

# Precognition Without Retrocausation

Is a precognitive dream caused by the event it foresees in the future, creating an effect in the past, or other there other, more reasonable ways of interpreting the evidence? Philosopher Stephen Braude examines the alternatives.

## Introduction

Many take it for granted that evidence for precognition would be evidence for retrocausation—that is, counterclockwise causal chains in which future states of affairs cause earlier states of affairs. So for example, when a person has a veridical precognitive dream of a future plane crash, they would say that the dream was caused by the later event. However, there are alternative and reasonable ways of interpreting the evidence for precognition, even after we rule out explanations of the data in terms of non-paranormal processes. These alternative approaches still appeal to the operation of psi, but they appeal only to *clockwise* causal chains. Moreover, the alternative approaches seem to avoid some nagging problems with the retrocausal analysis. Let us begin by surveying our explanatory options.



## The Main Contenders

### Retrocausal

This, of course, is the traditional view of precognition. In its most naive form, it takes the unfortunate term ‘precognition’ literally and considers the phenomenon to be non-inferential *foreknowledge* of a future state of affairs. Some have even taken the cognitive model so far as to define ‘precognition’ as ‘the *perception* of a future state of affairs’. But as most parapsychologists now recognize, the evidence for precognition lends little support to that approach.<sup>[1]</sup> To the extent that the evidence for precognition points at all to retrocausal ESP, it suggests what Broad<sup>[2]</sup> called telepathic or clairvoyant *interaction* rather than telepathic or clairvoyant *cognition*. After all, I might have no idea why I had a precognitive experience, or even *that* the experience was precognitive or that it ‘referred’ to the future. That is why more enlightened retrocausalists drop the requirement that precognition be a form of knowledge, and maintain simply that a precognitive experience *E* at time *t* is the effect of some event *E'* occurring at a later time *t'*.<sup>[3]</sup> For example, whether or not it counts as an instance of knowledge, my precognitive vision or dream of an airplane crash could be interpreted as the effect of a retrocausal process initiated by the subsequent crash.

Of course, the concept of causation is enormously complex, and philosophers have entertained many competing approaches to the subject. Moreover, as one would expect, the concept of retrocausation is even more controversial, and those who consider it indefensible will reject this approach from the start. But, assuming we refuse to explain *away* the precognitive data in terms of normal or abnormal processes, the remaining parapsychological option may strike others as at least equally unpalatable. That option is to explain precognition in terms of clockwise ESP and PK. Eisenbud<sup>[4]</sup> called this the ‘active’ analysis, as opposed to the ‘passive’ retrocausal approach. He chose that terminology because the retrocausal approach explains precognition in terms of mere information reception, whereas the active analysis appeals to something the subject *does*.

The active analysis consists of two component analyses, which may be used together or separately, depending on the nature of the case to be explained.

### Psi-Mediated Inference

The first of these options takes precognition to be formally analogous to a familiar kind of normal inference. Consider the case of an engineer who, after examining a building under construction, claims ‘this building will collapse’. Or, to make the case more analogous to a classic type of ostensible precognition, suppose that the engineer examines the building, goes home for a nap, and has a dream about the building collapsing, from which he infers that the building will indeed collapse. Now the first thing to observe is that the engineer’s statement is a tacit *conditional* or hypothetical. He is not maintaining that the building will collapse *no matter what*. Rather, the engineer’s claim would be expressed more carefully as being of the form, ‘the building will collapse unless \_\_\_\_\_’, and in context one usually knows which conditions

are being taken for granted. Presumably, the engineer means that unless (say) the design is modified or unless different materials are used, collapse is probable (if not inevitable). The next thing to observe is that the engineer bases this judgment on *contemporaneous* information. The conditional assertion, 'the building will collapse', is justified with respect to, or inductively inferred from, presently available information regarding the blueprints, the state of the building, or the materials being used to build it.

Now according to Analysis II, the situation is much the same when a person precognizes a plane crash. First, the precognizer's judgment that the plane will crash is a tacit conditional, 'the plane will crash unless \_\_\_\_' (for example, unless repairs are made, unless the plane takes a different flight path, or unless a different air traffic controller is on the job). Second, this judgment is based on contemporaneous information gained via real-time ESP of relevant states of affairs, such as the mental state of the pilot or air traffic controller, the projected flight path, or the condition of the plane's engines or electrical system. The principal difference, apart from the use of psi, between the precognitive case and that of the engineer is that in the former, neither the precognizer nor anyone else will usually know how to fill in the blank in the conditional 'event *E* will occur unless \_\_\_\_'. Presumably that is because not even the precognizer need be consciously aware of the data on which the inference is based.

