

## THE PHILOSOPHICAL IMPLICATIONS OF FOREKNOWLEDGE.

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WHEN the Secretary asked me to introduce a philosophical discussion on a subject connected with psychical research, I felt that I had a plain duty to consent, although I would much rather have declined. As readers of my books are aware, it has always seemed to me most strange and most deplorable that the vast majority of philosophers and psychologists should utterly ignore the strong *prima facie* case that exists for the occurrence of many supernormal phenomena which, if genuine, must profoundly affect our theories of the human mind, its cognitive powers, and its relation to the human body. I could say a good deal, which might be interesting but would certainly be painful, about some of the psychological causes of this attitude ; but I prefer to welcome the very evident signs of a change in it, and to congratulate the Aristotelian Society and the Mind Association on their courage in treating with the contempt that it deserves the accusation of "having gone spooky" which they will certainly incur in some circles.

I do not myself think that the evidence for alleged supernormal *physical* phenomena is good enough to make them at present worth the serious attention of philosophers. I have no doubt that at least 99 per cent. of them either never happened as reported or are capable of a normal explanation, which, in a great many cases, is simply that of deliberate fraud. We may, therefore, confine our attention to alleged cases of supernormal cognition. These may be roughly classified as follows. We may divide them first into supernormal cognitions of contemporary events or of the contemporary states of things or persons, and supernormal cognitions of past or future events or the past or future states of things or persons. Under the first heading would come Clairvoyance and Telepathy. In

my opinion the evidence, both experimental and non-experimental, for the occurrence of these kinds of supernormal cognition is adequate to establish a strong *prima facie* case, which philosophers and psychologists cannot ignore without challenging invidious comparisons to the ostrich. I have dealt with the philosophical implications of clairvoyance and telepathy to the best of my ability in my presidential address on *Normal Cognition, Clairvoyance, and Telepathy* to the Society for Psychical Research in May, 1935. It will be found, by anyone whom it may interest, in Vol. XLIII of the S.P.R. *Proceedings*.

Under the second heading would come such knowledge of the past as was claimed by Miss Jourdain and Miss Moberley in their book *An Adventure*, and such foreknowledge as is claimed by Mr. J. W. Dunne in his book *An Experiment with Time*. We will call these "Supernormal Postcognition" and "Supernormal Precognition," respectively. In the present paper I shall be concerned primarily with supernormal precognition, but I shall have to refer occasionally to supernormal postcognition by way of comparison.

I will begin by stating what parts of the subject I do, and what parts I do not, intend to discuss. (1) I am not going to put forward or to criticize any theory about the *modus operandi* of veridical supernormal precognition, supposing it to be possible and supposing that there is satisfactory evidence that it actually occurs. I have no theory of my own to suggest. The only theory known to me which seems worth consideration is that proposed by Mr. Dunne in his *Experiment with Time*. I have tried to restate and to criticize it in an article entitled *Mr. Dunne's Theory of Time* in *Philosophy* for April, 1935. As anyone who cares to consult that article will see, I cannot accept the theory as it stands, though I think it reflects very great credit on Mr. Dunne's originality and ingenuity. (2) I am not going to state or appraise the evidence which has been produced for the occurrence of supernormal foreknowledge. So far as concerns the English evidence, this has been admirably done by Mr. H. F. Saltmarsh in his *Report on Cases of Apparent Precognition*, which will be found

in Vol. XLII of the S.P.R. *Proceedings*. There is also a great deal of very impressive evidence from French sources in Dr. Osty's *La Connaissance Supranormale* and Richet's *L'Avenir et la Précognition*. I shall assume that the quantity and quality of the evidence are such as would make the hypothesis that veridical supernormal precognition occurs worth serious consideration *unless* there be some logical or metaphysical impossibility in it. No amount of empirical evidence would give the slightest probability to the hypothesis that there are squares whose diagonals are commensurate with their sides, because this supposition is known to be logically impossible. Now a great many people feel that the hypothesis of veridical supernormal precognition is in this position. (3) It is therefore very important to discover why this *a priori* objection is felt, and whether it is valid or not. This is a question for professional philosophers, like ourselves, and it is this question which I shall make the central topic of my paper.

I think that the *a priori* objection which many people feel against the very notion of veridical supernormal precognition can be dissected into at least three parts. No doubt they are closely interconnected, and no doubt the plain man does not very clearly distinguish them; but it is our business to do so. I propose to call them the "Epistemological," the "Causal" and the "Fatalistic" objections, and I will now treat them in turn.

(1) *The Epistemological Objection*.—We must begin by noticing that veridical precognition would not raise any special *a priori* difficulties if it consisted in inferring propositions about the future from general laws and from singular facts about the present or the past. It might still be supernormal in some cases. But, if so, this would only be because in some cases it might require a supernormal knowledge of general laws or of singular facts about the present or the past or because it might require supernormal powers of calculation and inference. The epistemological objection with which we are going to deal is concerned only with veridical precognition which is assumed to be non-inferential.

This being understood, the objection may be put as follows. To say that a person P had a non-inferential veridical cognition of an object O at a moment  $t$  is to say that the object O stood at the moment  $t$  in a certain relation to the person P, viz., in the relation of being cognized by P. Now an object cannot stand in any relations to anything unless and until it exists. But to say that P had a non-inferential veridical *precognition* of O at the moment  $t$  implies that O did not exist at  $t$ , but only began to exist at some later moment  $t^1$ . So the phrase "non-inferential veridical precognition by P of O at  $t$ " involves a plain contradiction. It implies that O stood in a certain relation to P at a time when O did not exist, and therefore could not stand in any relation to anything.

Is there anything in this objection? The first point to notice is that, if it were valid at all, it would be just as fatal to memory of events in the past as to veridical non-inferential cognition of events in the future. If it is obvious that a term which does not yet exist cannot yet stand in any relation to anything, it is equally obvious that a term which no longer exists can no longer stand in any relation to anything. But to say that I remember at  $t_2$  an event which happened at  $t_1$  is to say that at  $t_2$  this event has the relational property of being cognized by me. On the other hand, since the event no longer exists at  $t_2$ , it can have no relations to anything at that time. The argument is precisely parallel in the two cases. Since memory is certainly non-inferential postcognition, and since we are not prepared to reject the possibility of veridical memory, there must be something wrong somewhere in the epistemological objection to the possibility of non-inferential veridical precognition. What is it? I will first give the solution for memory; it will then be easy to apply it to non-inferential precognition.

It is worth while to remark at the outset that non-inferential precognition, if it happens at all, must on any view be more like memory than like perception of contemporary events. For such precognition would agree with

memory and differ from sense-perception in that the cognized object is cognized as occurring at a different date from the act of cognizing. Let us then begin by considering the nature of memory. Here, of course, we shall be confining our attention to memory in the sense of a present non-inferential cognition of certain events as having happened in the past. The word "memory" is also used to mean an acquired power to repeat or to utilize in the present something that was learned in the past, as when I say that I remember the opening lines of *Paradise Lost* or the first proposition of Euclid. Memory, in this latter sense, has obviously no close likeness to precognition.

