

The Journal of Parapsychology

EDITORIAL STAFF

J. B. RHINE and J. G. PRATT, *Editors*
ELIZABETH A. McMAHAN, *Assistant Editor*
J. A. GREENWOOD and T. N. E. GREVILLE, *Statistical Editors*
DOROTHY H. POPE, *Managing Editor*

ADVISORY EDITORIAL BOARD

HORNELL HART Duke University	H. H. PRICE University of Oxford
GARDNER MURPHY Menninger Foundation	ROBERT H. THOULESS University of Cambridge

This JOURNAL is published on the fifteenth day of March, June, September, and December by Duke University Press, Durham, North Carolina.

Contributions submitted for publication and all editorial communications should be addressed to the Managing Editor, Dorothy H. Pope, College Station, Durham, North Carolina. Correspondence with the editors is advised before submitting articles other than reports of experimentation. Since it does not forward manuscripts by registered mail, the JOURNAL cannot guarantee that they will not be lost in transit, and contributors are urged to keep copies of their papers. All contributions should be typewritten, double spaced. References should be given in the form adopted by the JOURNAL.

Reprints may be ordered when the proof is returned. The JOURNAL will bear one half the cost of reprints up to two hundred copies. Correspondence concerning subscriptions, change of address, back numbers, and other business communications should be addressed to Dorothy H. Pope, College Station, Durham, N. C.

The subscription price is \$6.00 a year; single current numbers \$1.50. The rate for back volumes is \$7.00; for single numbers \$1.75. Missing numbers will be supplied free when lost in the mails if written notice is given within one month of the date of issue. All remittances should be made payable to the JOURNAL OF PARAPSYCHOLOGY.

Subscriptions may be obtained in Great Britain through the Cambridge University Press, Bentley House, Euston Road, London, N. W. 1.

Entered as second class matter May 21, 1942, at the post office at Durham, N. C., under the act of March 3, 1879.

The Journal of Parapsychology

A SCIENTIFIC QUARTERLY DEALING WITH EXTRASENSORY PERCEPTION,
THE PSYCHOKINETIC EFFECT, AND RELATED TOPICS

EDITORIAL STAFF

J. B. RHINE and J. G. PRATT, *Editors*
ELIZABETH A. McMAHAN, *Assistant Editor*
J. A. GREENWOOD and T. N. E. GREVILLE, *Statistical Editors*
DOROTHY H. POPE, *Managing Editor*

ADVISORY EDITORIAL BOARD

HORNELL HART Duke University	H. H. PRICE University of Oxford
GARDNER MURPHY College of the City of New York	ROBERT H. THOULESS University of Cambridge

Volume XIX
1955

DUKE UNIVERSITY PRESS
DURHAM, N. C.

A Study of Psychokinesis in Its Relation to Physical Conditions...H. Forwald	133
ESP Test with a Spanish Girl	
I. John and Patricia Langdon-Davies	
II. F. Bateman and S. G. Soal.....	155
Relations of Mental Set and Change of Skin Resistance to ESP....Soji Otani	164
A Report on a Sentence Completion Form of Sheep-Goat	
Attitude Scale.....R. L. Van de Castle and R. R. White	171
Editorial:	
Spontaneous Psi Reconsidered.....	180
Letters and Notes	
Parapsychology and the Concept of "Randomness" (C. T. K. Chari).....	190
Precognition and Intervention (Milan Ryzl).....	192

NUMBER 4, DECEMBER, 1955

The Reliable Application of ESP.....Remi J. Cadoret	203
What the Younger Psychologists Think About ESP.....Lucien Warner	228
The Controversy in Science Over ESP	
Editorial: The Critical Background.....	236
Abstracts of Articles in Science	
"Science and the Supernatural".....George R. Price	238
"On 'Science and the Supernatural'".....S. G. Soal	241
"Comments on 'Science and the Supernatural'".....J. B. Rhine	242
"Compatibility of Science and ESP".....P. E. Meehl and M. Scriven	243
"Probability, Logic, and ESP".....P. W. Bridgman	244
"Where Is the Definitive Experiment?".....George R. Price	245
"The Experiment Should Fit the Hypothesis".....J. B. Rhine	246
Communications on the Price Article in Science	
(James C. Crumbaugh, Ralph W. Erickson, Waldron R. Gardiner,	
Edmond P. Gibson, Jack A. Kapchan, Robert A. McConnell, Charles	
E. Ozanne, Kendon Smith).....	247
Editorial Comment: The Balance of the View.....	267
Book Reviews	
An Adventure by C. A. E. Moberly and	
E. F. Jourdain.....Lucille Iremonger	272
Glossary.....	274

The Journal of Parapsychology

Volume 19

MARCH, 1955

Number 1

PRECOGNITION AND INTERVENTION

By LOUISA E. RHINE

ABSTRACT: This paper deals with the question: Can a precognized event be avoided? Since it would appear logically impossible that a truly precognized future could be prevented, it is important to examine any suggestion of evidence that successful intervention actually does occur in spontaneously precognized happenings. In making the study reported here, Dr. L. E. Rhine began with 1,324 cases of spontaneous precognition drawn from her collection of case material, and, by a series of eliminations, ended with only a small number of reports that were such as to meet all of her requirements for successful intervention. She notes that successful intervention would rarely be recognizable. There may well have been intervention in some of the cases eliminated, but in those instances at least one reasonable alternative interpretation was possible. Even the best cases are not considered as beyond all question. They stand merely as meeting the criteria and are subject to the limitations inherent in the case study method. Their value is in the questions they raise. They justify, first, a further inquiry for more of the kind of spontaneous material needed for this problem; and, second, a vigorous effort to initiate an experimental investigation of the intervention problem. In challenging the hypothesis that precognized events are inescapable, even these few cases could be regarded as a starting point.

This is Dr. Rhine's fifth report on her investigation of case material.—Ed.

INTRODUCTION

THE IDEA that it may be possible to know the future or, in other words, to exercise precognition at once raises some difficult secondary questions. No other psi concept cuts across such deeply ingrained ways of thought as this one does. Not only does it appear to contradict the traditional idea of causation, but it also seems to challenge the concept of volitional freedom. For on the face of it at least, it would seem that if the future can be known beforehand, then that future must in some sense already be existent. Like a roll of movie film, it must somehow be fixed and determined and waiting only to

be unrolled and experienced. If such should be the case, the idea of volitional freedom could only be a delusion.

Whether or not such a simile has any validity is, of course, a question. Murphy (9), Thouless (16), and J. B. Rhine (11) have already expressed themselves as finding some reason to think that the occurrence of precognition need not necessarily imply a complete absence of freedom. Their reasons, different in each case, are based on a consideration of, and clarification of, terms: the nature of time; the meaning of freedom; and the extent and character of precognition. But the effect that precognition must have on the idea of free will promises to long remain a debated question. It should be recalled that quite apart from the possibility of precognition, this has been argued for centuries and has finally been more ignored than solved. Now, however, the accumulation of evidence of precognition is such as to arouse a new interest in the old problem.

An evidence of this interest is to be found in current parapsychological literature. In a recent article in the *Journal* of the S. P. R., "Serialism and the Unconscious," (2) Dalton attempts to dust off the old Dunne theory of precognition which dates back to 1927 to see how adequately it can explain the phenomena. The fact that it does not do so very well can be judged, if not from the theory itself, then from the number of persons, Hart (5, 6), Dalton (1), Kruisinga (7), Wilson (17), Slomann (15), Gregory (4), Maunsell (8), each of whom in succeeding issues of the same journal takes exception to it.

In the Dunne theory, it will be remembered, precognition is explained by an infinite series of hypothetical "observers" in the personality, each of which is endowed with a broader time scope than the former. It is hard to see how this theory, stripped of its superficial aspects, does much more than assume the point to be explained; but the profusion of detail seems to have largely obscured this defect. After all, a hypothesis that could fully explain precognition would have to say how the personality, whether as a whole or in part, could foresee the future, or else it would have to explain the nature of time in such a way that the logical barrier to foreknowledge would be removed. It is no explanation merely to *assume* that some part of the personality is able to cross the time boundary.

There is another theory besides Dunne's that has intrigued many

students of parapsychology. This one, proposed in 1934 by H. F. Saltmarsh (14), is based on the William James concept of the specious present, the psychological "now" which has longer duration than the instantaneous present of the physicist and mathematician. Saltmarsh's suggestion was that the specious present may cover a longer period on the unconscious than on the conscious level. And so, if information about an event lying in the longer present, should cross the threshold into consciousness, a precognitive experience would result. Although this theory is easier and simpler than Dunne's, it too seems to beg the question by merely postulating that one factor or part of the personality, in this case the unconscious, can operate across the time barrier.

The two theories are quite different in the methods by which they would permit a precognized future to be changed by human intervention. Dunne's, as re-interpreted by Dalton, postulates a pseudo-time which would be precognizable and in which an intervention could occur, and a true-time, unprecognizable, in which it could not. The device or operation by which an intervention in pseudo-time could affect true time is not disclosed. Saltmarsh visualizes time as something like a series of parallel wires running from past to future, and along which passes a foreward moving "now" (like the head of a zipper) leaving behind it a past of fixed and unchangeable events, but having before it a certain amount of flexibility. The degree of this flexibility would be sufficient to allow for some volitional freedom, but only as much as would be consistent with the main direction of the parallel wires.

A great difference between the attitudes of the authors of these two concepts was that Dunne took his with a great deal of seriousness, even expanding it into something of a world concept. But Saltmarsh did not feel that any scheme yet proposed, even his own, was adequate or satisfactory.

Although in recent years the question has been approached in various ways by philosophers such as Price and Broad (10), Dummett and Flew (3), no one else since Saltmarsh has ventured a theory. But in this same period since Saltmarsh, all the experimental studies on the topic have been made. The results of these researches and the unceasing occurrence of spontaneous experiences that seem to be precognitive give the topic its present interest.

The recent discussion of precognition theory mentioned above, interesting and provocative as it is, also gives an indication of the inherent difficulty of trying to fit theoretical clothing to an actuality the form of which is still unknown. One might venture the guess that when the needed measurements have been taken, a theory to fit them will not require so many refittings and alterations. At the present stage of incomplete knowledge about precognition, the form it takes, and its range or extent, any attempt at theory, no matter how commendable, could hardly be expected to give to the facts more than a name without a substance.