In fact, the inference itself need not be conscious. It may occur subconsciously or unconsciously as part of the precognizer's ongoing need-determined psi-scanning, and its overt manifestations may be types of behavior other than first-person reports of precognitive experiences. For example, the precognizer might cancel a train reservation that he unconsciously infers will crash.<sup>[5]</sup> However, he needn't be aware consciously of so much as a 'hunch' that the train will derail. It might even be in his best interest psychologically to mask the source or nature of his information, in which case he might simply appear to lose his desire to make the trip. In other cases, the paranormally acquired information and unconscious inference might find their way into a dream or produce a somatic disorder. For example, rather than ride on the train he unconsciously fears will crash, the ticket holder might suddenly develop a disabling migraine headache.

### **Psychokinesis/Telepathic Influence.**

Some opponents of the retrocausal approach may also find Analysis II unsatisfactory for some or all cases of precognition, at the very least those in which precognitive targets are selected after the precognition by random processes, whose outcomes, we may assume, are non-inferable in principle. They may prefer to suppose that the precognizer paranormally influences later events and thereby *brings about* the state of affairs precognized, for example, that the precognizer of the plane crash disposes events in such a way that the crash occurs, or will occur unless appropriate countervailing measures are taken. That influence could be on physical states of affairs, such as the plane's engines, or a person's mental state, for instance those of the pilot, mechanic, or flight attendant. Clearly, this view encourages us to take seriously the underlying psychodynamics in virtue of which one or more ostensible precognizers might, probably unconsciously, want to bring about the sometimes unfortunate if not tragic events in question. It is no wonder, then, that the best case for this form of the active analysis has been made by a psychoanalyst, Jule Eisenbud.<sup>[6]</sup>

Eisenbud recognized that one can never be certain about underlying motives, much less that one could ever know the full story, that is, the complete array of relevant unconscious goings-on and under-the-surface interactions, normal and paranormal. At best, one can proceed as in other speculative areas of science, by generating hypotheses that tie together systematically as many loose ends as possible. Eisenbud also countered the predictable objection that people are unlikely to will or wish for, even unconsciously, the tragic large-scale disasters that they sometimes seem to precognize, such as the sinking of the Titanic, or the Aberfan mine disaster. According to some, even if people *were* able psychokinetically to bring about events of that magnitude, it is implausible to suppose that they would. Eisenbud's response, in addition to pointing out that psi-mediated inference is still an alternative to the retrocausal hypothesis, is simply to deny that humans are incapable of such a degree of malevolence. He argued, correctly and poignantly, that

...there is no disaster, of whatever magnitude of degree or horror, that has ever been foreshadowed in dream, premonition, or Delphic utterance that cannot be matched in effect by one that has been brought about by some individual deliberately and with full awareness of the consequences... The record on this score is so extensive and so clear, from fatal child abuse to Hiroshima, from capriciously started wars to shocking acts of political terrorism, that there can be no reasonable argument about human propensities in this domain. The only question is whether there is a hidden part of the average well-aculturated human being, who cannot consciously imagine himself battering a child or bombing a school building, that is subject to the same impulses that actuate persons who are openly destructive.<sup>[7]</sup>

## **Advantages of the Active Analysis**

One conspicuous virtue of the active analysis of precognition is that it avoids the notorious *intervention paradox* plaguing the retrocausal analysis. As many have noted, it is puzzling how one could both have a *veridical* or accurate precognition—say, of a plane crash, and then take the necessary steps to prevent it. If, as retrocausalists propose, the plane crash caused the earlier precognition, how could the plane crash then have been prevented? To say it was prevented is to say that there was no future plane crash—hence, no causally efficacious future plane crash in virtue of which the precognitive experience was veridical.

This is clearly no problem for the active analysis. If the precognizer (like the engineer) was simply drawing an inference, conscious or subconscious, from real-time psychic scanning, preventing the plane crash is no more puzzling than preventing the building's collapse, and in both cases we can say the inference about the future was justified, although we wouldn't now call it 'veridical'. The same is true if the precognizer psychokinetically or telepathically brings about the later state of affairs.