I must begin by pointing out and removing certain tiresome verbal ambiguities. In ordinary language to say that X is remembering such and such an event implies that the event actually happened. If we believe that it did not happen, we say that X does not really remember it, but only thinks he remembers it. Yet, from a purely psychological and epistemological point of view, the experience may be exactly alike whether it be veridical or delusive. Now we want to analyse such experiences psychologically and epistemologically, without implying by the words which we use anything whatever as to whether they are veridical or delusive ; for we know that some are delusive and we believe that others are veridical. Therefore we want a purely psychological term with no implications about truth or falsity. I propose to use the terms "ostensible memory" and "ostensible remembering" in this purely psychological sense. We can then distinguish two sub-classes of ostensible rememberings, viz., "veridical" and "delusive" ones. What is expressed in ordinary speech by saying that X is remembering so-and-so would therefore be expressed by us in the phrase "X is ostensibly remembering so-and-so, and this ostensible remembering is veridical." What is expressed in ordinary speech by saying that X only thinks he is remembering so-and-so would be expressed by us in the phrase "X is ostensibly remembering so-and-so, but this ostensible remembering

is delusive." We must now try to analyse the experience of ostensibly remembering an event.

Such an experience contains two utterly different but intimately connected factors. In the first place, the person concerned is imaging a certain image, visual or auditory or otherwise. This image is a *contemporary* existent; and, if the person who is imaging it attends to the question of its date, he has no hesitation in saying that it is present and not past. The second factor is that the experiment uncritically and automatically takes for granted that there was a certain one event in his own *past* life, of which this image is the present representative; and he automatically bases on certain qualities of his present image certain beliefs about the character and the recency of this assumed past event. These two factors may be called respectively "imaging" and "retrospectively referring."

Imaging can occur without the image being retrospectively referred. I may image a certain image, and it may be uniquely related to a certain one event in my past life in such a way that it is *in fact* the present representative of that past event; and yet I may not base upon it a belief that there was such an event. In that case I am not ostensibly remembering that past event. On the other hand, the second factor cannot occur without the first. One must be imaging an image in order to have something as a basis for retrospective reference. I propose to call any image which is *in fact* the present representative of a certain past event in the history of the person who images it a "retro-presentative" image, regardless of whether the experient does or does not retrospectively refer it.

Now the retrospective beliefs which a person bases on his awareness of a present image may, like any other beliefs, be true or false. There may or there may not have been one particular event in his past life of which this image is the present representative. And, if there was such an event, it may or may not have had the characteristics which this retro-presentative image causes him to believe that it had. If the retrospective beliefs are true,

the ostensible memory is veridical ; if they are false, it is delusive.

I have said that in ostensible memory we have certain retrospective beliefs "based upon" awareness of a present image and its qualities. I must now say something about this vague phrase "based upon." In the first place it does *not* mean "inferred from." Of course we have plenty of inferential beliefs about the past, and many of them are about events in our own past lives. But the very essence of ostensible memory is that it is not inferential, In any inference there must be at least one general premise and there must be a process of reasoning. Plainly there is nothing of the kind in ostensible remembering. Moreover, we could not have any inferential beliefs about the past unless we already had some non-inferential beliefs about it. For the general laws or the statistical generalizations which are used as premises in such inferences are believed only because of observations which we ostensibly remember to have made in the past. What is meant by saying that the retrospective beliefs are "based upon" awareness of a present image and its qualities is roughly as follows. These beliefs would not have occurred when and where they did if the experient had not then and there been aware of an image ; and the propositions believed by him would have been different in detail if the image had been different in certain respects.

It is useful to compare the part played in ostensible memory by awareness of an image with the part played in ostensible sense-perception by awareness of a *sensum*, *i.e.*, by sensation. In ostensible sense-perception, whether veridical or delusive, I sense a certain *sensum*, visual, auditory, tactual or what not ; and I automatically and uncritically base on this experience a belief that there is a certain one physical thing or event, outside me in space, which is existing or happening *now* and is manifesting itself to me by this sensation. In ostensible memory I image a certain image, and I automatically and uncritically base on this experience a belief that there *was* a certain one event in my own past life, of which this image is the

present representative. The three vitally important points for us to notice are the following :—(i) Both ostensible sense-perception and ostensible memory are “ immediate ” experiences, in the sense that they do not involve inference. In this respect they can be contrasted respectively with my present belief that there are chairs in the next room and my present belief that England was formerly connected by land with the Continent. (ii) Both of them *seem* to the uncritical experient to be “ immediate ” in the further sense of being acts of *prehension* or *acquaintance*, in the one case with contemporary physical things or events, and in the other with past events in one’s own life. (iii) In both cases a little philosophical reflexion on the facts of delusive ostensible sense-perception and delusive ostensible memory shows that they are not “ immediate ” in this sense. They do indeed involve acts of prehension as essential constituents. In ostensible sense-perception, whether veridical or delusive, the experient really is acquainted with *something*, viz., a sensum ; and in ostensible memory, whether veridical or delusive, he really is acquainted with *something*, viz., an image. But what he claims to be perceiving, in the one case, is not a sensum, but a contemporary physical thing or event outside him in space ; and what he claims to be remembering in the other case is not a present image, but a past event in his own life.

We are now in a position to remove the epistemological objection to memory, and to see how it arises. And, when we have done this, we shall be able to see how non-inferential precognition must be analysed if it is to escape this kind of objection. The epistemological objection to the possibility of veridical memory rests entirely on the tacit assumption that to remember an event is to have a present prehension of an event which is past. This would entail that the event, which *no longer* exists, nevertheless stands to the act of remembering, which is *now* occurring, in the direct two-term relation of prehended object to act of prehending. And this is condemned as absurd.

The answer to this objection is simply to give the right analysis and to point out how the wrong one came to



seem plausible. On the right analysis *something* is prehended, viz., an image. But this is contemporary, and it is not the remembered event. Again, something is judged or believed on the basis of this prehended image. This something is a *proposition*, to the effect that there was an event of such and such a kind in the experient's past life and that the prehended image is its present representative. This proposition, like all propositions, has no date ; it is not an event or a thing or a person, though it is about a person and about a past event. There is, therefore, no difficulty in the fact that it can be the object of a present act of believing. Lastly, if, and only if, the ostensible remembering is veridical, there actually *was* such an event in the experient's past life as he believes there to have been on the basis of the present image which he is now prehending. In that case, and only in that case, there is a relation, though a very indirect one, between this past event and the present experience of ostensibly remembering. It is this. The past event then corresponds to or accords with the present belief about his own past which the experient automatically and uncritically bases on his present image.