As Thouless said, "When we have far more experimental knowledge about promethic psi (precognition), the difficulties of making a system or theory in which it will appear a natural and inevitable thing may have been largely cleared away. Either the essential step in thought will have become easy or at any rate, the road will have been cleared for a future Einstein of parapsychology. Let us, then, do more experiments." (16)

To this I would add: Let us also consider more cases. Those spontaneous human experiences that seem to be precognitive (for convenience I shall hereafter omit the qualifying "seem to be") may give suggestions as to the dimensions of the process involved. Even though such suggestions must remain tentative until tested by experiment, they can have a preliminary value something like that of scouts in strange territory.

This should be especially true on such a question as whether a precognized future can be averted. For the present, at least, that question seems difficult to approach experimentally, mainly, of course, because data to show successful intervention would cancel the precognized impression. In other words, if intervention occurred in a test, no record of the target would remain against which to check the original call. There would then be no way to know whether it had actually been precognitive. But there are spontaneous cases that involve what appear to be attempts to avert a precognized future event. On a topic as significant as this one, it should be particularly interesting, while waiting for experimental techniques to be devised, to see what these cases suggest. One could at least get from them an idea of what sort of attempts at intervention are reported, something of the relative frequency of such attempts, the

causes and degree of their success or failure, and some impression of the extent to which they may bear on the theoretical question of volitional freedom.

In an earlier paper (13) I discussed types of precognitive experience and the relative frequency of their occurrence; but I did not go into the question of intervention. In the present study I have done so, attempting to survey all the cases in the Duke collection in which it would seem that the question of trying to avert a foreseen event might have arisen. In addition I gathered from the available old published collections all the instances I could find of experiences in which attempts had been made to avert a foreseen event. This paper is a report of what was found.

PROCEDURE AND RESULTS

As reported in the earlier article, there were 1,324 precognitive cases in the Duke Collections I and II. But of course not all of these were pertinent to the present project. In many instances the experience had not been recognized as being precognitive and was recalled only when the later event seemed to give it significance. In such cases, naturally, there would have arisen no impulse to intervene. Only if the individual concerned had felt that his impression related to some event still in the future, or at least if he had taken it seriously and felt it must be meaningful, could the question of intervention have any relevance.

Conveniently, the cases had already been divided into two groups according to the degree of seriousness with which the impression had been taken. Those that had been taken seriously at the time of their occurrence had been labelled *conviction* cases, the others, *non-conviction* (12). The conviction group seemed to offer just the material needed in this study.

From the above total of 1,324 cases, there were 471 that showed conviction. Besides these, 103 more had accumulated recently, making a total of 574. But in some of these conviction cases there would have been no desire to intervene—for in certain ones the foreseen event was a desirable one. There proved to be 141 cases in which this was true and which therefore were not used. These discarded cases consisted mainly of instances of the precognizing of winners of races, lotteries, etc., and of some miscellaneous situa-

tion of minor significance to the individual. There were left, then, 433 cases that involved events whose occurrence the individual might presumably have desired to avoid.

The first division of these cases was made on the basis of whether or not intervention had been attempted. Those in which it had not made up Group I; those in which it had, Group II. In the majority of instances intervention attempts took the form of clear-cut action by the individual to prevent the occurrence of the foreseen event; but occasionally no action, but only a warning or even only added alertness was involved. The concept of intervention thus was interpreted broadly in order not to be too selective too early in the study and thereby miss any suggestion that might be inherent in the material. Later analysis and discrimination could distinguish between superficial appearances and reality.

The next decision involved the question of whether or not the foreseen events were types that could have been changed by human intervention. Even preliminary reading of the cases had given me the impression that logic had not always been a possible guide to the individuals concerned, and sometimes attempts had been made to change the unchangeable; or, vice versa, sometimes no attempt had been made to change the changeable. It was desirable, then, to judge the events as to whether or not they were of preventable type.

But this decision proved difficult to make. Of course, natural cataclysms like floods and hurricanes were obviously unpreventable. But the events involved in the cases were mainly complex human situations in which the question was whether in the time after the experience it was reasonable to suppose that the individual, if he had taken the proper action, could still have prevented fulfillment.

The events that could no longer at that stage of their development have been prevented were therefore considered as unpreventable, just as were the natural cataclysms. But those in which change seemed still to have been humanly possible were classed as preventable. Unfortunately, no basis except that of common sense was possible for this judgment, which therefore must be considered as approximate at best and certainly not in all cases beyond question.

Next, Group I was studied as a comparative background for Group II, to see why intervention had not been attempted. Then the cases of Group II were analyzed as to success or failure, and their

bearing on the question of avertibility was considered. In each breakdown the number of representative cases was recorded, not because numbers as such could have much importance, but only because comparative frequencies in unfamiliar areas like this may at least help to distinguish the usual from the unusual, and possibly to indicate trends and suggest explanations.

Perhaps it should be again emphasized here that in general the aim was to make the survey as broad as possible, and for that reason it was necessary to array all available material seeming to bear on the topic. This meant a liberal interpretation in the first place as to which cases could be considered precognitive, an inclusive view of intervention, and a common-sense estimate of which situations could be considered preventable. For the exploratory purposes of this survey this general attitude of inclusiveness seemed to be demanded.

For readers unfamiliar with my earlier reports it may be helpful for me here to characterize briefly the specific nature and purpose of my use of case material. It is used *only* as a means of obtaining new suggestive leads and insights for the guidance of parapsychological research, and not as proof of any conclusion. Because study of this kind is frankly exploratory and its findings are to be considered at best as hypotheses for further research (if possible by experiment), the method deliberately makes use of a broad selection of large numbers of cases. It involves the intentional avoidance of narrow selection and also of the laboriousness of trying to authenticate cases as would be necessary if the results were to be considered as conclusive evidence. If such authentication were required, certain types of experience would automatically be excluded and the comparatively large scope of the inquiry would be impossible. Thus the purpose of the study would be to that extent defeated.

GROUP I: INTERVENTION NOT ATTEMPTED

In 271 instances, nearly two-thirds of all the cases studied, no intervention was attempted even though the experiences had been taken seriously and the precognized event would have been undesirable. Of course, the major interest of this study does not lie in cases in which no attempt to intervene was made, but rather in those of Group II in which efforts were made to escape the foreseen future. Nevertheless, it seemed worth while to inquire into the

nature of the situations involved in the Group I cases to see what may have been the reasons why in so many instances no attempt at intervention was made. For the reader's convenience the results of this inquiry are given first in outline below and then they are illustrated and discussed.

GROUP I. INTERVENTION NOT ATTEMPTED

	Preventable Type	Unpreventable Type	Totals
A. Impersonal Events		15	15
B. Personal Events			256
1. Warning disregarded	17		
2. Information very vague			
a. Accidents leading to injury, death (funerals) ; preventable type	46		
b. Non-accidental deaths		9	
3. Information more specific, but situation beyond change, or seemingly so			
a. Unpreventable accidents		42	
b. Non-accidental death (or funeral)		121	
c. Illness and various other unpreventable health situations		21	
Totals	63	208	271

A. Impersonal Events

First, there were 15 cases that definitely involved impersonal events such as natural cataclysms, like floods, hurricanes, and, if they can be so classified, even wars. Some of the events, too, were seemingly based on subsequent news items in which the individual had no personal involvement, as in Example 1. These 15 cases, of course, were classed as unpreventable.

Example 1

On Friday afternoon at 2:00 I was sitting at my sewing machine and the upper wheel was going at such a rate of speed that it seemed to set up vibrations of some kind. All at once I knew that the Empire State Building had been rammed by something, presumably an airplane. I did not stop my work when this registered in my mind, for what could I do even if it were true?

The next morning my son Floyd and his wife came in downstairs to visit my son Bruce and his wife. Their door downstairs was open so without even listening I heard them talking about the Empire State Building. "Oh," I said, "I knew that yesterday." The two daughters-in-law said, "Oh,

yeah . . . how come? It only happened today, but you knew it yesterday!" But Floyd, knowing his mother better than the girls did, came up and said, "So you knew it yesterday, Mama?" Then I explained it to him and he understood it instantly.

B. Personal Events

The rest of the Group I cases, totaling 256 instances, all involved personal events, but no attempts to intervene were made. Except for those of Section 1 below, events were of such diverse natures that I could make only one generalization. That was that the situations as foreseen were such that the individual could not, or thought he could not, do anything to avert them. In most cases the possibility of attempting to intervene was probably not even considered. To a varying extent this attitude seemed to have been the result of incomplete information. An attempt to distinguish between degrees of such incompleteness of information led to groupings 2 and 3.

1. *Warning Disregarded.* There were 17 instances in which the experience was definite and convincing, but the individual, even though strongly impressed by it, allowed himself, usually for logical reasons, to be persuaded not to take action to avoid the calamity. The situations appeared to be of the preventable type, as in Example 2, in which presumably the individual threatened could have escaped the calamity by staying at home the fateful day.

Example 2

I have had psychic experiences all my life. They have always distressed me as I cannot ever account for them. One night I saw a man, a neighbor in the house with us, who worked as a fireman on the railroad, covered with bandages being taken out of an ambulance. His arms and face had been badly scalded. I knew it was going to come true, and I wanted to tell his wife not to let him go to work that night. But my family said they would think I was crazy to say that. He was at work just one hour when a boiler blew up and scalded him very badly. I was right about the arms and face all in bandages, and the ambulance.

2. *Information very vague.* In 55 instances the information was very vague. In these cases the impression received was so incomplete that the individual did not know what to do. In some instances he did not know the identity of the person threatened. In others he did not know the nature of the impending calamity. On the question

of whether or not the events involved could be considered as preventable the following very tentative division could be made.

a. *Accidents leading to injury, death (funerals)*. In 46 instances the foreseen calamity seemed to have been an accident or accidental situation that led to an injury, a death, or a funeral. In all of these cases, as in Example 3, one could suppose that, granted sufficient foreknowledge, the calamity could be classified as preventable.

