

Linkage Experiments with Mediums

KARLIS OSIS¹

ABSTRACT: Experiments using mediums as subjects were aimed at the problem of evidence for survival after death. Intensive explorations were made to find ways in which classical mediumistic phenomena, such as messages about deceased persons and cross correspondences, could be cast into modern experimental design.

In a pilot experiment in which a famous biologist was the supposed communicator, the proxy sitting and appointment methods were incorporated into a linkage design, i.e., a chain of human links was interposed between the mediums and the biologist's widow (the living source of information). In order to block the possibility of ESP between the medium and the widow, each participant was aware only of the adjacent link in the chain. Some mediums gave some apparently veridical information about the biologist, in spite of the linkage barrier to ESP between the living.

In two further experiments with the personality of the deceased Ross, cross correspondences were explored using the linkage design. Results resembling classical cross correspondences emerged. Various assessment methods were also explored in these two preliminary studies.

The main experiment incorporated the findings of these methodological explorations into a complex, balanced-block design experiment. The results were evaluated by an elaborate analysis of variance technique. Only marginal significance was shown in some factor interactions. The perspective for future approaches to such research is discussed and found encouraging.

INTRODUCTION

The question of personal survival after death is an immensely complex one and a great variety of empirical approaches to the problem, and theories about it, have been presented in the literature of psychical research. Some investigators cite as evidence against the survival theory findings which show that personality traits and memory traces are dependent on the body's neurological structures and neurophysiological processes (7, 8, 13, 18, 20), while others present parapsychological observations of varying validity in efforts to find factual support for the survival hypothesis (2, 3, 6, 13, 14, 17, 19, 22, 34).

The types of confirming evidence which seem most impressive concern apparitions collectively perceived (10, 12, 30, 35, 40), memories of supposed previous incarnations (36), spontaneous cases which seem to occur between a living person and a deceased one, exhibiting intent on the part of the dead (27), PK cases ostensibly showing activity by the deceased (28), and visions seen by

¹ The research reported here was performed while the author was on the staff of the Parapsychology Laboratory, Duke University, and later during his association with the Parapsychology Foundation, Inc.

dying persons (4, 23). The behavior of mediums during trance is also of special interest in considering the survival hypothesis. Mediums often assume the personality characteristics of deceased persons with whom they are supposedly in communication (11) or produce messages which seem to be drawn from their memory ranges (14). These phenomena are especially interesting when the data are gathered in experiments using sophisticated methods such as proxy sittings (1, 37, 38, 39, 41) or cross correspondences (16, 24, 31).

My own conviction, however, is that research in no one of these areas alone will provide definite answers to the survival question, but that all of them make necessary contributions to an evaluation of the complex whole. There is no "crucial experiment" which, if the outcome were clear-cut, would decide the survival question once and for all. The problem requires more reliable and better differentiated knowledge in *all* these areas, and perhaps even in areas as yet undreamed of. Gardner Murphy has explained the burning need for new data very aptly:

Where, then, do I stand? To this the reply is: what happens when an irresistible force strikes an immovable object? To me, the evidence cannot be by-passed, nor on the other hand can conviction be achieved. It is trivial and childish to ask whether I believe fifty-five—forty-five or forty-five—fifty-five. Trained as a psychologist, and now in my sixties, I do not actually anticipate finding myself in existence after physical death. If this is the answer that the reader wants, he can have it. But if this means that in a serious philosophical argument I would plead the antisurvival case, the conclusion is erroneous. I linger because I cannot cross the stream. We need far more evidence; we need new perspective; perhaps we need more courageous minds (21, p. 273).