No doubt, the causes of the wrong analysis of ostensible memory being so prevalent are the following. In the first place, people are inclined to confine their attention to ostensible memories which are veridical, and to forget that there are plenty which are delusive and that the latter are *psychologically* indistinguishable from the former. Now the purely prehensive analysis of ostensible memory has no plausibility whatever when applied to ostensible memories which are delusive, but it seems quite plausible if one forgets about them and thinks only of those which are veridical.

Secondly, the fact that ostensible memory, like ostensible sense-perception, is "immediate," in the sense of being non-inferential, may lead people to think that it is "immediate" in the sense of being purely prehensive. And they may be confirmed in this mistake by the fact that ostensible memory really does contain a prehension as an essential

factor, and that it is rather easy to overlook the other factor which is equally essential. This other factor is not a prehension of a particular existent, but is the uncritical acceptance of a proposition (true or false) about one's own past life.

Lastly, it must be noted that everyone who is not a professional philosopher tends to regard sense-perception as purely prehensive, viz., as consisting in a prehension by the percipient of some contemporary physical thing or event. It is only reflective analysis which shows that this account is much too simple to fit the facts as a whole. Now there are likenesses between ostensible memory and ostensible sense-perception, and there are striking differences between both of them and discursive or inferential cognition. Therefore there will be a strong tendency to think that memory is prehensive of past events, since sense-perception is mistakenly believed to be prehensive of contemporary physical things and events.

It remains to apply these remarks to precognition, and to remove the epistemological objection to the possibility of veridical non-inferential precognition. I shall begin, as before, by stating how I propose to use my terms. I am going to use the term "ostensible foreseeing" as equivalent to "ostensible non-inferential precognition." And I am going to use both these equivalent phrases in a purely psychological sense, just as I used the terms "ostensible memory" and "ostensible sense-perception." Then I shall distinguish between ostensible foreseeings which are veridical and those which are delusive. There is no doubt that there are ostensible foreseeings; the only question is whether any of them are veridical and whether these are too numerous and too detailed to be attributable to chance.

Now, in order to avoid the epistemological objection, we have simply to analyse ostensible foreseeing in the way in which we analysed ostensible remembering. When a person has an ostensible foreseeing the experience involves two factors. He images a certain image, which is, of course, contemporary with his act of imaging. And he automatically, uncritically, and non-inferentially bases

upon his prehension of this image a belief that there *will be* an event of a certain kind, of which this image is the present representative. If his ostensible precognition is veridical, this present belief will eventually be verified by the occurrence of such an event as he believes to be going to happen. If it is delusive, the belief will be falsified by the non-occurrence of any such event in the context in which it was expected to happen. Even if the ostensible foreseeing should be veridical, there is no question of its being a present prehension of the future event which later on happens and verifies it. *Something* is prehended, but it is the present image and not the foreseen future event. Something is judged or believed, viz., a timeless proposition to the effect that there will be an event of a certain kind in a certain context and that the prehended image is its present representative.

So the purely epistemological objection to the possibility of veridical non-inferential precognition vanishes in smoke. The fact is that most people who have tried to theorize about non-inferential precognition have made needless difficulties for themselves by making two mistakes. In the first place, they have tried to assimilate it to sense-perception, when they ought to have assimilated it to memory. And, secondly, they have tacitly assumed an extremely naïve prehensive analysis, which is plausible, though mistaken, when applied to ostensible sense-perception, and is simply nonsensical when applied to ostensible remembering or ostensible foreseeing.

Before leaving this topic I must mention the following possibility. In talking of memory I said that a person may be aware of an image, which is *in fact* retro-representative, without at the time basing any retrospective belief on it, and therefore without ostensibly remembering the past event which it in fact represents. Suppose that this person keeps a diary, and that at some later date he is reading through one of his old diaries. Then a certain passage in the diary which he is now reading may both make him remember having had this image and give him reason to believe that it was a representative of a certain earlier

event which is recorded in this passage. Now suppose that veridical foreseeing occurs, and suppose that our analysis of ostensible foreseeing is correct. Then it is likely that there would be "pro-presentative" images on which the person who has them bases *no* prospective belief at the time, just as there are retro-presentative images on which the person who has them bases no retrospective belief at the time. Let us suppose that this happens to a person in a dream, for instance. Then at the time he does not have any experience which can properly be called "ostensibly foreseeing" a certain future event, any more than the person in my previous example had any experience which could properly be called "ostensibly remembering" a certain past event. But suppose that the dream was, for some reason, recorded or told to another person at breakfast. Later on, events may happen which give the dreamer or the friend to whom he related his dream good reason to believe that the dream was *in fact* pro-presentative of those events. Much of the evidence adduced for supernatural precognition is really evidence for the occurrence of images which were *not* prospectively referred by the experient at the time when he had them, but were shown by subsequent events to have been *in fact* pro-presentative.

It remains to notice an intermediate case which is fairly common. A person may dream that he is witnessing or taking part in certain events at a certain familiar place, and in the dream he may take those events to be present. *E.g.*, he may dream that he is watching a race at a well-known racecourse, that he is seeing a certain horse coming in first, and that he is hearing the crowd shouting a certain name. On waking he, of course, recognizes that the incidents which he has been ostensibly previewing are not contemporary, and he may recognize that the dream refers to a race in which he is interested and which he has arranged to attend next week. He therefore now refers the image of the winning horse and the shouted name to that future race-meeting. If that horse should win in that race, this will *pro tanto* be evidence in favour of the view that his dream contained images which were *in fact* pro-

presentative. But it cannot be said that the *dream itself* was an instance of veridical foreseeing; for it was not an instance of ostensible *precognition* at all. It was an instance of ostensible sense-perception; and, in that respect, it was delusive, though subsequent reflexion on it enabled the experient to precognize a certain event correctly.

(2) *The Causal Objection.*—Suppose that, at a certain moment  $t_2$ , I remember a certain event  $e$  which happened at an earlier moment  $t_1$  in my life. If we ask for a causal explanation of the occurrence of a memory of this particular event at this particular moment, we are given the following answer, which we find fairly satisfactory in principle. We are told that the original experience  $e$  at  $t_1$  set up a characteristic kind of process or a characteristic structural modification in my mind or my brain or in both; that this process has been going on, or that this structural modification has persisted, during the interval between  $t_1$  and  $t_2$ ; that at  $t_2$  a certain other experience (which we may call a “reminder”) occurred in me; that, for certain reasons which could often be assigned, this reminder linked up in a specially intimate way with this structural modification or with the contemporary phase of this continuous process; and that the cause of my remembering  $e$  at  $t_2$  is the conjunction of the reminder at  $t_2$  with the simultaneous phase of this continuous process or with the persistent structural modification initiated by my experience at  $t_1$ . There may be a good deal of mythology in this causal explanation; but it is acceptable mythology, bearing a close analogy to certain observable facts in other departments of phenomena.