Example 3

I dreamed that my two girls were killed in a wreck. At first I heard music playing. It seemed like a guitar, it was so soft. Then I heard a crash, and I thought I heard someone speak. Then I looked but I saw no one, but I knew it was my two girls, and I started crying and woke up. I was so sad I could hardly talk for three days. I knew I was going to lose my two girls. I cried everytime I thought of it. I never corrected my daughters after that for I knew they would soon be gone. I told some of the girls, but they said, "Maybe you are wrong this time." We were coming home and my sister-in-law was driving the car when a street car hit us. It was raining and the conductor was looking at the car ahead of us. It killed my girls and I am a cripple today from the accident.

b. *Non-accidental deaths*. In nine cases a death from "natural causes," rather than from an accident was involved. Of course, it is impossible to say at just which point, granted sufficient foreknowledge, an intervention to prevent even a non-accidental death would cease to be possible. But at least in these cases it seemed relatively impossible to have done so in the time period involved, as illustrated by the following example.

Example 4

Before my father died I was frantic. I knew someone was going to die but I thought it was my husband. Then I got a wire saying that my father had died. My sister also had a premonition of his death. She was at a dance that night when she felt so terrible that she left and went home to wait to hear what it was. She felt sure that it was our father although she didn't know he was ill.

3. *Information more specific, but situation seemingly unpreventable*. In 184 cases the information was fairly specific but the situations were beyond change or at least it must have seemed so to the individual. The main types of events were:

a. *Unpreventable accidents*. In 42 instances the events were accidents which, on account of the time when the experience occurred

or of the individual's inability to control the situation, were essentially unpreventable. In these cases the events were complicated and involved other people and circumstances beyond one individual's control. Even so, the distinction between the accidents of this group which have been classed as unpreventable and those of 1(a) above, classed as preventable, could only be considered one of degree. These are illustrated by Example 5.

Example 5

In the early spring of 1911 Mrs. B awakened from a terrifying nightmare. She thought a gigantic shadowed locomotive was pulling a string of cars at a terrific speed. It would loom up suddenly and crash head-on into another train in the dark. She could see the cars pile up and hear the awful noise the trains made when they crashed together with hissing of steam, etc. She told various people about it but they all laughed at her. She was so convinced that her dream would come true that she made her own preparation. She made up a quantity of bandages from clean sheets, got the bandages together with brandy, peroxide, etc. The following Sunday evening she was visiting her mother when suddenly the air was rent with a burst of sound from the railroad track running along the park in which she had dreamed the wreck would occur. She knew what it was at once. She ran upstairs, got her first-aid kit and hastened to the scene of the wreck. The cause of the wreck turned out to have been that the Pennsylvania Flier ran through the switch and crashed into a freight on the siding. Details of the dream and of the reality coincided.

b. *Non-accidental deaths (or funerals)*. There were 121 cases of this kind of which 84 involved either the dreamer himself or someone close to him. These events seemed to be relatively unpreventable, as in Example 6.

Example 6

About a month before Mother's death my sister had a vivid dream which upset her very much. She awoke in a flood of tears and told me that she had dreamed she was at Mother's funeral. She was standing around an open grave and it was raining so hard that she was completely saturated. Just as she stood there feeling that the end of the world had come for her, a cousin spoke sharply to her and she turned away and got into the mourning coach waiting near the grave. She rushed into Mother's room and told her about her terrible dream. Mother tried to comfort her and said, "It was only a dream, dear. You see, I am quite all right." However, she could not throw off the profound impression it made on her and all that day walked about looking most wretched.

About a week later Mother was in great pain and her doctor took her to a specialist who told her that an immediate operation was necessary. This was performed, but she lived for only three weeks after that. At her funeral all the circumstances my sister had so vividly described were reproduced. It

rained so hard the whole world seemed to be weeping and a cousin said to my sister in very sharp tones, "It is no good standing here any longer. Get into the coach at once. We shall all catch our deaths of colds." My brother squeezed my sister's arm and said, "Your dream. It has all come true, even to Cousin Mary's being so unkind."

In the remaining 37 instances the person who figured in the dream was not closely related to the dreamer, and many of the cases involved public figures, or personalities in the news. The situations in these cases also would have been unpreventable, as far as the individual involved was concerned, as Example 7.

Example 7

About a month ago an elderly man came into the drug store where I work, and remarked to my father, "Well, I have sad news this morning. Max Gardner died during the night of a heart attack. Max was a friend of mine and I didn't know he had a bad heart." "Are you sure?" Daddy asked, "I have heard nothing about it." "Yes," the man replied, "he died of a heart attack in New York. He was going to England in a few days." Daddy didn't want to call the old man a liar and he told him that there must be a mistake. The man insisted that it was true and kept repeating that he should know, because Max Gardner was a friend of his. I heard the conversation, and Daddy and I looked through the papers and could not find anything about the death of Mr. Gardner. We thought the man had been thinking of someone else. He is very old, and we blamed the error on his age. A little more than three weeks later, when we had almost forgotten the incident, we heard over the radio about the death of Mr. O. Max Gardner. It certainly gave us a queer feeling because according to the old man it had happened three weeks before. And it happened exactly in the way he described it to us.

c. *Illness and various unpreventable health situations.* In 21 instances the event was an illness or other health situation, unpreventable under the circumstances, since they were not under the control of the individual who had the experience, as in Example 8.

Example 8

We were living on a farm nearly two miles from our nearest neighbors. My father-in-law who lived with us was away from home. I was pregnant and suddenly became ill. My husband could not leave me to go for a doctor. Both of us were almost frantic but my sister-in-law came in. When she saw the situation she suddenly burst into tears. "It is all as I dreamed it," she said. "Last night I saw myself walking along the lake to the house. Old Nelson, the dog, was lying in the door. She did not bark as she usually does, but just got up and let me pass. When I came in you were lying on Father's bed and in need of a doctor. The dream worried me so that I almost ran to get here this morning. Then when I came in sight of the house

it all seemed as if it had happened before, it was so exactly as I had dreamed it."

My husband hurried off for the doctor and my son was born that evening, two months prematurely. He is six feet tall now and 30 years old, but if it had not been for that dream it is extremely doubtful if I would be writing this now, and it is certain that he would not be here.

Summarizing Group I, it can be said of the 271 cases in it that the majority (208 as against 63) were relatively, if not unquestionably, unpreventable. And except for the 17 instances in which the warning was disregarded, the reason no intervention was attempted in the possibly preventable instances could be said to have been because the impressions had been too incomplete to have guidance value.

GROUP II. INTERVENTION ATTEMPTED

There were only 162 cases in which the individual tried to prevent the occurrence of the event he had foreseen. On account of the interest attaching to this kind of experience, I tried to increase the number by searching for additional instances in the available old published case sources, without attempting to make the search exhaustive. I found 29 cases¹ which I added to the above examples from the Duke collection, so that there were 191 cases in all to be studied as to the results of intervention attempts. Those attempts proved to have been successful in a ratio of about two to one, the separate groups of each being presented, first in outline on p. 14, and followed, as in Group I, by illustration and discussion.

A. Intervention Futile

In 60 instances the attempt to avert disaster failed. The apparent reasons for the failure were varied. The attempt to generalize them resulted as follows:

1. *Information too vague.* There were 20 cases in which the information was vague at least on some point, but nevertheless the individual tried to do something to avert the calamity. Because of his lack of specific information, however, he did not take the

¹ These 29 cases were distributed among various publications as follows: Parapsychological journals: *Proc. S.P.R.* (6); *Journal S.P.R.* (7); *Journal A.S.P.R.* (4); *Bulletin of Boston S.P.R.* (1). Books: *The Night Side of Nature* by Catherine Crowe, published by G. Routledge & Co., London, 1854 (6); *Some Cases of Prediction* by Dame Edith Lyttelton, published by G. Bell & Sons, London, 1937 (3); *Footfalls on the Boundary of "Another World,"* by Robert Dale Owen, published by Trübner & Co., London, 1881.

GROUP II. INTERVENTION ATTEMPTED

	Preventable Type	Unpreventable Type	Totals
A. Intervention Futile			60
1. Information vague	20		
2. Uncooperative second person involved.....	28		
3. Situation unpreventable		12	
B. Intervention Successful			131
1. Unacceptable			
a. Alternatives to precognition possible.....	29		
b. Precognized impression vague	51		
c. Precognized impression specific but limited.....	18		
d. No mention of individual	17		
e. Escape possible without intervention	7		
2. Acceptable	9		
Total Group II	179	12	191
Total Group I	63	208	271
Grand Total			462

appropriate action, and therefore failed. In all these cases the events were of the preventable type, as in Example 9, in which presumably if the identity of the individual had been sensed, the tragedy could have been avoided.

Example 9

On the 18th of July last, my little granddaughter, Kathy C., was killed by a township truck which backed into her while at play in her grandmother's driveway. My husband works at night so I wait up for him. While relaxing in a darkened room a few nights before, I saw a vision of an accident. I saw a child lying on the ground with a cover over it. I was unable to tell whether it was a boy or a girl but I figured by the length of the child that it would be around five or six years of age. I hadn't the slightest idea of who the child might be as the entire body was covered. It seems it was meant to be that way. It so impressed me that I told my next door neighbor about it and advised her to keep an eye on her grandson about that age who lives with her. I also called my son who lives in the heart of town to watch his two small ones in order to avoid an accident. However, I did not call the son whose child was killed because he lives in a country place with his mother-in-law's place next to his and both places are securely fenced. I did not see how anything could happen to his children.

In other instances, as in Example 10, specific time, or place, were lacking. On that account the individual's attempts to escape the foreseen calamity still did not succeed, however persistent they may have been, and even though the situation was of the preventable type.

Example 10

A gentleman, who resided near one of the Scottish lakes, dreamt that he saw a number of persons surrounding a body, which had just been drawn out of the water. On approaching the spot, he perceived that it was himself, and the assistants were his own friends and retainers. Alarmed at the life-like reality of the vision, he resolved to elude the threatened destiny by never venturing on the lake again. On one occasion, however, it became quite indispensable that he should do so; and as the day was quite calm, he yielded to the necessity, on condition that he should be put ashore at once on the opposite side, whilst the rest of the party proceeded to their destination where he would meet them. This was accordingly done: the boat skimmed gaily over the smooth waters, and arrived safely at the rendezvous, the gentlemen laughing at the superstition of their companion, whilst he stood smiling on the bank to receive them. But alas! the fates were inexorable; the little promontory that supported him had been undermined by the water; it gave way beneath his feet, and life was extinct before he could be rescued from the waves. This circumstance was related to me by a friend of the family. (Crowe, p. 41.)

2. *Uncooperative second person involved.* An uncooperative second person was involved in 28 cases. These events could be considered preventable, as in Example 11, in which presumably the accident would not have occurred if the warning had been taken.