The active analysis also avoids a fairly widely-held concern described by CD Broad.<sup>[8]</sup> Broad rejected the idea that a future plane crash could cause an earlier precognitive dream because, at the time of the dream, the plane crash is simply an *unrealized possibility*, and as such it can have no causal consequences at all. Of course, as readers may realize, Broad's claim that future events are unrealized possibilities would be challenged by contemporary physicists who consider time to be an inseparable component of a four-dimensional spacetime continuum, or block universe. They would claim that physics compels us to regard world history as existing in its totality in some timeless sense, and that the unrealized quality of future events is a function of the epistemic limitations of human consciousness rather than a mind-independent feature of nature.

## Problems with Retrocausation

It should also be noted that the retrocausal analysis is conceptually controversial in a way the active analysis is not. This is not the place to survey all the relevant issues, but one important point merits attention here: No *data* require positing retrocausation. Outside of the parapsychological cases, the proposed examples of retrocausation are all highly contrived philosophical thought experiments<sup>[9]</sup> or else still-controversial suggestions concerning the interpretation of physical equations. Moreover, the parapsychological cases can apparently all be accommodated by means of the active analysis, which appeals only to extensions of phenomena for which we already have evidence.

Indeed, as Stephen Braude has explained, putative retrocausal links differ dramatically and profoundly from ordinary types of clockwise causation.<sup>[10]</sup> The first point to notice is that when we identify events *C* and *E* and relate the two causally, we are not picking out two discrete events, or a single event, *CE*, that may be completely isolated from the surrounding mass of happening that we parse according to our needs and interests. Both *C* and *E* have their own individual causal histories running from earlier to later; each is the outcome of an enormous number of converging causal lines. Of course we never identify all those lines when considering what caused the event; we identify only those relevant to the context of inquiry.

Consider an example. Suppose we want to explain what caused the frequent 'dropouts' of sound during CD playback in a hifi system. And notice that different sorts of explanation will be appropriate to different needs to understand. For example, it might be enough to point out that the cables from the CD player to the preamplifier were not fastened securely. But in some contexts we might need to present a richer causal picture. It might be more appropriate and helpful to mention that the CD player had recently been disconnected and reconnected hastily, or that a young child had been playing behind the audio hookups and might have inadvertently, or intentionally, loosened the connection. Or, we might need to mention the poor quality control of the cable manufacturer, which led to the construction of interconnects that fatigue easily or seldom fit securely, and which accordingly require the continued vigilance of the user.

Ordinarily, then, whenever we relate two events as cause and effect, we inevitably presuppose that there is a surrounding network of events leading to and away from them. Any causal connection we identify will always be part of a larger causal nexus spreading indefinitely into the past and future. The particular causal connections we find worthwhile to single out are individuated, on pragmatic grounds, out of an intrinsically seamless web of happening running from earlier to later and leading to and away from the events we relate causally. And from out of that web we can distinguish many different causal lines, some converging toward the individual events and others spreading out from them.

Furthermore, as the example above helps illustrate, when we identify a causal connection and presuppose its surrounding causal history, we needn't have in mind some specific additional story or set of stories to tell about the component events. Rather, we presuppose simply that there is more we *could* say if we had to. In fact, we face a situation analogous to that of persons who plot travel routes for the Automobile Association.<sup>[11]</sup> When asked to trace a route from Baltimore to Boston,

for example, they know that both cities are points on a complex system of roads and that there are different ways of getting from one city to the other. Then they select a path suiting the needs and interests of the traveler. For example, they might select a direct and quick route, rather than one more convoluted and allegedly more scenic. Similarly, when we identify events as cause and effect, we presuppose the possibility of tracing an indefinite number of different sets of connections leading to and away from them—that is, different stories or causal maps, each appropriate to an associated range of interests and requests for explanation and understanding. That is the respect in which an event may correctly be considered a causal condition or product of an enormous number and variety of other events.