BACKGROUND OF THE LINKAGE EXPERIMENTS

This paper will discuss only one narrowly delineated approach to the survival problem, a series of experiments which concentrated on obtaining from mediums (under conditions to be described later) veridical messages ostensibly drawn from the memory and interest ranges of the deceased. Assuming that it is possible to receive such messages, experimental situations were designed which we hoped would tend to separate information obtained by ESP from living sources from that obtained from the deceased. It must be emphasized that in this research the question of survival after death is the problem under investigation, i.e., left open. However, for the sake of simplicity we will use a terminology which implies survival. Terms used include the following:

1. A *medium (M)* is a person claiming to produce psi phenomena with some regularity and believing that these productions originate from a contact with the dead. In our experimental design, *Ms* were used at two stages: as "appointment mediums" to arrange the test situations, and as subjects to carry on the actual tests.

2. An *appointment medium (AM)* is an *M* who helps to arrange the test situation by making an "appointment" with the deceased in a preliminary contact. The *AMs* were not the actual subjects in this series.

3. The *subject (S)* is the person who is experimented upon. Often he is called the "receiver" or "percipient" in the literature. Only mediums were used as subjects in our experiments and they are hereinafter referred to as *Ss*.

4. The *agent (A)*, often called the "sender" in the literature, is the person who is the source of the information received by the *S* via ESP.

5. The *living agent (LA)* is the living person who is the possible source of the psi information obtained by the *S*. In part, the *LA* could himself be the "stimulus" or ESP "target" for the *S*; in part, his memories about a deceased person could be the source. The *LA* is often called the "sitter" in the literature.

6. The *deceased agent (DA)* is the hypothetical surviving personality assumed to be the *S's* source of information in certain parts of mediumistic experiments. The *DA* is often called the "communicator" in the literature.

7. The *agent's proxy (AP)* is the person who sits in for the *LA* in a session with an *S*. The *AP* knows nothing about the *DA* and therefore cannot be a source of information about him. In the literature the *AP* is called the "proxy sitter." In the present series laboratory assistants were used as *APs*.

Experimental Methods

I searched the classical research literature on mediumship to discover which experimental methods seemed best able to facilitate the *S's* performance; my special interest was in arrangements which could be used in a modern experimental design. Three methods seemed to be promising:

1. The *proxy sitting* method, which attempts to introduce a barrier to ESP between the *S* and the living source of information.
2. The *appointment* method, which was devised by Nea Walker (41) to sensitize the *DA* to a particular *S*.
3. The *cross correspondence* method.

These arrangements will be explained in the following pages.

Expansion of the Proxy Sitting Method into the Linkage Experiment

The psychical research literature contains a good deal of evidence that gifted *Ss* are able to give facts concerning deceased persons about whom they have no normal knowledge (5, 11, 14, 15, 33). It has long been recognized, however, that such facts do not provide strong evidence for survival because the possibility exists that they could have been obtained by ESP between the *S* and an *LA* who knew the deceased person. We cannot assume a *DA* when an *LA* could have been the source of the information obtained. Earlier research tried to minimize this difficulty by arranging sittings in which the relative or friend of the deceased was not present at the sitting, but represented by a proxy who knew nothing about the desired communicator. Telepathy between the *S* and the *AP*, therefore, could not yield useful information about the deceased; and since the *LA* was absent, telepathy between him and the *S* would presumably be more difficult. Figure 1 shows (a) the usual sitter-present arrangement and (b) the proxy arrangement.

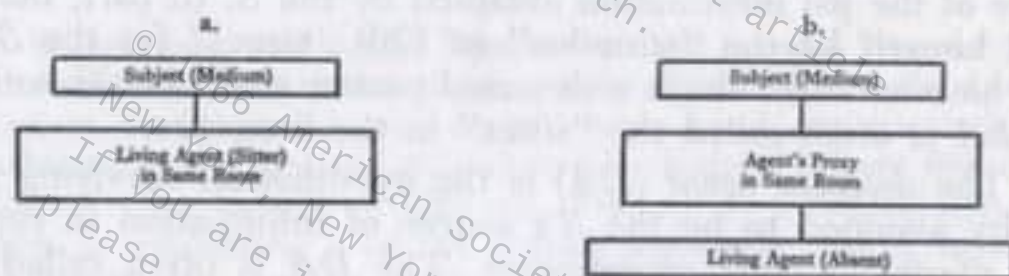


FIG. 1. Graphic representation of sitter present and proxy sitting arrangements.