Example 11

My grandmother tried one morning to keep my grandfather from going to work on his farm, telling him she dreamed so vividly of his falling from a load of hay and breaking his neck. He was planting that day and laughed at her, but the weather started to change, and he stopped planting to help the haying crew get the hay in. The team lunged, he fell off the top of the load and died of a broken neck.

3. *Situation unpreventable.* There were 12 instances in which the outcome did not depend only on the individual's own decision, but on a complex set of circumstances beyond his control. Therefore, even though he did what he could, he failed, as illustrated by Example 12. The situations are classed as unpreventable.

Example 12

I was serving in a western desert, and I vividly dreamed that I was in Salisbury station and my wife was not there to meet me. I should explain that I had only been married three months prior to leaving the Colony, and the subject of my return was a constant one in our letters. I wrote to my wife and told her of the dream, and she wrote back a letter in which we both, so to speak, had a good laugh. However, by a set of most extraordinary circumstances entailing the flaunting of a number of precautions taken against the actuality, the dream actually occurred in real life some time after that. These circumstances included the catching of dysentery, having the

convoy broken by an enemy submarine, and so arriving unheralded, and the arriving in South Africa and leaving again upon a Sunday so that I personally was unable to send a telegram, and finally the loss of the telegram by the Sergeant to whom I had entrusted it who was staying on in the port of arrival.

Incidentally, this section devoted to cases seeming to show the futility of attempting to intervene in a precognized future is reminiscent of certain stories from history and literature, reflected above in Example 10. It would seem that man's preoccupation through the ages with the question of his own destiny may have led to the preservation of many narratives, some of them involving famous names in history, in which an apparently precognitive dream or vision came true in spite of every effort of the individual to escape his "fate." Such older material, however, I believe may be suspect, more especially because of its highly dramatic character and the strong human interest involved. And even if the incidents themselves be considered as authentic, one might still suspect the selectivity that preserved them rather than other incidents in which an inexorable fate would not have been shown. At any rate, the cases of the more recent Duke Collection seem to me much less suggestive of an unyielding and inescapable destiny than simply of a capacity that is limited either in scope or the efficiency of its functioning.

B. Intervention Successful

In 131 cases an effort to avert a foreseen event was made, and was successful, if the criterion for success be taken to be the achieving of the individual's objective. It is not possible to say that an entire foreseen event was averted, since if it had been, just as in an experimental test, it would have been impossible to determine whether the original impression was a truly precognitive one. It might have been only a baseless anxiety. In these cases, however, to whatever extent the foreseen event was averted, sufficient of the setting remained to make possible the judgment that the impression had related to the event that threatened; and therefore could be classed as precognitive.

The events in the main involved complex human situations such as wrecks and accidents over which the individual did not have sole control. They were in general of such nature that any given indi-

vidual was only one actor, so to speak, and with or without him the play could go on. His control was generally limited to a decision regarding his own part in the total situation. But since by his decision he could prevent his own involvement in the foreseen events, they were classed as preventable. Appropriate decisions sometimes involved taking action, as illustrated by Example 13.

Example 13

On February 9, 1942, Mr. and Mrs. C. stopped for the night at a small hotel in Selma, N. C. Early the next morning Mrs. C. dreamed that the hotel was reduced to burning ruins by an explosion. The dream woke her and she was unable to go back to sleep. Waking her husband she insisted that they leave at once. Mr. C., heavy with sleep, protested loudly that they had not planned to leave for hours. But his wife was determined and they departed at once.

A day later Mrs. C. called her husband's attention to a story in the morning paper. It was an account of how a truck loaded with dynamite had crashed into a small hotel, and the result of the explosion had destroyed the building. The hotel was the one in which they had stayed the night before. If they had stuck to their original schedule they would still have been in the hotel when the truck load of death arrived.

Or, as in Example 14, the person involved decided to refrain from contemplated action.

Example 14

When I was newly married I got homesick one day. I just had to go home. Billy fussed a little, but gave in to me and ordered the one and only taxi to take me to the morning train. I remember how joyful I was and how I danced about the house waiting for the taxi. Billy and the driver teased me, but I was too happy to care. Just as he bought the ticket, cold fear gripped me. I started to cry. "Give him back the tickets," I said, "Please, Billy, we can't go on this train." Billy went into one of his rages, but the ticket man reached out and took the tickets. "Do as she says. Always do as she says." We got into the taxi and all the way to the hotel they asked me why. I did not know. I just cried. At dinner that night there was a commotion. The taxi man was coming toward me, pushing people to one side and upsetting chairs. He cried, "How did you know not to go on that train? It wrecked at the next town. The car you always ride in turned over and everyone was killed."

Naturally the situations in the different cases varied greatly, and consequently many different types of action were involved in preventing their fulfillment. In a few instances, like Example 15, another individual was substituted for the one threatened.

Example 15

At one time my husband kept in running condition a race car. He had two drivers, one a smart quick-thinking boy named Dick, the other a good sort but slower in reaction named Robert. We were going to Salisbury to a race one afternoon. I had never seen the track there, when a picture flashed in my mind of a racer going through the fence. The top plank broke and went through the driver's head. Robert was to drive that afternoon. I told my husband not to let him drive, but to let Dick, that something was going to happen and Dick could think faster. The picture was so plain and real I was very much upset and would not tell my husband all of it. He went to Dick and told him what I said, and Dick drove. The racer did go through the fence in the very place where I had seen it and broke the top plank. Dick jerked his head aside and kept from being killed.

In other cases, necessary information obtained as the result of the precognitive experience was all that was necessary to avert the tragic part of the foreseen calamity, as illustrated in Example 16.

Example 16

The following incident happened about 25 years ago when I was an instructor at the City Normal School, and many friends can vouch for the accuracy of the story as it is told. My mother had died the year before while still watching over my welfare. I cannot tell, but a message came to me that saved lives. Of this I am sure. A friend had recently taught me to drive one of the old model Ford sedans, and then moved to another city, cautioning me about nearly everything that might possibly happen. All went well, and then some friends planned a day's outing at a lake 80 miles distant. Several car loads were going and they asked me to take four passengers. Although rather nervous about taking that much responsibility I consented and a friend told me I could follow her car as she knew the way. The night before the picnic I awoke from a frightening dream. I had been following Anne's car on a country road which became rougher by the minute. Suddenly the road began descending into a gulley, the descent became steeper and below us at the foot of the hill we could see a right angle turn, but directly in front was a wall of rock. In my dream I seemed to smell something burning. My brakes would not hold. Then I awoke. Before I could eat breakfast the next morning, I told my dream to the others and in spite of their laughs I said that I could not eat until I found out what to do in such a situation. As they did not drive I went to a neighbor's and he told me that if my brakes burned out to throw the car in reverse. Soon we were on our way. All went well for an hour or so and we followed Anne's car as agreed. Finally Anne signalled that she would make a turn. We followed, the road became rougher and yet we went on until there was no longer any possibility of turning back, for we were descending a steep hill with a wall of rock at the foot of the hill in a right angle turn. All at once there was the smell of rubber burning and my brakes gave way. After a second's hesitation I threw the car in reverse and made the dreaded turn at the foot of the hill in safety.

Why did that dream come true? Anne had made the wrong turn and

found herself on an old abandoned road. Why did I see this road the night before? Anyway our lives were saved because I had not laughed, and took heed of the warning.

Sometimes, too, the experience served only to put the individual on guard so that by merely being alert the possible tragedy was prevented, as in Example 17.

Example 17

On the Saturday after Thanksgiving in 1946 I had spent a rather full day, and being tired lay down for a few minutes. I was never entirely asleep, but the day was dark and rainy and I suddenly jumped up, as I had seen a little old woman loom up at the left fender of my car. I felt as wretched as though it had happened. I had a hard time shaking the feeling off. That was about 4:00. About 5:30 my daughter called me and wanted me to come to the bus stop and pick her up. It was at that time when if one puts on his lights they do little good. There was a heavy mist. I was driving slowly, remembering my dream and taking every precaution. There was not a person on the street, when the little old woman loomed up on the left fender. I don't know how I prevented hitting her. I thought I had as she fell, but I had stopped immediately. I had to call for help. My husband said it was because I had dreamed it and had to make it come true, but I had never seen this person before, and she ran into the car. She said the car had never touched her. It missed her—but by an eyelash.

Regardless of the type of situation and the kind of action necessary to avert it, the experiences in these successful intervention cases could be said to have served as warnings by which the individual managed to escape an impending threat, just as on a common-sense basis he might do by following any other kind of warning. From a practical standpoint there was no difference. But the question whether these cases can be considered as instances in which a precognized future event was averted is a theoretical one. Their suggestive value would depend, then, on how well they fulfill certain necessary requirements. Regardless of whether or not any of them *may* be examples of intervention, one needs to know as far as possible to what extent they *need* be so considered.

Among the more obvious and external requirements of a case of intervention are the following: First, it must be due unequivocally to a precognitive, and no other, form of psi process. The impression of the foreseen event must be clear-cut, so that one can be certain just what was foreseen. It must also specifically include the individual in question. In addition, there must be no doubt that the action taken did change the course of events as desired, and that

presumably no such action would have occurred except as the result of the warning. The cases that fulfill all of the above requirements will be designated as acceptable, and those that do not, as unacceptable. Whatever their nature may actually have been, the purpose here, as stated above, is to see the extent to which the intervention hypothesis *need* be considered.

Analysis of the cases to see which ones fulfilled the above criterion, then, gave the following results:

1. *Unacceptable cases.* Nearly all of these cases, 122 of the 131 in which intervention was successful, showed rather obvious weaknesses in relation to the above criteria of acceptability. They fell into groups, on the basis of those weaknesses, as follows:

a. *Alternatives to precognition possible.* In 29 cases, regardless of the fact that the impression seemed to be based on a future event, there were circumstances already in existence at the time of the experience which could not be ruled out as possibly having been the cause of it. In some instances these circumstances were such that clairvoyance rather than precognition might have been the psi process involved, as in Example 18.

Example 18

Over 20 years ago I was working as an investigator for an investment insurance company. As our company insured cars and trucks I made enemies in the underworld. In consequence I usually had a good firearm within reach. One morning I was awakened at 4:00 A.M. by a policeman who was a close personal friend. The guy looked like he had seen a ghost. He asked me to loan him my pet pistol, a 44 calibre Smith & Wesson special. He handed me his own gun, a 38 Colt police, saying, "For God's sake don't carry this gun. I can't tell you why. You would think I am crazy."