In fact, it seems to be a central presupposition, not just of the activity of giving causal explanations, but also of the ordinary concept of an *event*, that events are embedded in this way into a surrounding nexus of related happenings. Generally speaking, events are determinate slices of an intrinsically undifferentiated mass of happening running clockwise from earlier to later, a whole onto which we may trace different causal maps or grids, relevant to different associated needs and interests. That is why my CD playback dropouts may be explained relative to different causal histories. That is also why ordinary events may be embedded in a chain of *transitive causal links*. The loose audio connectors might be traced to my having hastily reconnected my audio components; that event in turn might be traced to my having cleaned all my audio contacts; and that in turn might be the outcome of my wanting to remedy an audible degradation in the sound of my system. And of course this process can be extended indefinitely into the past. Moreover, various sorts of causal histories and transitive causal chains lead *away* from the event explained. For example, the dropouts from my CD player might lead me to believe that the problem is with my player; and that might result in my taking it to a repair shop for unnecessary service, *etc.*

By comparison, retrocausal connections appear to be *isolated* causal links. They do not spread extensively back into the future and out into the past as conventional causal links spread extensively back into the past and out into the future. That is why alleged retrocausal effects (say, precognitive dreams) seem to have no further retrocausal repercussions, although they have plenty of conventional causal consequences. A precognitive dream may cause the dreamer to be upset, enter the experience into a diary, cancel travel plans, and so on. But of course, these are examples of clockwise causality. No account, either of precognition or of retrocausation generally, explains how a later cause can have additional, much less extensive, retrocausal consequences. Rather than being individuated from a mass of happening running counterclockwise from later to earlier, as would be the case if retrocausation mirrored clockwise causation, retrocausal connections seem to stand out like a sore thumb on any causal map.

At the very least, then, retrocausalists must defend the view of causality they seem tacitly to endorse. They must explain why an isolated link deserves to be considered a causal link of *any* sort, never mind its temporal direction. No other sort of putative causal connection lacks an extensive surrounding causal history running temporally in the same direction.

In fact, that is why we often need to *backtrack* through an event's causal history just to speculate responsibly about what that event's causal consequences might be. The following example, from DM Hausman,<sup>[12]</sup> illustrates this nicely. Hausman considers the case of engineers who, when checking the design of a functioning nuclear power plant, ask 'What would happen if that steam pipe were to burst?' He notes that

...the bursting of the pipe may have different consequences when it has different causes....[The engineers] may... do some backtracking and reason, 'If the pipe were to burst, then either it was faulty, or a girder fell on it, or there was an earthquake, or there was sabotage, or the pressure became too great. The consequences of the bursting vary depending on which of these holds'... If the pipe burst because the pressure was too great, and the pressure was too great because the reactor was going out of control, then the consequences of the pipe bursting may be different than if it were caused by corrosion, a faulty weld, or a terrorist's bomb. In order to consider how the world would differ in the future in consequence of the bursting, the engineers must also think about how the world must have differed in order for the bursting to have occurred.<sup>[13]</sup>

Granted, defenders of the retrocausal analysis might insist that in talking about retrocausal connections, they are introducing a new sense of 'cause', appropriate to the unique way in which later events can be causal conditions of earlier events. Or, they might argue that the conventional concept of causality is simply defective and needs to be replaced by one that allows cause and effect to have no surrounding causal history running in the same temporal direction. However, concepts (like events and causal links) are not isolated individuals. In fact, the concept of causation is intimately linked to many others in a larger network of concepts. Presumably, then, retrocausalists cannot be content with mere terminological or conceptual patchwork. In order to revise or supplement the concept of causation, they would have to refashion a large cluster of related concepts, all of them apparently equally indispensable, such as explanation, understanding, event, decision, action, intention. They would not be endorsing the apparently simple view – and indeed the prevailing view of

retrocausation – that the retrocausal arrow is just like the regular causal arrow except for its temporal direction. On the contrary, proponents of the retrocausal analysis of precognition, unlike proponents of the active analysis, would apparently have to defend a sweeping and fundamental revision of our conceptual framework, one that is neither required by the data nor obviously more parsimonious than its alternatives.

Stephen Braude

## Literature

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## References

### Footnotes

1.^ See Braude, 2002.

2.^ Broad, 1962.

3.^ We could state this somewhat more precisely by saying that 'State *s* of a person *P* is precognitive' means 'a causal condition of *s* is some state of affairs occurring later than *s*.'

4.^ Eisenbud, 1982.

5.^ See Cox, 1956.

6.^ Eisenbud, 1982, 1992.

7.^ Eisenbud, 1982, p. 175.

8.^ Broad, 1967.

9.^ See, for example, Dummett, 1954, 1964.

10.^ Braude, 1997, Chapter 6.

11.^ That is, if such persons still exist and haven't been forced out of work by GPS systems.

12.^ Hausman, 1996.

13.^ Hausman, 1996, pp. 65-66.