The main objection to the otherwise useful proxy method is that the *S's* ESP might have the power to surmount the single barrier of the *AP* by discovering from his mind the identity and location of the distant relative who would be a living source of the information about the desired communicator; the *S* could then draw the information from the memory and surroundings of this relative. To make such an effect more difficult, we decided to use an extension of the proxy method by putting more minds between the *S* and the living source of information. In such a situation, for example, the *LA*, a relative of the desired communicator, could ask his acquaintance, Jones, to contact an experimenter, Smith, who turns to an assistant, Brown, who then conducts a sitting with an *S*. Everyone in this chain knows only the adjacent person. In this case, the *S's* ESP would have to surmount a series of human links in order to get the information known to the *LA*. By manipulating the number of links used (see Figure 2), the researcher can attempt to segregate living sources of information from deceased sources. Two possibilities exist:

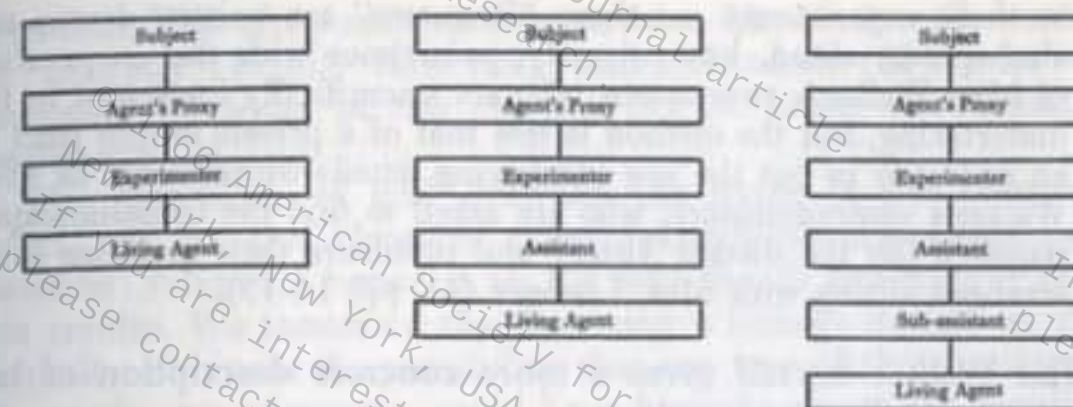


FIG. 2. Possible ways to increase the number of links in proxy sittings.

- (1) If it is found that the linkage block cuts the communication line between the *S* and the living source of information and at the same time does not interfere with the flow of veridical material about the deceased, then the hypothesis of communication between the *S* and the deceased would gain considerably in certainty.
- (2) If, on the other hand, it is found that the information obtained about the deceased is not veridical when the connection between the *S* and the *LA* is blocked, then we might assume that *all* communication in unblocked conditions is based upon ESP between the *S* and a living source.

Neither of the above interpretations would be valid unless the linkage block satisfied two specifications: (a) that it really decreased or cut ESP between the *S* and the *LA*, and (b) that it was of such a nature that it did not interfere with ESP between the *S* and the *DA*.

Once the decision had been made that the linkage idea would provide a substantial basis for our experiments, we searched for secondary methods which might facilitate communication between the *S* and the *DA* without breaking the blocks which (it was hoped) would tend to eliminate ESP between the *S* and the *LA*.