About 10:00 A.M. that same morning I received a call to the Memorial Hospital. My policeman friend had stumbled into a hold up. He had killed two hoodlums and wounded a third with five shots from my 44 before suffering a minor chest wound himself.

He asked me to take his 38 to a pistol range and fire it. I did. It fired two shots. On the third the main spring let go, rendering the gun useless. I went back and told my friend "I thought so," he said. "I dreamed I was in a gun fight and the gun failed on the third shot. That dream was so real that I just knew I had to have a good gun before I went on duty. I was even scared to drive to your place, two and one-half blocks with that Colt." Modern guns of the superb quality of Colts, and Smith & Wesson seldom fail. Just why this cop had the nightmare, I don't know. All I know is that he was as anxious to obtain my 44 as a drowning man is to grab a life-preserver, and that in my hands his gun fired only two shots.

In the above case, even though the policeman's experience seemed to be based on the still future hold-up, the possibility exists that it might have been caused instead by a clairvoyant awareness of a defect in the gun converted by dream embroidery into a hold-up in which the gun failed. If such had been true, then the experience would not have been a genuinely precognitive one, and would have no bearing on the theoretical aspects of this study.

Also, among these cases to which an alternative to precognition existed were a few, like Example 19, in which a telepathic factor could not be ruled out.

Example 19

When I was about 18 years old we had a house in the suburban district of Oslo and during the summer vacation rented one about 2½ hours away by train. Once my mother asked me to go to town to take care of some business. I was to leave in the morning and stay in Oslo through the day, spend the night at our home and return the next morning. The night before I left I had a horrible dream. I dreamed that I woke up in my mother's room at the house in town where I used to sleep when I was there. I saw a man bending over me and I started screaming but nobody heard me. Then he put his hands around my throat and started choking me and I woke up shaking all over. I could still feel his hands around my neck. The next morning I left anyway, but I could not get the dream out of my mind. Half way to Oslo I left the train and took the first one back again. My mother was more surprised than pleased to see me. I told her about my dream and she sighed, "Well, you're always seeing and hearing things." The next day we got a call from the police in Oslo saying that our house had been robbed that night. When my mother got the message she looked at me and fainted. Later we heard that a neighbor leaving for work in the morning had seen a curtain blow through a wide open window in our house, and knowing we were not at home had notified the police. The window was the one in my mother's room.

In the above case, the possibility exists that the individual's experience was based upon a telepathic impression from the robber who may already at the time of the experience have had in mind the house he meant to enter, again embroidered as by a vivid imagination. If so, of course, the case would not bear on the question of intervention.

b. *Precognized impression vague.* There were 51 instances in which the precognized impression was so vague that instead of a specific calamity, only a generalized sense of danger was experienced. Even so, the individual, by taking precautions, did escape a calamity that later occurred. Although the experiences in this group may

really have been based on the future event, one is not forced to consider that they were. Whatever value such cases may have from certain viewpoints, for the present purpose they are open to the possibility that the relationship between experience and event may not have been precognitive, but only coincidental. They must then be considered as unacceptable. They are illustrated by Example 20.

Example 20

Several years ago my husband was working on the McGovern tunnel, then in the process of construction. His job was underground and on the swing shift. About 30 minutes before time to leave the house I began to cry without control. As I rarely cried my husband was greatly concerned. I finally told him I wished he would not go to work, although I had no concrete reason for saying such a thing. Just a feeling that all was not well. As we sorely needed the money he tried to allay my fears, but I only cried the more. However, he finally gave in and stayed at home. That night there was an explosion in the tunnel on the shift he worked and several men were seriously injured.

c. *Precognized impression specific but limited.* In 18 cases the event foreseen was a specific and dangerous situation, but either the experience or the reporting of it stopped short of including the actual calamity that presumably would follow. And so, even though, as a result of the experience, the individual took action and averted the calamity, theoretically his action did not constitute an intervention because precognition had not covered the averted event. This kind of situation is illustrated by Example 21.

Example 21

When I was going to bed one night I had this premonition. I was driving a company staff car to Winston-Salem. There is a curve to the left as you drive along highway 421 at a point about a mile this side of a radio transmitter station. In this premonition I was approaching the curve. As I got into the curve a car coming from Winston-Salem rounded the curve toward me. When we were about 40 or 50 feet apart, a dirty yellow truck sped around the curve and started to pass this oncoming car. That placed the truck squarely in my lane. I remember thinking there was sufficient space on the shoulder of the road for me to get out of his way. That was all to my premonition.

The next day as I drove to Winston-Salem I had this on my mind. Instead of approaching the curve at 50 or 55 miles an hour and then slowing down just before I went into the swing to the left, I slowed down to 35 or 40 miles an hour and kept my eyes on the spot I had seen in my premonitive vision the night before.

Just as I had seen it, the car rounded the curve from the direction of Winston-Salem and came toward me. When I was about 40 to 50 feet away

a yellow truck liberally splashed with mud and dust, whipped around the oncoming car and headed straight for me. Both the truck driver and I hit our breaks. I remember that the right wheels of the staff car went off the road, but how far I could not say. The truck driver cut his wheels toward his side of the road and we narrowly missed a head-on collision. I believe we came within 15 or fewer feet of a crash.

In the above example, the foreseen event was that the yellow truck would appear at the specified place, which it did. No wreck had been foreseen, and therefore the fact that none occurred represented normal response to a warning and cannot be considered an intervention.

d. *No specific mention of individual.* In 17 cases doubt could arise as to whether the event as foreseen necessarily included the individual who avoided the calamity. Although in most of them it seemed a reasonable assumption that he would have been involved, for present purposes only specific mention would ensure that his escape constituted an intervention. Cases of this kind are illustrated by Example 22.

Example 22

During the war my husband was in command of a Naval ship, and naturally thoughts of him were often in my mind. After he had been away for almost two years I dreamed one night that he started home by plane. The plane was wrecked and everyone aboard was killed. I had that dream on 14 consecutive nights. I wrote him asking him when he returned that if it were humanly possible not to come by plane. Several months passed and early one morning he called me from a California airport saying he had just arrived and would leave in about an hour. He asked me to meet him in Washington the following day. I was horror stricken. My feelings are difficult to describe, but I felt he must not fly. I persuaded him to come by train. He cancelled his reservation and had coffee with several officers who had flown in with him, and turned in for a few hours of sleep. When he got up he found the plane on which he was to have left had crashed about 10 minutes after it left the field and everyone aboard was killed.

In the above example, the assumption on the part of the wife, that her husband would have been killed if he had taken the plane, was reasonable. Yet since she did not actually foresee him (or specify that she did) as one of the dead one cannot interpret the fact that he escaped as due to action that theoretically could be classed as an intervention.

e. *Escape possible without intervention.* In seven instances it

seemed possible that even without the experience the individual might have avoided the catastrophe, as in Example 23.

Example 23

I remember very vividly a dream I had several years ago, 1947, I believe. I dreamed that I was near the ACL underpass on the way to Richmond and ran into the rear of a big Brooks Brothers truck. It woke me up. The next day when I approached the top of the hill and before starting the downgrade to the underpass, I instinctively slowed down. There was a big truck, motor in the ditch at the roadside with the rear out in the road. Believe me, I passed it by with respect.

In the above case, the possibility exists that the individual might have been able to avoid hitting the truck, even without the warning, and therefore one is not forced to assume that the escape was due to an intervention.

2. *Acceptable cases.* After making the above elimination, only nine cases remained as acceptable. But, any attempt to make final evaluations on case material is likely to be futile. The best one can hope to do is to make relative judgments. In isolating the cases that seem to me to be acceptable, the decision as to which are and which are not is decidedly relative. I do not feel that all the cases in the unacceptable groups actually have no value for this study. In some instances the judgments which were based on reports that may themselves have been faulty, had to be arbitrary. On the other hand, I do not feel that the cases listed here as acceptable are perfect. In fact, I will point out some possible imperfections below. The point is rather that the criticisms possible on these are relatively less obvious. Since the number of cases in this group is small but important, they are all given below.

Example 24

Many years ago when my son, who is now a man with a baby a year old, was a boy I had a dream early one morning. I thought the children and I had gone camping with some friends. We were camped in such a pretty little glade on the shores of the sound between two hills. A little creek flowed into the sound. It was wooded, and our tents were under the trees. I looked around and thought what a lovely spot it was.

I thought I had some washing to do for the baby, so I went to the creek where it broadened out a little. There was a nice clean gravel spot, so I put the baby and the clothes down. I noticed that I had forgotten the soap so I started back to the tent. The baby stood near the creek throwing handfuls of pebbles into the water. I got my soap and came back, and my baby was lying face down in the water. I pulled him out but he was dead. I

awakened then, sobbing and crying. What a wave of joy went over me then when I realized that I was safe in bed and that he was alive. I thought about it and worried for a few days, but then nothing happened and I forgot about it.

During that summer some friends asked the children and me to go camping with them. We cruised along the sound until we found a good place for our camp near fresh water. The lovely little glade between the hills had a small creek and big trees to pitch our tents under. While sitting on the beach with one of the other women watching the children play one day, I happened to think I had some washing to do, so I took the baby and went to the tent for the clothes. When I got back to the creek I put down the baby and the clothes, and then I noticed that I had forgotten the soap. I started back for it, and as I did so the baby picked up a handful of pebbles and threw them in the water. Instantly my dream flashed into my mind. It was like a moving picture. He stood just as he had in my dream, white dress, yellow curls, shining sun. For a moment I almost collapsed. Then I caught him up and went back to the beach and my friends. When I composed myself I told them about it. They just laughed and said I imagined it. That is such a simple answer when one cannot give a good explanation. I am not given to imagining wild things.

Example 25

Some time ago when my son was a little boy of five I went to stay for a few days with my sister, taking the child with me. One afternoon we went for a walk in the field, had quite lost our way and found after a while that we had evidently wandered into private grounds. We decided to follow the path, for it would probably lead to a house where we could ask our way.