But suppose that, instead of remembering at  $t_2$  an event which happened at an earlier moment  $t_1$ , I veridically foresaw at  $t_2$  an event which did not happen until a later moment  $t_3$ . Or suppose that, even if I did not have at  $t_2$  an experience of ostensible foreseeing, I had then an image which subsequent experience shows to have been in fact pro-presentative of a certain event at  $t_3$ . How can we account for the occurrence of a pro-presentative

image of this particular future event at this particular moment? Since the event which it pro-presents had not yet happened when the pro-presentative image occurred, it cannot yet have had any effects. It cannot yet have initiated any characteristic kind of process or structural modification in my brain or my mind. Any *past* experience of mine may have causal *descendants* in all the later stages of my history. But an experience which has not yet happened can have no causal descendants until it has happened. It may, of course, have causal *ancestors* in the earlier stages of my history. It will do so, *e.g.*, if it is the fulfilment of an intention which I had formed earlier and gradually carried out. But in most cases of veridical foreseeing, or of images which turn out to have been pro-presentative though they were not prospectively referred at the time, there is no question of the pro-presented event being brought about by a process which was already going on in the experient at the time when he had the image. No doubt the pro-presented event had then a causal ancestor *somewhere* in the universe, if the Law of Universal Causation be true. But, as a rule, this causal ancestor was completely outside the mind and the body of the experient.

So the causal objection comes to this. At the time when a certain person had an image which was pro-presentative of a certain event, that event cannot have had any causal descendants. And, in many cases, its causal ancestors lay wholly outside the experient's body and mind. How, then, could we possibly account for the occurrence in this person at this particular moment of an image which is pro-presentative of this particular future event? The pro-presented event had no causal representative, either ancestor or descendant, in the experient at the time when his pro-presentative image of it occurred.

Before considering the causal objection it is desirable to consider a little more fully the analogy between ostensible remembering and ostensible foreseeing. In my definition and analysis of "ostensible remembering" I said that the experient judges that there was a certain event *in his own*

*past life*, of which the image which he is now having is the present representative. Now it might justly be objected that this is too narrow. We claim to remember events which are not our own experiences; thus, *e.g.*, a person who had been to King George VI's coronation would claim to remember the coronation. On the other hand, it would be contrary to English usage to claim to remember an event which was neither a past experience of one's own, *e.g.*, an attack of toothache, nor the object of a past perception of one's own. Nobody now alive could properly say that he remembers George III's coronation, because no one who is now alive witnessed that event.

Consider now the case of Miss Moberley and Miss Jourdain, the experients who wrote the book *An Adventure*. They claimed to have non-inferential veridical postcognition of certain events which happened at Versailles during the French Revolution. But they did not claim to *remember* those events; and, if they had done so, they would have been understood to be claiming to have pre-existed their present bodies, to have animated other bodies at the time of the French Revolution, and to have witnessed these events when they were happening.

I shall express this limitation, which is part of the definition of "memory," by saying that memory is veridical non-inferential postcognition which is "intra-subjectively circumscribed."

Now this is, so far, merely a question of the meanings and usages of words. But we now come to a point which is not verbal. It is this. We always assume that every normal veridical postcognition is *either* intra-subjectively circumscribed *or* is due to inference from observed present facts and general laws *or* is due to hearing reports or reading records made by other human beings. When our attention is called to an alleged case of veridical postcognition which is apparently not intra-subjectively circumscribed and yet apparently does not rest either on inference or on testimony, such as the case presented by Miss Moberley and Miss Jourdain, we feel extremely puzzled. If we accept it as veridical and as too detailed to be due to chance coinci-

dence, we have to regard it as supernormal, and we try to bring it under our general rule in one way or another. Thus, *e.g.*, some people would try to assimilate it to memory by suggesting that the minds of these two ladies had pre-existed their present bodies, and that they had been witnesses (in bodies, which they had previously animated) of the events which they postcognized in a subsequent incarnation. Others would try to assimilate it to knowledge based on testimony by suggesting that the souls of the persons concerned in these incidents at Versailles in the eighteenth century survived and communicated telepathically with these ladies in the twentieth century. Others again would try to assimilate it to looking at an old photograph, depicting a past scene, which was taken when the scene was still present and has been preserved.

Plainly the difficulty which makes people fly to these rather far-fetched suggestions is a *causal* difficulty. If we adopt any of these suggestions, we can see, at least in outline, a continuous causal chain connecting the original events with the occurrence of the postcognition of them. On either of these theories the original events would be factors in a certain total state of affairs in the eighteenth century which is a causal ancestor of the subsequent post-cognitive experience in the twentieth century. But, unless we accept one or other of these suggestions, there seems to be no continuous causal connexion between the occurrence of the postcognitive experiences and the events which are postcognized. In that case why should the images which occurred in the minds of Miss Moberley and Miss Jourdain at a certain moment have corresponded to *any* actual past event? And why should they have corresponded to the particular past event to which they did correspond, rather than to any other of the infinitely numerous events in the past history of the world which these ladies had never witnessed?

Now it is evident that we must draw a distinction among ostensible precognitions like that which I have just been drawing among ostensible postcognitions. In the first place, there will be intra-subjectively circumscribed



ostensible precognitions. Here the events which are ostensibly precognized are either future experiences of the subject or are events which he will himself perceive. Secondly, there may be ostensible precognitions which are not intra-subjectively circumscribed. Here the events which are ostensibly precognized are neither future experiences of the subject nor events which he will perceive.

Among events of the latter kind three sub-classes must be distinguished :—(i) Those whose occurrence will be reported to the subject or verified by his own observations and inferences *after* they have happened. (ii) Those which the subject will be able, at some *intermediate* date to anticipate with reasonable confidence by normal means from information which will by then be available to him. (iii) Those which fall under neither of these headings. Now the first and the second of these sub-classes could easily be assimilated to the class of intra-subjectively circumscribed veridical precognitions. For it might be suggested that, in these cases, what the subject primarily precognizes is the report which he will in future hear or read, or the anticipation which he will later make on the basis of data which will then be available to him.

Now only intra-subjectively circumscribed veridical precognitions, in the strictest sense, would be analogous to memories. The first sub-class of precognitions which are not intra-subjectively circumscribed would be analogous to remembering a report which one had heard or read, of an event which one had not personally witnessed. The second sub-class would be analogous to remembering an inference which one had made, to the effect that a certain event had probably happened at some earlier date. It is only the third sub-class which would be analogous to the completely anomalous kind of veridical postcognition which is alleged to have happened to Miss Moberley and Miss Jourdain. From the nature of the case most ostensible precognitions which have been shown to be veridical are either intra-subjectively circumscribed or fall into the first or the second of our two sub-classes. The following would be an instance of our third sub-class. Suppose that I have

an ostensible precognition of a certain event, that I write it down without mentioning it to anyone, and that I die before it is due for fulfilment. Suppose that my executors find the prediction among my papers, and that it is subsequently fulfilled. This would fall into our third sub-class, and would be analogous to the veridical postcognition claimed by Miss Moberley and Miss Jourdain.