The Appointment Method

In reviewing the various methods employed in mediumistic experiments, I was struck by the method of Nea Walker, assistant to Sir Oliver Lodge. This method consisted of holding a sitting at which a request was made to the *DA* to communicate at a certain specified future sitting. In his introduction to Miss Walker's book, *Through a Stranger's Hands*, Kenneth Richmond describes the method as follows:

The few known facts about the case are not given to the medium... They are [instead] included in a "Request" which is made to deceased friends of Miss Walker's, who have professed to cooperate

in these experiments . . . these "Requests" are written down, and also spoken aloud, but privately, sometimes with the cooperation of Miss Walker's two sisters, who are scientifically interested in the undertaking. But the method is less that of a private sitting than of an endeavor to put the few identifying details within reach of Miss Walker's communicators, who are asked to find the communicators required [by the distant sitter] and to ensure their presence at an arranged sitting with Mrs. Leonard (41, pp. 14-15).

Miss Walker herself gives a more concrete description of her technique in the same volume:

My method in attempting to get evidence through Mrs. Leonard [the medium] about a communicator unknown to me, has been to write out a letter to the Group [deceased agents who had been friends of Miss Walker] just as I should to friends on earth, explaining what I want, and telling what little I know. This, of course, is not communicated to Mrs. Leonard; everything that she knows about anything is noted in reports of sittings, and she knows nothing of my "requests." To take an example, which happens to be short, my request letter in the Prichard case ran as follows: "April 22nd, 1930. This is just to record that I have asked [meaning mentally and aloud when alone] for the brother of a Miss Kate Prichard, to come to my next Leonard sitting on May 3rd (Saturday) afternoon. His sister lives at . . . She is twenty-five . . . He was twenty-three, and was killed in Malay nearly a year ago, June, 1929. This is all I know about him. Please try and find and bring him."

Such letters are read over by me, usually the last thing at night, and aloud, when I am alone (41, pp. 24-25).

Miss Walker's method seemed to provide an answer to our need. Although it sounds fantastic to say that it is possible to make an appointment with a deceased person as we make a business appointment to meet someone at a certain time and place, the evidence supplied by Miss Walker raised hopes that it might work. In any case, despite wide inquiry, neither my colleagues nor I could think of anything which might be more promising and therefore we decided to build the appointment method into our experimental design.

The Cross Correspondence Method

Another method of designing experiments seemed to be useful for our purposes: the use of cross correspondences. In brief, cross correspondences are messages, purporting to come from a *DA*, which are fragmented or broken into parts. Each part is given to a different *S* at a different sitting. Usually the parts make little sense by themselves and only form a coherent unit when taken

together. The cross correspondence idea has been well described by Murphy (17,21), Roll (29), and Saltmarsh (31), who were intrigued by some of the classical S.P.R. cross correspondence results (16, 24, 31).

The possibility of ESP between the living is not completely ruled out in the classical cross correspondence experiments, however: telepathy between an *LA* and the *Ss* could have caused the results. We theorized that by using a linkage design we could virtually eliminate the possibility that any one of the participating *Ss*, or the experimenter, could have brought about the results by telepathic impact on the other *Ss*. We decided to incorporate the classical cross correspondence technique into the appointment-linkage design by using more than one *S*. We could then check each *S's* statements for messages similar or complementary to the ones received by the other *Ss*.

The Experimental Design

As already stated, the experiments reported here incorporate the appointment method and the cross correspondence method into the linkage design. In general, the plan worked as follows: We first had the appointment medium (*AM*) make contact with the *DA* from whom communications were desired. We provided the *AM* with all the known aids to ESP communication: an interested sitter who was present, psychometric objects owned by the *DA*, photographs of him, and so forth. When the *AM* had supposedly made contact with the *DA*, the *AM* set up a future appointment between the *DA* and one or more *Ss* who were unknown to the *AM*. The *DA* was given a date, hour, and minute. He was asked to agree on certain signals—for instance, a nickname or a first-and-second name combination—which would summon him.