We were walking along, the little boy running some yards ahead, when my sister suddenly exclaimed, "Don't let Jeffrey run ahead like that. Call him back. I just remembered something I dreamed last night. I was in a place just like this, but the path ended in a precipice, and I was lying on the edge holding a child by the hands who had slipped over. It may mean nothing, but call him back all the same." I did so, and we walked on. Quite soon the path turned a little and then ceased abruptly at a sheer drop, evidently a view point for a waterfall that was just opposite.

Had the child run on at the pace he had been going he would not have been able to pull up in time to avoid falling. I found this affair very puzzling for it did not seem like actually seeing ahead in time—precognition—since the child did not fall in reality. But thinking about it now there appears to me to be more similarity than I had at first thought, for in each case she saved the child, although in the dream it was by physical means, and in reality by a mental effort, of which the dream was symbolic, perhaps. Or is this too far-fetched an idea?

Example 26

About 10 years ago in New York I had a dream. I heard a scream and turned around and saw my son, then two years old, falling through the window. I even heard the siren of the ambulances driving up in front of the house. When I awoke I first checked the baby and then the windows. Everything was okay. A couple of days later I put his mattress in the

window for airing. The window was pulled tightly down on it. I was busy in the next room. Suddenly I remembered my dream and ran into his room. He had managed to push up the window and was up on the window sill. I grabbed him the moment he was going to fall. The mattress was already down on the street.

Example 27

When about nineteen years old I got a job that I had been after for a year. The night before I was to report for work as fireman in a steam plant, I dreamed the same dream three times of a steam explosion in which I was blown out of the building and died in the hospital. I thought that I read the account in the paper. I did not take the job.

About a week later the accident occurred. The man who took my job was blown out of the building and died. One was scalded to death, one was lost for some time by being blown under a huge pile of coal. I do not know how the fourth man escaped. I helped repair the firebox on the Sterling boiler that let go.

Example 28

... We were living in about 188-, in Hertford-street, Mayfair. One day I determined that on the morrow I would drive to Woolwich in our brougham, taking my little child and nurse, to spend the day with a relation. During the night I had a painfully clear dream in vision of myself standing on the pavement and holding my child, our old coachman falling on his head on the road—his hat smashed in. This so much discomposed me that when in the morning I sent for the coachman to give him his orders, I almost hoped that some obstacle to the drive might arise, so that I might have an excuse for going by train. The coachman was an old and valued servant. I asked him if he would have the coach ready to drive to Woolwich at ten. He was not given to making difficulties; but he hesitated, and when I suggested eleven instead, he said that he would prefer that hour. He gave no reason for his hesitation ... I told him almost eagerly that I could quite well go by train; but he said that all was right.

We went to Woolwich and spent the day. All went well until we reached Piccadilly on the return journey. Then I saw that other coachmen were looking at us; and looking through the glass front of the brougham I saw that the coachman was leaning back in his seat, as though the horse were pulling violently, of which, however, I felt no sign. We turned up Down-street. He retained his attitude. My dream flashed back upon me. I called him to stop, jumped out, caught hold of my child, and called to a policeman to catch the coachman. Just as he did so the coachman swayed and fell off the box. If I had been in the least less prompt, he would have fallen just as I saw him in my dream. I found afterwards that the poor man had been suffering from a serious attack of diarrhoea on the previous day, and had gradually fainted from exhaustion during the drive home. ... In this case my premonitory dream differed from the reality in two points. In my dream we approached Down-street from the west; in reality we came from the east. In my dream the coachman actually fell on his head, the crushing of his hat on the road being the most vivid point of the dream. ... (*Proc. S.P.R.*, Vol. 11, p. 497.)

Example 29

In June 1951 off and on for over two weeks I had the same recurrent dream. I was in a white house, untenanted, in a very small kitchen. My father and my husband were with me. They were building something. Things weren't going right. They started wrangling. Dad was losing his patience. He was a good carpenter and precise. My husband was getting more angry. I stepped in and told them I had had enough. Dad slammed down his tools, said nothing and walked out. My husband looked at me and quit. The carpentering was left unfinished in the dream, always the same dream.

At this time we had been living with my folks for 11 years. Housing problems, no hopes. But suddenly out of nowhere the last of June my brother-in-law called and told us of a little white house that would be for rent. We applied and rented it. That same week my dad and my husband and I were in the little white house, the same little kitchen. I was washing the built-in cabinets and sink. Everything was identical as in the dream, but no argument. I thought I was again just imagining. However, by the end of five or six days, the argument developed. My dad grew impatient, my husband more angry. There I sat as in my dream, watching. Suddenly I sat bolt upright. I realized the situation here and in the dream were identical. I also remembered the bad ending of the dream. I immediately made up my mind this would not end like the dream, so I asked Dad if he could eat some ice cream and drink some tea. He was pleased so I left and was gone about 20 minutes. The situation was still tense when I returned. The scene remained. To this day I don't know why I did it, but I began to laugh, I guess I became almost hysterical. I know I thought the dream was winning and I was silly for thinking so. Both men got so cross at me they forgot the tenseness of the argument. After we were settled in the house Dad said one day, "For a while I thought I was going to walk out and let your husband finish it, but you fixed that." Then later my husband said that he was about ready to tell him to get out, he had caused enough arguments.

Example 30

A mother had a waking picture of her eldest son, Herbert, dead in the bath tub. It haunted her so that she made a special point of listening that nothing went wrong, but she did not tell him her impression although she told her younger son, Peter. After a couple of years Herbert went away and when he came home for a holiday she still remembered it.

One evening on this visit she heard him whistling and singing in the bath tub. She was dressed to go out but could not leave. After a while she heard the water running out but did not hear him singing so she opened the door, and there he lay, exactly as she had seen him two years before. There was gas heat and the window was closed and he had apparently been overcome by fumes. She immediately opened the door and windows and called the doctor and he was revived. If she had not been there, he doubtless would have died. (*Journal S.P.R.*, Vol. 34, p. 69.)

Example 31

Being engaged running a locomotive with a local freight train for some time, and there were several working on construction trains on the same

road, and one in particular that was very difficult to run and not get in the way of other working trains, which offence would suspend the conductor and engineer, or one of them at least; and what made it still more complicated was that they had to run over several miles of another road where there were many more trains to look after, as both roads ran over the same track. After trying three or four conductors and engineers and all got discharged or suspended for thirty or sixty days, the road master came to me to take the engine I was running, and go and try it without a conductor, and have charge of a large number of men as gang boss, working the men, keeping their time mileage of the cars loaded and light, conducting the train, running the engine, and receiving all telegraph orders, making a report each day of all I had done, and all that transpired—being stationed out on the road at a small town.

After running it about two weeks, I dreamed one night that there was a collision at that station of the fast express with the through freight train, and that the engines were terribly broken up and passenger coaches, with many killed and many more badly hurt. When I awoke, it was very vivid in my mind, worried me throughout the day, but nothing happened; but the next morning when I was ready to go, the through freight train was late, and came down, passing the station seven minutes on the express time (one of the most reckless things they could have done, as it was in a cut, and on a sharp curve where the express always came through at full speed). My engine was standing over on the second side track with its train. Just then I heard the express whistle for the station,—I saw my dream in an instant, with all its horror, but, not supposing there was any chance to save them, I took a red flag and ran out on the track and stopped the freight by my signals, as I ran down the track toward the express, as it was in the curve. As soon as the engineer saw the flag, he did all in his power to stop. The two engines came within about ten feet of each other, as they stopped.

Now without any one to have flagged them, there is no telling what the result would have been, as there were nine coaches, with all that could stand up inside and out on the platforms, and no one else that could have flagged the trains, as they were not there to do it if I had not done it. The dream had aroused my mind so thoroughly that I was on the look out for anything of the kind to happen; otherwise I should not have paid any attention to them, as I was not in the habit of meddling with other trains when mine was out of the way. This was looked at by those interested there at that time as a matter of chance, or luck, as some would have it—just happened to be so, but if they (had) known what I did about it and had their mind taxed as heavily as I did the day before, they would have thought different; for I practically knew of it more than twenty-four hours before it came, and had it in my power to save it, and did it with joy. (*Proc.*, S.P.R., Vol. 11, p. 561.)

Example 32

I was working as a street car operator for the Los Angeles Railway Company. I dreamed that I was operating a "one man" car on the "W" line going south on F . . . Street. I pulled up at an intersection, Avenue 26, loaded passengers and waited for the signal to change. All things in

the dream were as they *actually* were; I mean the street, stores, traffic conditions, everything was in the dream just as they were in real life.

When the signal said "Go" I proceeded and crossed the intersection. Now F . . . Street, on which I was traveling south, runs north and south, Avenue 26, crosses it. A short block south of Avenue 26 there is an exit which is for automobile traffic only. The exit gives onto F . . . Street, and it is a one-way exit, but it is possible, and too often done, to make an illegal lefthand turn and go south on F . . . Street. In order to do this the auto has to cross both north and south bound street car tracks.

Now back to the dream: As I crossed the intersection I saw a north-bound "5" car approaching. I waved to the motorman and went on. As the cars passed my car was at the point of this exit. Suddenly, without warning, a big truck, painted a solid bright red, cut in front of me coming from the exit. The north bound car had obstructed my view of the exit, and the truck, making the illegal turn, could not see my car because of the other street car. There was a terrific crash. People were thrown from their seats on the street car and the truck was overturned. There had been three people in the truck—two men and a woman. The two men were sprawled on the street, dead, and the woman was screaming in pain. I walked over to the woman and she looked at me with the largest bluest eyes I had ever seen. She repeatedly shouted at me, "You could have avoided this, you could have avoided this."

I awoke with a start, my pajamas soaked with perspiration. It was nearly time for me to get up anyway, so I stayed up, quite shaken by the dream.

I reported for work and for one reason or another I do not remember, I was given a run on the "W" line. I had recovered my composure by then and had put the dream out of my mind. I made one trip south. On my second trip I pulled up to Avenue 26 just as in the dream and loaded passengers. I was waiting for the signal to change, still not thinking of the dream, when I suddenly became sick at my stomach. I was actually nauseated. I felt provoked at myself and hoped it would go away. As I left the intersection on the signal change, I saw, just as in my dream, a No. 5 car, north-bound. Now I was definitely sick. Everything seemed to have happened before and my mind seemed to be shouting at me about something. When I waved to the motorman on the "5" car the dream came to me. I immediately shut off the power and applied the brakes, stopping the car. A truck, not a big truck completely red as in my dream, but a panel delivery truck with space for advertising on the side painted over with bright red, shot directly in my path. Had I been moving at all, I would have hit it as surely as I did in my dreams.

