proper kind of explanation. I will call it personal explanation. We use this kind of explanation when we explain events as actions of agents or as brought about by actions of agents for certain purposes. You use it when you explain my coming to Cambridge today as something which I did intentionally (i.e., as an action of mine, not just something that happened) for a purpose-in order to give this lecture. We are all the time explaining events in this way, as actions of agents done for such and such purposes, and it is recognized that we are indeed explaining when we do this. In such explanation we cite as the cause not an event but an agent, and as the reason why the cause brings about the effect not the operation of a natural law, but the agent's purpose or intention.

It will, I hope, be useful to elaborate a little more fully the structure of personal explanation in order to distinguish it from scientific. In personal explanation an event is first classified as an action. By an action I understand something which an agent does intentionally, that is does meaning to do it. An action may be either a basic action (something which the agent just does straight off, does not do by doing some other action) or a non-basic action (something which the agent does by doing something else). A nonbasic action is a basic action together with an intended consequence of it. Thus moving one's finger is a basic action of a man. A man does not do it by doing something else. Yet shooting a man is a non-basic action-a man does it by moving his finger against a trigger. The shooting consists of the latter action together with the intended consequence of a bullet entering the victim's body. Various movements of a person's body are classified as actions of his, and various other ones are not so classified. My hand moving may sometimes be an action-my moving my hand-or it may be no action, a mere reflex movement.

Classifying some event as an action provides part of the explanation of its occurrence. Wondering why a man's ear moved, we may be told that he moved it, for moving his ears is something which that man can do. Or if a leg of what we supposed to be a corpse moves it is part of the explanation of why it moved to say that really the

corpse is a living person and he moved the leg. Again, it has sometimes been supposed that men can move things at a distance from them just by so choosing, an achievement termed telekinesis. In such a case we would explain the movement of those things as basic actions of a man. His power of performing basic actions would then extend beyond the limits of what we ordinarily think of as his body. Once personal explanation has classified an event (E) as an action (A) of some agent (P) it goes on further to explain it by citing the purpose or reason or intention which the agent had in doing the action-though some explanation is provided of an event by classifying it as an action, even if we do not know the agent's intention. The intention may be, minimally, just to do that action. A man may wave his hand about just for the sake of waving his hand about. But normally basic actions are done for some further purpose; they are done to achieve some further goal (G). This goal is often some state of affairs which will, the agent believes, follow from the basic action by a process of normal scientific causality. I may hit a nut with a hammer in order to crush it. That the crushing of the nut (G) follows from the wielding of the hammer is to be explained by the normal pattern of scientific explanation. The agent then seeks to achieve G by doing because he believes that A will cause G. But G may be related to A in other ways. A may be the first action of a sequence of actions which, if they are all performed, the agent believes, will constitute G. A man may sing one note in order to sing a whole tune of which that note is the first. Actions then are further explained by the goal which, the agent believes, they will achieve.

So then when persons bring about things, their doing so is the operation of a different kind of causality from the scientific, and personal explanation is a different kind of explanation from the scientific. This is not to deny that in the case of humans the operation of personal causality may depend on their brains and nerves being in certain states and on the operation of certain laws about how nerve impulses are transmitted. But it is clearly coherent to suppose that sometimes it does not so depend-Uri Geller may bend a fork without his doing so being dependent on anything that happens in his brain or nerves. Personal explanation as such does not necessarily involve reference to brain or nerves and personal explanation explains. Now when the theist claims that God brings about things, he is providing a personal explanation of their occurrence (and he claims that God's bringing about things does not depend on any material goings-on for its efficacy). The theist is providing a personal explanation, whether his claim is that God made and sustains in being the Universe, or whether his claim is that from time to time God interferes in the orderly operation of the Universe, which he had made and keeps going. So the claim that God brought about the turning of water into wine or a man suddenly recovering from cancer is the claim that these things are basic acts of God; like a man's moving his hand or, better perhaps like a man conjuring up a picture or running through a chain of reasoning in his head—something which he just does.

So much for what it is for a god to bring about a violation of natural laws. What now would be evidence that he does? Even if we have evidence for supposing that a violation of natural laws E has occurred, what reason can we have for supposing that a god has brought it about? I have not discussed what evidence we can have that a particular violation of a law of nature has occurred, but I will say something very briefly about what evidence we can have that a certain event E, given that it is a violation of a law of nature, has been brought about by a god. There is an initial presupposition, it is slightly more likely than not, that any given event has an explanation. Ex hypothesi scientific explanation cannot explain E. I know of only one other kind of explanation of contingent events -personal explanation. So there is automatically some a priori reason for supposing that there is a personal explanation of E. If to all appearances no embodied agent, such as a man (e.g. Uri Geller), brought about E, there is some grounds for supposing that a disembodied agent such as a god, brought it about. However this ground is a pretty slender one and it would. I think, need to be backed up by considerations of other kinds. I suggest that there are two kinds of further evidence which we could have that E was due to the action of a god. First, there may be strong similarity between the circumstances of the occurrence of E and the circumstance of the occurrence of things typically brought about by embodied persons such as men, sufficient to justify us postulating a cause similar in some respects, viz., a disembodied person. If E occurred in answer to a request for it to occur, that would be such a similarity. If when E occurred, there was heard a voice explaining why he had brought about E, that would be another such similarity. In reports about purported violations of natural laws we often have the former, very seldom the latter. Evidence of this kind I will call internal evidence, meaning simply evidence which arises in the immediate spatio-temporal vicinity of E and suggests that it, not anything else, has been brought about by a god. It must be admitted that for most purported violations of natural laws, internal evidence that they are due to the act of a god is not very strong. Secondly we may have what I shall term external evidence-that is, evidence from a much wider field that there exists a god who is the sort of being who might well be expected to bring about events like E. This would be any evidence that there is a god and any evidence of his character. What would this be? Well, if there is force in such arguments, it would be the evidence which traditionally features at the beginning of arguments for the existence of God-the evidence

of the existence and design of the Universe, and its providential operation down the ages. Whatever good reasons (if there are any) which men have had for believing in the existence of one or more gods is evidence of the existence of a being with the power to bring about events such as E; and any evidence from these or other fields that he is the sort of being who might be expected to interfere in the universe to produce an event like E is evidence of a being with the character to bring about E. I could not of course in a lecture like this begin to assess the strength of such evidence. The only point which I wish to make is that the stronger is such evidence, the more likely it is that a particular violation E is due to the agency of a god. Conversely the more evidence there is that there is no god, or that whatever god there is does not have such a character to be likely to bring about E, the less likely it is that E was brought about by a god. Like philosophy and science, natural theology is an integrated subject: evidence from distant fields can make it more or less reasonable to describe a particular event as a miracle.

So then I conclude that there is a central sense of the word 'miracle' in which a miracle is any event which satisfies the three criteria which I set out. There may or may not ever be miracles in the sense, but it is coherent to suppose that there are. The word may however also be used in other wider or related senses, e.g. as anything which satisfies both the second and third criteria. The man who is interested in miracles in Bible or church needs to be clear about his use of the word—in what sense of the word is he claiming that miracles have or have not occurred. I claim to have analysed a central sense, and thereby provided the material for analysis of wider and related senses. I hope that my analysis will prove of use in consideration of the themes and arguments of the subsequent lectures in this series.

Notes

- 1 Paul Tillich, Systematic Theology, Vol. 1 (London 1953), p.130.
- 2 David Hume An Enquiry Concerning Human Understanding, Section 10 'Of Miracles', (first published 1748), (ed.) L. A. Selby Bigg (Oxford 1902), p.115, n. 1.