It was possible to use the appointment-linkage design in two ways: First, we could use it to gain information from one *S* about the *DA* and his life events. Secondly, we could set up appointments between two or more *Ss* and a single *DA* and then try to find cross correspondences in the information supposedly given by the same *DA* to the various *Ss*. In our experiments we tried both techniques.

Testing and Assessment Techniques

Mediumistic statements are not easily assessed. Researchers have found that the simple annotation methods of the early experiments are inadequate and have replaced them with various exploratory methods involving quantitative assessment, such as those of Pratt (25), Pratt-Birge (26), and Saltmarsh-Soal (32).

None of these methods were found to be suitable for evaluating experiments in which several variables are compared and by necessity, therefore, I had to explore other possibilities: (1) restriction of the stimulus field, (2) tracer effects, and (3) global assessment.

Restriction of the stimulus field. In conducting survival experiments the investigator can give the *S* free rein to make statements about anything and everything connected with the *DA*, or he can limit the *S* to obtaining answers to questions concerning very limited aspects of the *DA*'s life. If the investigator chooses the latter course, he can verify the statements concisely and work out appropriate statistics. Numerical data such as birthdays, anniversaries, ages, etc., are especially useful because it is possible to calculate the probability of their being correctly stated by chance. As will be seen below, we attempted to restrict the stimulus field through the use of a questionnaire.

Tracer effects. Jan Ehrenwald (9) has devised the idea of tracer effects. This principle was used in some of the explorations described here. In it, the experimenter sensitizes the telepathic agent, living or dead, to selected words, phrases, or numbers which would be very unlikely to occur in the normal course of the sitting. It is then possible to assess the probability of these tracers occurring in the statements of the *S*. In our preliminary experiments we used a three-digit number and words randomly selected from Webster's Dictionary as tracers.

Global assessment. In contrast to restricted stimulus items and tracer effects, all the *S*'s statements about a *DA* can be analyzed as a unit. We found that the global assessment method provided data amenable to complex statistical analysis, but our first explorations did not lend themselves to anything so ambitious. In the main experiment, however, we used this evaluative technique.

Exploratory Approaches

Since we wanted to explore the applicability of our three experimental principles to modern research on the survival problem, we decided to try out the general ideas and the technical testing methods in a small pilot series of tests before going on to a more complex experimental design geared to highly structured data collection methods and elaborate statistical analyses.

PRELIMINARY LINKAGE EXPERIMENTS

Explorations with a Questionnaire

We made our first explorations of the linkage idea with the widow of an internationally-known biologist. She acted as an

AM and as the *LA* as well. She and her husband had been a closely-knit couple and had cultivated telepathy between each other, she informed me. As an example of this, she said that since they lived on an island which had no shops, whenever she needed certain groceries she would concentrate on the required items and her husband would arrive home from the mainland with the right things. She also reported that her husband communicated with her after his death through her own and a friend's automatic writing.

It seemed appropriate to try out the linkage idea with this couple. We wanted to see whether *Ss*, either individually or in cross correspondences, could produce information about the biologist. On my behalf, three assistants made arrangements with the *Ss* in this exploration: An assistant in Philadelphia arranged for the cooperation of three *Ss* and also participated as an *S* herself; an assistant in Munich arranged sittings with two *Ss* in Germany and one in Switzerland; and an assistant in New York had a sub-assistant in England arrange sittings with five *Ss* and also arranged one directly. In the case of the English arrangements there were two links between myself and five of the six participating *Ss*. A total of thirteen *Ss* participated (see Figure 3).