There were three people in the truck, two men and a woman.

As the truck passed in front of me, the woman leaned out of the window and looked up at me with the same startled, large blue eyes I had seen in my dream, and without realizing what it meant to me, I'm sure, she waved her arm hand, thumb and forefinger circled in the familiar "okay" gesture.

I was so upset I had to be relieved.

These nine cases, then, conform reasonably well to the requirements mentioned above. But even so, the judgment that these are

acceptable and the others not, is, as I have said, relative. For instance, there is a counterexplanation that could apply in some of these instances. It is based on internal rather than external factors. Even if it be granted that one part of the experience, the one that was fulfilled, had been precognized, it may not be necessary to assume that the averted part was; for it is possible that the origin of the total experience was more complicated, and that the two parts had different origins. Even if the non-averted part were truly precognitive, the other still could have been a rational inference derived from the precognitive impression. Since it is evident from the study of other psi cases that dreamers do often embroider extrasensorially received information, it is only reasonable to ask whether such mental action could be involved in cases like these.

Suppose, for instance, that a critical situation short of the ultimate calamity were precognitively apprehended (as indeed was true in the cases of Section C above, in which only the danger was foreseen), might not the rest of the experience have been unconsciously added on by the dreaming mind? For instance, in Example 24, if the dreaming mother had foreseen the site of the camp and the moment when she remembered the soap, might not the quick unconscious inference that the baby would be drowned when she returned have been a natural one to make? In the same way, one could suppose that in Example 25 the fall of the child from the precipice, and also, in Example 26, the baby's fall from the window could be taken as inferences based on truly foreseen situations. In these three cases it seems to me such a possibility cannot be ruled out.

Inferences such as these presumptive ones might well arise from natural anxieties. The question as to whether they would occur before waking, as in these just-mentioned cases, rather than after waking might depend on the point at which the emotional (or some other) factor awakened the individual. In other words, one could suppose in cases like those of Section C above, in which the danger but not the actual calamity was foreseen, that they were instances different from these only in that in them the dreamer awakened before there had been time for the inference to be made.

In order to avoid this counterhypothesis there must be no question but that except for the intervening action the calamity would have occurred, and also that except for the experience no action

would have been taken. It seems to me possible (even though, I admit, scarcely likely) that even without the experience the individual in Example 27 might have somehow avoided the explosion, (might even have been absent that day); or in the familiar old case, Example 28, of the coachman falling from the brougham, his fall might just possibly have been prevented without the forewarning; and even without the experience, the individual in Example 29 might have summoned the wit to stop the quarrel between her father and her husband.

The last three cases of the group, however, (Example 30, the man in the bathtub, and Examples 31 and 32, the two engineers' cases) seem to me to approach the ideal very closely (even though in Example 31, one must rely on the narrator's conviction that without the dream he would not have taken the action). At least it seems relatively unreasonable to suppose that without the intervention anything in the situations as given could have prevented the man from drowning, the two trains from colliding, or the truck from being hit by the street car; neither does it seem reasonable to suppose that that intervening action would have been taken except for the experience that preceded it. These three cases, then, seem to me to be more suggestive of the occurrence of true intervention than any others in my list.

As to whether the cases of Group II were preventable, all but 12 could be so classified. In these 12 instances an attempt was made to prevent the occurrence of the foreseen event, even though the situation really was unpreventable, but in all the rest the situations were preventable. There was thus in Group II as in Group I a small overlap of cases in which the presence or absence of an intervention attempt did not follow the logic of preventability. But nevertheless, in general, intervention was attempted in potentially preventable situations and not attempted in those that were unpreventable. The over-all generalization on this point would be that the individuals did in the main act logically, and failure to do so was mainly due to imperfectly received impressions.

DISCUSSION

Out of 131 cases of apparently successful intervention only nine were considered as acceptably fulfilling the ostensible requirements.

Even from this selected number, six more were eliminated as possibly being open to counterhypothesis. But in the three remaining cases no reasonable objections seemed to apply (except, of course, those that are inevitably inherent in all human testimony) and they were therefore allowed to stand as the most suggestive of all, on the point of intervention. Whether or not they too may be open to counterhypotheses not herein specified is not the point. They are not advanced as *proof* of intervention, but only as the best illustrations I could find of experiences that suggest it.

The number is, of course, very small but numbers in a case study can have only secondary importance in any event, and in this instance one would have no right to expect very many. The requirements for an acceptable case of successful intervention are much too complex for that.

But the fact that even a few such instances evidently occur needs to be considered. The fact may encourage those interested in solving the problem of volitional freedom, as it seems to be involved here, to look more hopefully to the possibility of eventually getting evidence on the question. On the other hand, to those who are seeking for an understanding of precognition and are baffled in their attempt to account for it, the suggestion of these cases that a precognized future can be altered would only increase the difficulty. In a world governed by the causal and temporal principles as presently conceived, it is sufficiently difficult to figure out a way by which a non-existent future event could cause a present one, without also trying to account for its possible avertibility. If precognition be understood to mean the foreseeing of a future *that is bound to occur*, then that future by definition could not be averted; and conversely, if a foreseen event can be averted then it could not have been one that was bound to occur. If, as these cases suggest, a foreseen event was averted, then the facts escape the definitions, and redefining is necessary. Such redefining would seem to necessitate the altering of established concepts of causality and time, and that need may be the heart of the present difficulty.

For confronted with the experimental evidence for precognition and also the suggestion that intervention is a possibility, the rational mind reaches an impasse, from which it must take one of several ways of escape. It may await further study, more case collections and

analyses, possibly, but more particularly (and however remote at present), experimental evidence of intervention. Or this conflict of experience and logic could be taken as a fresh starting point in attacking the question of precognition itself, the adequacy of the evidence, the interpretations, and the limitations, whatever they may be. A third escape might be to reexamine the fundamental assumptions of causality, of the nature of reality and of experience.

Perhaps a combination of all these reactions will be necessary. At any rate, the present situation seems to be one of self-contradiction. Such an appearance has in the history of science denoted only an early stage in the investigation of a new principle. It is fair to assume that when the facts are sufficiently clearly known in this new area, too, nature will be found to be harmonious. The present indications, therefore, are that the solution awaits some viewpoint not yet glimpsed, some approach not yet discovered, some question not yet phrased. I hope even this mere handful of cases, by raising questions about some current concepts, can help to stimulate a forward step, may even perhaps inspire some ingenious experiment to test the possibility of intervention in precognition.

REFERENCES

1. DALTON, G. F. Correspondence. *J. Soc. psych. Res.*, 1954, 37, 317-20.
2. ———. Serialism and the unconscious. *J. Soc. psych. Res.*, 1954, 37, 225-35.
3. DUMMETT, M. A. E., and FLEW, A. Symposium: Can effect precede its cause? *Belief and Will*. (Sup. Vol. 28 of Aristotelian Society.) London: Harrison & Sons, 1954.
4. GREGORY, C. C. L. Serialism and physics. *J. Soc. psych. Res.*, 1954, 37, 392-95.
5. HART, H. Serialism and the unconscious. *J. Soc. psych. Res.*, 1954, 37, 312-13.
6. ———. Time and precognition. *J. Soc. psych. Res.*, 1954, 37, 390-92.
7. KRUISINGA, J. C. M. Correspondence. *J. Soc. psych. Res.*, 1954, 37, 314-16.
8. MAUNSELL, G. Serialism and interference. *J. Soc. psych. Res.*, 1954, 37, 395-99.
9. MURPHY, G. An approach to precognition. *J. Amer. Soc. psych. Res.*, 1948, 42, 3-14.

10. PRICE, H. H., and BROAD, C. D. The Philosophical Implications of Precognition. *Knowledge and Foreknowledge*. (Sup. Vol. 16, Aristotelian Society.) London: Harrison & Sons, 1937.
11. RHINE, J. B. *The Reach of the Mind*. New York: Wm. Sloane 1947.
12. RHINE, L. E. Conviction and associated conditions in spontaneous cases. *J. Parapsychol.*, 1951, 15, 164-91.
13. ———. Frequency of types of experience in spontaneous precognition. *J. Parapsychol.*, 1954, 18, 93-123.
14. SALTMARSH, H. F. Report on cases of apparent precognition. *Proc. Soc. psych. Res.*, 1934, 42, 49-103.
15. SLOMANN, A. Dunne's "Serialism" Theory. *J. Soc. psych. Res.*, 1954, 37, 358-62.
16. THOULESS, R. H. Experimental precognition and its implications on determinism. *J. Soc. psych. Res.*, 1950, 35, 201-10.
17. WILSON, K. M. Correspondence. *J. Soc. psych. Res.*, 1954, 37, 316-17.

*Parapsychology Laboratory
Duke University
Durham, North Carolina*

EVIDENCE OF DISPLACEMENT IN A PRECOGNITION TEST

By G. L. MANGAN¹

ABSTRACT: After reviewing the various methods used in earlier researches on precognition, or ESP of the future, Dr. Mangan presents an experiment with a new advance in method, reported for the first time. The aim was to devise a safe way of arranging the order of the target cards to be precognized, one that would allow nothing but precognition to give results reliably above chance.

The subject who participated in this experiment was in San Diego, California. She completed five runs of ESP symbols a day, five days a week, for four weeks. At the end of each week, she mailed her data to the experimenter, in Durham, North Carolina. When the record sheets were received and before the experimenter looked at them, he selected the targets which the calls were intended to match. The method of selection, based on a complicated series of steps intended to be beyond the range of human power to influence to any purpose, is described in detail.

In a preliminary test (GESP) the subject had shown a strong tendency to hit the next card ahead (called forward displacement). In the main experiment this happened again and constituted the main effect produced. She exceeded "chance" on this displacement to an extent to be expected but once in a thousand such series (of 100 runs). Also, as in the preliminary series, she tended to avoid the card just preceding the intended target (backward displacement) and gave a total score well below "chance" on that. It should be remembered, too, that this was an ESP test in which long distance and precognition were combined as test conditions.

Dr. Mangan published a report of a PK experiment in the preceding issue of the Journal.—Ed.

INTRODUCTION

THE published evidence of precognition must be viewed cumulatively. It rests, not on any one critical study or series of studies, but rather on a limited amount of experimental evidence as reported by Rhine (10, 11, 12), Humphrey and Pratt (4), Humphrey and Rhine (5), Tyrrell (19), Stuart (18), and Hutchinson (6). Carington (3), and Soal and Goldney (17) offered it as the probable explanation of certain secondary effects in other data.