So far I have been pointing out analogies between ostensible postcognition and ostensible precognition. But now we must note the difference in our attitude towards the two. We have not the least *a priori* objection to the possibility of veridical memory. But our *a priori* objection to the possibility of that kind of veridical precognition which would most closely resemble memory is almost as strong as our *a priori* objection to the possibility of that kind of veridical precognition which would resemble the anomalous postcognitive experiences of Miss Moberley and Miss Jourdain. This difference in our attitude is bound up with the causal objection, as I will now show.

Even if what I veridically precognize is an experience which *I* am going to have or is an event which *I* am going to witness, there seems to be no possible causal explanation of why a certain image which I now have should correspond to *any* future event or to *this* rather than to any other of the infinitely numerous events which will happen from now onwards. The complete cause of the occurrence of a present image in my mind must be in the *past*. If this image is pro-presentative of a certain event, the event which it pro-presents is in the *future*. In the case of memory the causal explanation is in terms of a "trace," left in the subject by a past experience, and a present "reminder." The trace is the present causal descendant in him of a certain past experience of his; and the reminder is some present experience of his which stirs up this particular trace. The immediate causal condition of the ostensible memory-experience is the present excitement of *this* trace. It therefore seems intelligible that the present ostensible memory should correspond to a certain past event, viz., to that particular experience which was the causal progenitor

of this particular trace. But there cannot now be in a person a "trace" of an experience which he has not yet had. And, unless there is now in him something analogous to a "trace" of a future experience, how can anything that happens to him here and now play the part which is played by a "reminder" in memory? What conceivable causal account, then, can be given of veridical non-inferential precognition, even when it is confined to the subject's own future experiences or to events which he will personally witness?

In face of this causal difficulty, which attaches equally to *all* ostensibly non-inferential veridical precognition, we tend to act as many people have acted in face of the anomalous kind of ostensibly non-inferential veridical post-cognition claimed by Miss Moberley and Miss Jourdain. We tend to fall back upon one or other of the following five theories:—(i) That the subject has himself subconsciously inferred, from data which he has subconsciously noted, that a certain event will probably happen in a certain context; and that the results of this inference have emerged into consciousness in the form of an ostensibly non-inferential veridical precognition. (ii) That the subject himself has subconsciously formed an intention to bring about a certain event, and has initiated a course of action which is likely to fulfil this intention; and that the veridical precognition is a by-product in consciousness of this subconscious intention. (iii) That the occurrence of the ostensible precognition, however it may have been caused, sets up a desire for its fulfilment; and that this sets up processes, of which the subject remains unaware, which tend to bring about the ostensibly precognized event and thus to verify the precognition. (iv) That some other human being, now living on earth, has consciously or unconsciously inferred that a certain event will probably happen in a certain context, or has formed a conscious or unconscious intention of bringing it about; that knowledge of his inference or of his intention has been conveyed telepathically to the subconscious part of the subject's mind; that the information, thus subconsciously received, emerges

into the subject's consciousness in the form of an ostensible non-inferential precognition that this event will happen ; and that this is correct, either because the other man's inference was sound or because the other man's intention is eventually carried out. (v) This theory is the same as the fourth, except that we now substitute the phrase " some non-human person or the surviving soul of some dead man " for the phrase " some other human being, now living on earth." We may, if we like, ascribe to such minds a much greater knowledge of past and present facts and general laws and much greater powers of inference than those possessed by any human being now living on earth.

These five alternative theories are not, of course, mutually exclusive. The first three of them do not *explicitly* involve any super-normal factor. But I think it is certain that a great deal of the alleged evidence for veridical foreseeing could not be fitted into them except on the assumption that human beings have supernormal powers of perception, of inference, and of action on the external world. The fourth involves no supernormal *agents*, but it does presuppose the supernormal *process* of telepathic conveyance of information from one embodied human mind to another which may be in no obviously close relationship with it at the time. It would seem, however, that some such process as this has to be postulated in order to account for many well-attested facts of mediumship which have nothing ostensibly precognitive about them. The fifth theory involves both supernormal processes and supernormal agents, for the existence of which we have little, if any, independent evidence. It is, therefore, to be avoided if possible. Yet, if there were many well-attested cases of veridical ostensibly non-inferential precognition which could not be brought under any of the first four heads, we might be forced to accept the fifth theory as a *pis aller* in view of the causal difficulties.

All these rather fantastic theories are proposed in order to avoid the causal difficulty about veridical foreseeing. Is that difficulty genuine and insuperable ? Let us consider what a person means when he says that the available

evidence suffices to show that there is veridical foreseeing. Plainly he does not mean simply that in many cases a later event, which a person had no rational ground for expecting, *happens* to accord to a very high degree with an earlier experience in this person of ostensible foreseeing. He means that there is an amount of accordance between such subsequent events and ostensible foreseeings which is too great to be ascribed to "chance coincidence." He may admit that, if each case stood alone, it might be reasonable to count it as a chance coincidence. But he asserts that, when the reported cases are taken together, this view of the accordance between ostensible foreseeings and subsequent events cannot reasonably be held.

Now we are not concerned here with the truth or falsity of this opinion, but with its implications. What is implied by saying that a certain correlation between the intrinsic characteristics of  $x$  and those of  $y$  is not a "chance coincidence"? It is equivalent to saying that this correlation is due either (*a*) to  $x$  being a cause-factor in a causal ancestor of  $y$ , or (*b*) to  $y$  being a cause-factor in a causal ancestor of  $x$ , or (*c*) to  $x$  and  $y$  being effect-factors in causal descendants of a common causal ancestor  $z$ . Suppose now that  $x$  is an ostensible foreseeing or an image which turns out to have been pro-presentative, and suppose that  $y$  is a subsequent event whose concordance with  $x$  is said to be "something more than a chance coincidence." Alternative (*b*) is ruled out by the self-evident general principle that an event cannot be a cause-factor until it has happened, and that it can then be a factor only in determining *later* events. We are thus left with alternatives (*a*) and (*c*). The first of these alternatives is equivalent to saying that the ostensible foreseeing or the pro-presentative image was a cause-factor in a causal ancestor of the event which subsequently verified it. The theory (iii) in our enumeration of five theories above is an instance of this alternative. The other alternative is equivalent to saying that there is a certain causal ancestor which has a series of successive causal descendants, that the ostensible foreseeing or the pro-presentative image is an effect-factor in one of the earlier

of these causal descendants, and that the event which verifies it is an effect-factor in one of the later of them. Theory (ii) in our enumeration above is an instance of this alternative.

Since we are tied down to alternatives (*a*) (*b*), and (*c*) by the definition of "not being a chance coincidence," and since (*b*) is excluded by a principle about causation which appears to be self-evident, it would seem to be legitimate to infer that all possible theories about veridical ostensible foreseeing must be variations on the following four themes :—

(i) That the concordance between an ostensible foreseeing or a pro-presentative image and a certain subsequent event, however detailed it may be and however numerous may be the instances of it, is merely a chance coincidence.