There is nearly as much evidence of precognition in spontaneous cases as there is of contemporaneous ESP. Saltmarsh's approach to precognition was a treatment of spontaneous case reports (16),

¹I wish to express my appreciation to the Parapsychology Foundation, Inc., of New York City, whose financial support made this research possible; to Mrs. Esther Foster for the help she gave in rechecking the data; and to Mr. Malcolm Turner for his advice on the statistical problems of this paper.

of mathematical probability can be dissipated. Most, if not all, of the theories are equivalent in their *practical* applications. It is the inadequacy of applied statistics in the Soal-Goldney type of research that Spencer Brown has to establish. That he has lamentably failed to do this should be obvious.

Department of Philosophy
Madras Christian College
South India

C. T. K. CHARI

PRECOGNITION AND INTERVENTION

I wish to present here some remarks suggested by the article "Precognition and Intervention" by Dr. L. E. Rhine.¹ These comments are based upon experimental observations concerning the problem of precognition and free will.

I wish first to emphasize my conviction that correctly precognized events are bound to occur in spite of any effort at intervention. I think this is inherent in the meaning of precognition, as Dr. Rhine correctly recognizes. It seems to me, however, that the problem of the relation between precognition and an assumed freedom of the will must not be formulated in terms of whether or not intervention in precognized events is possible, but rather in terms of the following two questions: (1) Is every future event precognizable? and (2) Is it not possible to cognize also a mere probability of an event which is not inevitably bound to occur? Maybe this could be the new approach to the problem Dr. Rhine is calling for.

Dr. Rhine gives in her article examples of cases in which the precognized event was fulfilled in spite of all attempts to intervene. The reasons why the intervention was not successful were given as follows: (1) The information obtained was too vague. There was lacking a precise statement about either the person, time, or place, etc. (2) An uncooperative person was involved. (3) The situation was unpreventable (e.g., in natural cataclysms).

Similarly in those cases in which the intervention seemed to be successful, the case for an averted destiny was not clear because of these possibilities: (1) alternatives to precognition were possible;

¹ *Journal of Parapsychology*, March 1955, pp. 1-34.

(2) the precognized impression was vague; (3) the precognized impressions were specific but too limited; (4) no specific mention of the individual had been made; or (5) escape was possible without intervention.

Even the nine best cases, therefore, as Dr. Rhine herself recognizes, were inconclusive. It is true, in the study of precognitive and related experiences we often find the impressions distorted. Thus we may consequently suppose that in those cases found acceptable as intervention cases, the real precognition was confined to that part of the impression which *was* later fulfilled. That part of the impression in which the intervention apparently succeeded may have been no *real* precognition of a factual event, but only a cognition of the *possibility* that this event would happen (e.g., the possibility of collisions in examples 31 and 32 in Dr. Rhine's article). This possibility is included in the framework of the precognitive experience as a whole, however, and becomes (possibly in a symbolic form) part of the vision of a real accident.

I think the problem of precognition and intervention may be more successfully attacked in the second way Dr. Rhine suggests: by studying the properties of precognition and its possible limitations. It must be done, I think, by assuming an absolute determinism in the following sense: that *what is correctly precognized is bound to occur* no matter what efforts to intervene may be made.

Therefore, if an event in the future is reliably cognized, it will be fulfilled in spite of any effort to intervene. There may be cases in which not all the accessory circumstances are foreseen, and therefore the precognized event may find its fulfillment in an unexpected way. In this connection I suspect future research may show that some kinds of events are not likely to be reliably precognized; I mean those in which an intervention is still possible and likely. In addition to this, I think it possible that besides the events in the future which are bound to occur, there also is left a place in the future for events "in preparation" (that is, potential events) in which by the interference of free will a choice between two or more alternatives may be exercised.

It is possible that such potential events, both those which will come to realization and those which will not, are also to a certain extent accessible. But it is necessary to find an experimental cri-

terion to distinguish them from the true precognition of predestined events, those which are bound to occur.

Some years ago I performed several exploratory clairvoyance experiments with hypnotized subjects who sometimes showed very reliable clairvoyant abilities. There were also several cases of precognition which are relevant to our problem. First, I observed that on various occasions events were apparently correctly precognized in whose course I could, at least theoretically, interfere, but in which (whether or not because of my curiosity to find out if the precognition would come true) it was certain beforehand that no one would so interfere. For instance, circumstances were predicted in which a certain person would be lightly injured in an accident. I knew in advance the name of the person, the precise time, place, circumstances of the accident, and the future progress of the injury. I had (at least, so I thought) the possibility of warning the person in question, or even of compelling her to evade the danger. However, in view of the circumstances, I preferred not to do so. In another case, when I tried to obtain precognition of the time at which a watch would stop, I could have tried to avert the fulfillment of the precognition; that is, I could have broken the watch to pieces. I did not do that but waited until the time the watch stopped and thereby showed the correctness of the precognition. To tell the truth, if I had interfered with the predicted happening, and if this effort to prevent the fulfillment of the precognized event had proved to be successful, I would not have been certain that I really had interfered with a precognized and predestined event. The prophetic impression in this single case might have been only a meaningless hallucination. Any intervention would have been uncheckable in these cases and therefore was not attempted.

The following observations illuminate our problem a little more:

(1) One of the hypnotized subjects with whom I experimented believed she was able, by judging the distinctness of her clairvoyant vision, to distinguish uncertain statements from certain ones. This subject informed me that she was able to predict reliably all events in the far future, that is, 50-60 years or later. Of course, these statements could not be checked. With respect to events in the nearer future, I was told she could correctly cognize events which depended upon the intersecting efforts of many individuals. Those

events which depended on the action of a single individual were seen indistinctly and therefore could not be predicted quite reliably.

(2) Another group of experiments was designed to test the precognition of events which could be influenced by a decision of a single person. Unfortunately, the experiments were performed with a subject who was not able to remove satisfactorily all sources of error—whose clairvoyant ability, therefore, was not sufficiently reliable. Although the result of these experiments was negative I wish to describe them because this might give an impulse to others to attempt to repeat them more successfully and perhaps to bring more light on our problem.

I had chosen a series of future sport matches as the means for determining targets in an experiment. After these games were over, an assistant was to indicate the results of each match by a code of easily recognizable movements of her body and limbs. A certain movement was assigned to every possible result. Before the games were played, the clairvoyant subject was to predict the movements the assistant would perform. It is obvious that the experimenter could not know in advance which movements would become the target because it would depend on the way the games came out. The assistant who finally made the movements was not told which of them had been foretold.

The experimental procedure was as follows: For instance, twelve games would be chosen: A contra B, C contra D, E contra F, etc. In the first modification of the experiment the assistant was told to go at a specified time, after the games had been played, to a specified place, and there to indicate the results of the games—let us say, in the following way: lifting the left hand to indicate that A had won; lifting both hands to indicate a tied score; lifting the right hand to indicate that B had won. Next, lifting of the left hand indicated that C had won; lifting both hands, that it was a tie; lifting the right hand, that D had won; and similarly until the results of all the twelve games were indicated. The subject was told to determine by ESP of the future the position and all the movements of the assistant. Thus, if he could manage it correctly, the experimenter could, after decoding the meaning of the movements, learn the results of the games in advance.

After the negative result of this experiment, I tried an improvement by ordering the assistant to maintain the positions for a longer time. For instance, the hand had to be held up without movement at least for one minute; and as a chief improvement, each game was distinguished from others by various outstanding characteristics. This I considered necessary because in other experiments I have seen that when such a complex scene is to be cognized, the subjects are often not able to describe the movements in their right succession. They often make "jumps" in time; for instance, they miss several movements and then unnoticeably return to preceding ones. So in the last modification the assistant was to indicate the results of the games in the following way; for the first game she was to dress in a white blouse and black skirt and while sitting on a chair, she was to lift the left hand to indicate that A had won, the right hand to indicate that B had won, and both hands to show a tie. For the result of the second game, the assistant was to put on, for instance, a black blouse and white trousers and to indicate the results as she stood on a table in another corner of the room. In this case, putting the left hand on her right knee would indicate that C had won; covering her face with both palms would indicate a tie; and sitting down on the table, that D had won. For the third game, the assistant was to be dressed in black trousers and a black blouse and to make the following indications as she lay on the floor: lifting both hands to show that E had won; lifting both legs, that F had won; lifting both hands and legs to show a tie. Similarly for all other games a different dress, different place, and different movements were chosen. The subject had to predict each movement and also all accessory circumstances: dress, position of the assistant, etc.

In spite of these methodological improvements the experiment, repeated several times, never led to a successful result. The clairvoyant subject was never able to predict the movements reliably. Two explanations for the failure can be presented: (1) It is possible that this subject had not sufficient ability to make these predictions. (2) It is also possible that the predicting of these movements was impossible. If this second explanation be correct, two possibilities come to mind. First, this was an event in the future which was still undetermined at the time the foretelling took place, and it may be doubtful whether such events are precognizable. Judging

by my previous experience, however, I think that such events *are* cognizable in some way. Second, the event was entirely dependent upon the free determination of one single person, either the experimenter or the assistant (as to whether or not he would eventually perform the movements). The movements were determined according to the results of the games, and on the basis of these movements, the experimenter would be able to decode the results of these games. The arrangement of these experiments was such as to make possible a kind of signaling of the results from the future to the past.

If in this way the subject had predicted the results of the games correctly, the exercise of free will could have brought the experiment into a paradoxical situation. For example, after the results of the games had been correctly predicted, the experimenter could have ordered the assistant to perform no movements at all, and then the results of the games would have been correctly predicted on the basis of movements which never had been performed.

I wish to mention these suggestions which, in my opinion, speak for the hypothesis that future events which could be modified by free will are not accessible to precognition. These experiments were performed four years ago and I am not able to offer more experimental material just now. I hope I have at least suggested an experimental approach to this problem that may not be too remote when a subject with good precognitive abilities is available. The experimental approach to this problem may be more promising if the targets for cognizing are not simple objects (as for instance ESP cards) which enable statistical treatment of the results, but rather more complex situations from daily life.

MILAN RYZL.

*Rybalkova 4
Prague XII, Czechoslovakia*