(ii) That the precognitive experience is only ostensibly non-inferential, but really depends on inference either in the subject himself or in some other mind ; and that the pro-presentative image is just a by-product which arises in the subject's mind as a result of inferring a certain conclusion about the future.

(iii) That the ostensible foreseeing or the pro-presentative image is a cause-factor in a causal ancestor of the event which subsequently fulfils it.

(iv) That there is a certain causal ancestor which has a series of successive causal descendants, that the ostensible foreseeing or the pro-presentative image is an effect-factor in one of the earlier of these, and that the event which subsequently verifies it is an effect-factor in one of the later of them. If this be granted, the fundamental difficulty of the subject is this. It is alleged that ostensible foreseeings have been verified by subsequent events too often and too accurately to allow us to accept the first alternative. On the other hand, many of the best cases are such that it is impossible to bring them under any of the remaining three alternatives unless we postulate additional dimensions of space or agents and causal laws which are quite unfamiliar and for which we have no independent evidence.

If I were faced with a choice between these evils, I should consider that the least of them is to postulate additional

dimensions of space, provided that this will account for the facts. If I thought, as Mr. Dunne seems to do, that I should have to postulate an unending series of dimensions and then an "observer at infinity" (who would plainly have to be the last term of a series which, by hypothesis, could have no last term), I should, of course, reject this alternative as nonsensical. But it is certain that these extravagances are not needed in order to account for the possibility of veridical ostensible foreseeing on the lines of Mr. Dunne's theory. For this purpose five, and only five, spatial dimensions are needed. The fallacy which caused Mr. Dunne to embark on his wild-goose chase after the "observer at infinity" can easily be detected and avoided. Therefore there is no *prima facie* objection to a theory which tries to explain veridical ostensible foreseeing in the way in which Mr. Dunne tries to do so. And, although I am wholly dissatisfied with Mr. Dunne's detailed explanation, as it stands, because I cannot see what would correspond in the physical and mental world to the various geometrically defined entities involved in the theory, I do think that there is at least a chance of working out a satisfactory theory on his general lines.

If this much be granted, I think it is obviously preferable to postulate a five-dimensional space rather than to pursue the other alternatives that I have enumerated. After all, nothing could be more completely contingent than the apparent fact that the space of nature has just three dimensions. As Hinton showed, there are some physical facts which would be rather neatly explained by the assumption that it has four dimensions. The assumption of a fifth dimension, in order to explain certain very odd cognitive phenomena, is internally consistent and intelligible, and we have no ground for holding it to be antecedently improbable. I do not think that this can be said of any of the other alternatives open to us.

If I were wise, I should leave the matter at this point. But I propose to "go in off the deep end" while I am about it, and to make a perfectly fantastic suggestion. I believe that this suggestion is of some interest on two

grounds : (i) So far as I can see, it is the one and only way in which the prehensive analysis of ostensible foreseeing, which we rejected long ago, could possibly be made intelligible and rehabilitated. And (ii) even if we continue to reject the prehensive analysis, the suggestion would enable us to deal with the causal difficulty in a way which we have hitherto shunned as impossible.

It will be remembered that we rejected the prehensive analysis of ostensible foreseeing because it entails that an event which has not yet happened "co-exists with" the foreseeing of it, and therefore in some sense "already exists." Let us ask ourselves now whether there is any possible way of giving a meaning to such apparently nonsensical statements.

So far as I can see, the only way in which a sense could be given to such statements would be to ascribe a second dimension to time. A point which is *east* of another point may be either *north* of, or *south* of, or in the *same latitude* as the latter. Suppose that "east of" corresponds to "later than" in the only temporal dimension that we ordinarily recognize. And suppose that there were a second temporal dimension, and that "later than" in this dimension corresponds to "north of" in the case of points on the earth's surface. Then an event which is "after" a certain other event, in the only temporal dimension which we ordinarily recognize, might be either "after" or "before" or "simultaneous with" this other event in the second temporal dimension which persons who accept a prehensive analysis of foreseeing would have to postulate.

Now, if we had to postulate a hitherto unsuspected second dimension of time, we should have to revise all our "axioms" about the connexion between time and causation. We might have to say that  $x$  cannot be a causal ancestor of  $y$  unless  $x$  is before  $y$  in *at least one* temporal dimension ; but that  $x$  can be a causal ancestor of  $y$ , provided it is before  $y$  in *one* temporal dimension even if it be after  $y$ , in the other temporal dimension. Nothing could seem more self-evident to most people than the proposition that a material object could not get into or out of a continuous



spherical shell unless a hole were made in the latter. Yet it is easy to show that this proposition is not *intrinsically* necessary, but is only a necessary consequence of the quite contingent proposition that the space of nature has but three dimensions.

It may be worth while to develop this very wild suggestion a little further. Consider any two points  $x$  and  $y$  on the earth's surface. Let us represent the proposition " $x$  is due north of  $y$ " by the symbol  $xNNy$ ; and let us use similar symbols, *mutatis mutandis*, for the other possibilities. Then there are eight possible spatial relations in which  $x$  may stand to  $y$ , viz., (1)  $xNNy$ , (2)  $xNEy$ , (3)  $xEEy$ , (4)  $xESy$ , (5)  $xSSy$ , (6)  $xSWy$ , (7)  $xWWy$ , and (8)  $xWNy$ . The corresponding relations in which  $y$  may stand to  $x$  are, of course, (i)  $ySSx$ , (ii)  $ySWx$ , (iii)  $yWWx$ , (iv)  $yWNx$ , (v)  $yNNx$ , (vi)  $yNEx$ , (vii)  $yEEx$ , and (viii)  $yESx$ . A person who could recognize the distinction of east and west but not that of north and south would lump together cases (1) and (5) and say that  $x$  and  $y$  "coincide in position" in each case. He would lump together cases (2), (3) and (4), and would say that  $x$  is "east" of  $y$  in each case; and he would lump together cases (6), (7) and (8), and would say that  $x$  is "west" of  $y$  in each case.

Now we supposed above that the temporal relation "after," in the one temporal dimension which is familiar to us, is analogous to the spatial relation "east of." And we supposed that "after," in the second temporal dimension with which we are not normally acquainted, is analogous to the spatial relation "north of." Let us denote "after" and "before," in the first temporal dimension, by A and B respectively; and let us denote "after" and "before," in the second temporal dimension, by  $\alpha$  and  $\beta$  respectively. Then, in the spatial analogue, A corresponds to E, B to W,  $\alpha$  to N, and  $\beta$  to S.

Suppose now that  $x$  and  $y$  are two events. If a person judges that  $x$  is *simultaneous with*  $y$ , it may be that (a)  $x$  is simultaneous with  $y$  in both temporal dimensions, or (b)  $x$  is simultaneous with  $y$  in the first and before  $y$  in the second,

or (c) that  $x$  is simultaneous with  $y$  in the first and after  $y$  in the second. These alternatives may be symbolized respectively by  $x \equiv y$ ,  $x\beta\beta y$ , and  $x\alpha\alpha y$ . There is no spatial analogue to (a); but (b) is analogous to  $xSSy$ , and (c) is analogous to  $xNNy$ . Next let us suppose that a person judges that  $x$  is *before*  $y$ . Then it may be that (a)  $x$  is before  $y$  in both dimensions, or (b) that  $x$  is before  $y$  in the first dimension and simultaneous with  $y$  in the second, or (c) that  $x$  is before  $y$  in the first dimension and after  $y$  in the second. These alternatives may be symbolized respectively by  $xB\beta y$ ,  $xBB y$  and  $xB\alpha y$ ; and they correspond respectively to  $xWSy$ ,  $xWWy$  and  $xWNy$  in the spatial analogy. Lastly, let us suppose that a person judges that  $x$  is *after*  $y$ . Then it may be that (a)  $x$  is after  $y$  in both dimensions, or (b) that  $x$  is after  $y$  in the first dimension and is simultaneous with  $y$  in the second, or (c) that  $x$  is after  $y$  in the first dimension and before  $y$  in the second. These alternatives may be symbolized respectively as  $xA\alpha y$ ,  $xAA y$  and  $xA\beta y$ ; and they correspond respectively to  $xENy$ ,  $xEEy$  and  $xESy$  in the spatial analogy.

Now let us suppose that the true rule about the connexion between causation and temporal relations is the following:—An event  $x$  can be a cause-factor in a causal ancestor of an event  $y$  if, and only if,  $x$  is *before*  $y$  in *at least one* of the two temporal dimensions. (The spatial analogue is that it is necessary and sufficient that  $x$  should be *either west or south* of  $y$ .) Plainly these conditions are fulfilled in the following five cases and in them only, viz.,  $xA\beta y$ ,  $x\beta\beta y$ ,  $x\beta B y$ ,  $xBB y$  and  $xB\alpha y$ . (These correspond to  $xESy$ ,  $xSSy$ ,  $xSWy$ ,  $xWWy$  and  $xWNy$ , respectively, in the spatial analogy.) How would these five cases appear to a person who recognizes only the B-A dimension of time? In the first he would judge that  $x$  is *after*  $y$ ; in the second he would judge that  $x$  is *simultaneous with*  $y$ ; and in the remaining three he would judge that  $x$  is *before*  $y$ . Thus, other things being equal, the cases in which it would appear to him that a *later* event is a cause-factor in a causal ancestor of an *earlier* event would be only one-fourth as numerous as the cases in which it would appear to him

that this causal relation relates an earlier event to a later one or relates two simultaneous events to each other. And it is easy to conceive of special conditions which would reduce this proportion enormously below one-fourth. This would be so if, for some reason, there is a very high negative correlation between standing in the A-relation to an event and standing in the  $\beta$ -relation to the same event.

There is one more point to be noticed before leaving this topic. The relations from  $y$  to  $x$  which are equivalent to the five relations from  $x$  to  $y$  enumerated above are, respectively,  $y\alpha Bx$ ,  $y\alpha\alpha x$ ,  $yA\alpha x$ ,  $yAAx$  and  $y\beta Ax$ . Let us now apply our rule about causation to these. We see that  $y$  could be a cause-factor in a causal ancestor of  $x$  in the *first* and the *fifth* and in them only. For these are the only two in which either B or  $\beta$  occurs. How would these two cases appear to an ordinary observer? It is plain that they would present a double paradox to him. In the first place, as we have already seen, it is possible that what appears to him as a later event may be a cause-factor in a causal ancestor of what appears to him as an earlier event. But, further, in this case  $x$  may be a cause-factor in a causal ancestor of  $y$ , whilst  $y$  may *also* be a cause-factor in a causal ancestor of  $x$ . For here  $x$  is before  $y$  in one of the temporal dimensions, whilst  $y$  is before  $x$  in the other of them.

I will now sum up about this fantastic suggestion. (i) As I have pointed out, there is nothing in the least fantastic in the hypothesis of more than three *spatial* dimensions, as in Mr. Dunne's theory. But the suggestion that *time* may have more than one dimension may be simply nonsensical. Certainly it ought not to be lightly admitted into society merely on the dubious claim to kinship with perfectly respectable hypotheses about additional spatial dimensions. (ii) I believe that some such suggestion as this is the only way to make sense of a purely prehensive analysis of veridical foreseeing and of memory. But this does not do much to recommend it to me. For I do not hanker after such an analysis of these experiences, and I think it most unlikely that any such analysis of

them is correct. (iii) The main interest of the suggestion is in reference to the Causal Objection. Although the non-prehensive analysis of ostensible foreseeing does not *require* the hypothesis of a second temporal dimension in order to make it intelligible, as the prehensive analysis appears to do, yet it *could* be combined with that hypothesis if this were found desirable. Now it will be remembered that we rejected (as contrary to a self-evident principle about causation) the suggestion that the event which subsequently verifies an ostensible foreseeing or concords with a pro-presentative image might be a cause-factor in a causal ancestor of the foreseeing or of the image. We see now that, if we are prepared to swallow the hypothesis of a two-dimensional time and to relax our causal "axiom" in a certain way, we need not necessarily reject this alternative. So we must now, very tentatively, add this alternative to the list of four which we previously stated to be exhaustive.

(3) *The Fatalistic Objection.*—In order to state this objection clearly it will be necessary to define certain terms. I will begin by defining the statement that a certain event  $e$  was "dependent on" a certain voluntary decision  $d$ . It is to have the following meaning. If the person who made the decision  $d$  had instead chosen a different alternative, and all the other circumstances at the time had been as they in fact were, then  $e$  would not have happened. There is no doubt that we all believe, with regard to many events, that they are in this sense dependent on voluntary decisions.

Next, I will define the statement that a certain event  $e$ , which happened at  $t^1$  in a certain place or in a certain person's mind, was "already completely predetermined" at a certain earlier moment  $t$ . It has the following meaning. There is a set of facts about the dispositions, the mutual relations, and the internal states at or before the moment  $t$  of the various substances then existing, which, together with the laws of matter and of mind, *logically entails* that an event exactly like  $e$  will happen after an interval  $t^1-t$  in the place or the mind in which  $e$  did happen.

Suppose now that *e* depends on *d*, in the sense defined, and that *d* is not completely predetermined at any moment. Then it follows that *e* is not completely predetermined at any moment *before* that at which *d* happens. Of course, *e* may still be completely predetermined at moments *after* *d* has happened.

Finally, the following proposition seems self-evident to many people. If an ostensible precognition occurs and is subsequently fulfilled, then, unless this is a mere chance coincidence, the event which subsequently fulfilled it must have been already completely predetermined at the time when the ostensible precognition took place.

Now in many cases an ostensible precognition or a representative image has been fulfilled by a subsequent event which was, to all appearance, dependent on a voluntary decision which took place *after* the ostensibly precognitive experience. Suppose we hold that the fulfilment was not a mere chance coincidence; and suppose we accept the proposition which many people find self-evident. Then we shall have to draw the following conclusion: Either (a) the event which subsequently fulfilled the precognition did *not* really depend on the voluntary decision on which it seemed to depend; or (b) if it did, then that voluntary decision must have been *already* completely predetermined at the time when the precognition took place. On the first alternative, the voluntary decision was quite irrelevant and ineffective as regards the event which seemed to depend on it. On the second alternative, the voluntary decision was completely predetermined some time before it took place. Now many people find it highly repugnant, both intellectually and emotionally, to admit either of these alternatives about voluntary decisions and the events which apparently depend on them. Hence they feel a strong objection to admitting the possibility of veridically precognizing events which are apparently dependent on subsequent voluntary decisions. I think that this is the essence of the Fatalistic Objection.

So far as I can see, there is nothing wrong with the reasoning. It only remains, then, to examine the premise,

*i.e.* the following proposition :—“ If an ostensible precognition occurs and is subsequently fulfilled, then, unless this is a mere chance coincidence, the event which subsequently fulfilled it must have been already completely predetermined at the time when the ostensible precognition took place.” Is this really self-evident ?

I think that it is very important to distinguish a certain pair of statements, which are rather liable to be confused with each other, and to see logical connexion or lack of connexion between them. One is the statement that “ the future is already *predeterminate* ” ; the other is the statement that “ the future is already *predetermined*.” I have explained what the latter means. What is the meaning of the former ? Let  $c$  be any characteristic that can be manifested in time. Suppose that a judgment is made at any moment  $t$  to the effect that an event manifesting the characteristic  $c$  will happen in a certain place or in a certain mind at a certain future moment  $t^1$ . Then this judgment is *already* true or it is *already* false, as the case may be, at the time  $t$  when it is made. The actual course of future history will *show* that it *was* true or will *show* that it *was* false, as the case may be ; but the judgment will not *become* true or *become* false, from being neither the one nor the other, when the moment  $t^1$  is reached. I do not know whether this proposition is important or is a mere triviality ; but, whichever it may be, it is all that is meant by saying that “ the future is already *predeterminate*.”

Now consider an event  $e$  which actually happened at a certain moment  $t^1$  in a certain place or in the mind of a certain person. What would be meant by saying that  $e$  “ was already completely *predeterminate* ” at a certain earlier moment  $t$  ? It would have the following meaning : If  $c$  be any characteristic which  $e$  manifests, then a judgment made at  $t$  to the effect that there will be a manifestation of  $c$  at  $t^1$  in this place or in this mind would *already* have been true at  $t$ .

It is now plain that to say that an event was already *predetermined* at a certain moment and to say that it was already *predeterminate* at that moment are two entirely

different statements. The former is a proposition involving the notion of causation, whilst the latter involves no such notion. There is not the least inconsistency in saying that a certain event  $e$ , which happened at  $t^1$ , was already completely predeterminate at  $t$  but was not then completely predetermined.

Now, so far as I can see, the premise on which the Fatalistic Objection depends seems to be relevant only because these two notions are not clearly distinguished. I think that the following two propositions *are* self-evident : (i) The occurrence of  $e$  at  $t^1$  could not be *inferred with certainty* at an earlier moment  $t$  from facts about what has existed or happened at or before  $t$  unless it were already completely *predetermined* at  $t$ . (ii) An event  $e$  which did not happen until  $t^1$  could not have been *prehended* at an earlier moment  $t$  unless it were already *predeterminate* at  $t$ . The first of these is an immediate consequence of the definitions of the terms which occur in it. The second of them is a consequence of the nature of prehension and the definition of being "predeterminate." If an event can be pre-prehended, it must in some sense co-exist with the pre-prehension of it ; and the precognition must consist in knowing by acquaintance that it has such and such characteristics. This would be impossible unless it is in some sense *already* true that it has these characteristics, *i.e.*, unless it is in some sense already predeterminate. Supposing that a meaning can be given to the notion pre-prehension, it is quite clear that an event need not be completely *predetermined* at the time when it is pre-prehended. All that is necessary is that it should then be *predeterminate*.

I suspect that the premise of the Fatalistic Objection is a confused mixture of the two propositions which I have distinguished above. Now no one supposes that veridical ostensible foreseeing consists in inferring from facts about the past and the present with complete certainty that certain events will happen in the future. Hence the first of these propositions is irrelevant to the whole subject of this paper. On the other hand, the second of these propositions has nothing to do with *predetermination*, and is therefore irrelevant

to the question of the determination and the causal efficacy of voluntary decisions.

Now that this confusion has been removed we can easily settle the question for ourselves. Suppose that the occurrence of  $e$  at  $t_3$  was foreseen by  $A$  at  $t_1$ . Suppose, further, that the occurrence of  $e$  at  $t_3$  was in fact dependent on the occurrence of a certain voluntary decision in  $B$  at an intermediate date  $t_2$ . Does this entail that the occurrence of this decision in this person at  $t_2$  was already predetermined at  $t_1$ ?

It certainly *does* entail the following proposition: If  $A$  had recognized at  $t_1$  (as he very well might in some cases) that the occurrence of  $e$  at  $t_3$  would be dependent on the previous occurrence of such a decision as  $d$  in  $B$ , then he could have inferred that  $B$  would make this decision at some time between  $t_1$  and  $t_3$ . But this is *not* equivalent to, nor does it entail, the proposition that the occurrence of  $d$  in  $B$  at  $t_2$  was already predetermined at  $t_1$ . In order to see this it is only necessary to look back at our definition of "being completely predetermined at a certain moment." In accordance with that definition the statement that the occurrence of  $d$  in  $B$  at  $t_2$  was already completely predetermined at  $t_1$  would have the following meaning. It would mean that there is a set of facts about the dispositions, the mutual relations, and the internal states *at or before*  $t_1$  of the various substances *then* existing, which, together with the laws of matter and of mind, logically entails that an event which has all the characteristics of  $d$  *will* occur in  $B$  *after* an interval  $t_2-t_1$ . The difference between the two propositions is now obvious. The first (which really is entailed by our original suppositions) is about the possibility of inference from factual data about the *remoter future* to factual conclusions about the *less remote future*. The second (which is not entailed by our suppositions) is about the possibility of inferring from factual data about the *present or the past* to factual conclusions about the future.

Finally, the following point is worth noticing. I can infer from events in the less remote past that Julius



Cæsar decided in the more remote past to cross the Rubicon. No one imagines for a moment that this fact shows that Cæsar's decision to cross the Rubicon was completely predetermined at any previous date. Suppose now that an augur at Rome had foreseen those later events from which *we* infer that Cæsar had decided at an earlier date to cross the Rubicon. Obviously, he could have drawn precisely the same conclusion about Cæsar's *then future* decision as we draw about his *now past* decision. And, if the possibility of our making this inference from these data does not require Cæsar's decision to be completely predetermined, why should the possibility of the augur's making the same inference from the same data require this ?