The assistants submitted twelve questions to the *Ss*. I devised these questions, which concerned the biologist's life and work, and

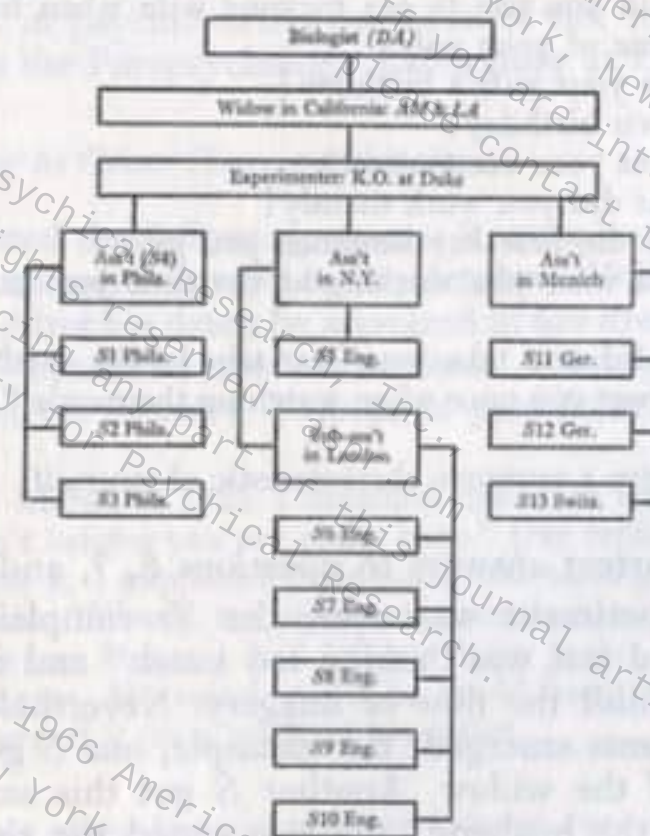


FIG. 3. Links and participants in the "Biologist" experiment.

had them approved by the widow, presumably with the corroboration (through automatic writing) of her husband. Instructions to the Ss and the questions were as follows:

Experiment A

This experiment is organized on a large scale involving many mediums and automatists in different countries. We will be very glad to have your cooperation in this first step toward a new approach to the old problem of survival after death.

Instructions

The main idea of the experiment is to get through you responses from a certain communicator who has promised to communicate if you will concentrate on a key sentence and on his photograph. The communicator is accustomed to control automatic writing; therefore it should be used if you are able to do it. If not, the communication method preferred by yourself should be applied.

Please prepare for the sitting in your usual way, then concentrate on the key phrase, "Pink iris—May queen," and on the photograph enclosed. First allow the communicator to express himself freely. Then the following questions should be asked:

1. Can you describe your home in a sentence or two?
2. What did you use to say to your wife when bringing coffee?
3. Nickname of your wife?
4. When is your wife's birthday?
5. Your own birthday?
6. What was your occupation?
7. On what did you work mainly?
8. What is the first key sentence you gave?
9. On what were you working at the time you had to leave this world?
10. Where did you take your last trip in the earthly life?
11. What upset you once when watching the movie "David Copperfield"?
12. Please give a sentence characteristic of yourself.

I knew the correct answers to questions 6, 7, and 8 only.

After the experiment was over, the Ss complained that the highly structured test was "asking too much" and indicated that it seemed to inhibit the flow of imagery. Nevertheless, some interesting statements emerged. For example, one S got the correct year of birth of the widow. Another S got this same year, but attributed it to the husband; she also stated the right month of birth for both and missed the day of the month by two for the

widow, by three for the husband.* Countries and other localities were incorrectly given except by one English S, who correctly placed the biologist as a teacher at Stanford University, an outstanding hit. Another S came close to making a direct hit on the question concerning the communicator's last work when she replied that he had been painting a portrait. Actually, he had been painting a still life which prominently featured the sculpture of a head. Although these statements must be considered inconclusive as evidence concerning the source of information since they occurred mixed with a number of incorrect items, they encouraged us to explore other avenues.

Explorations with Tracer Effects and Cross Correspondences

The pilot experiment just described taught us that most of the Ss disliked the questionnaire technique; it was therefore abandoned. The statements such as those concerning the birth dates and the Stanford University hit indicated possible success using tracer elements. In order to make the data amenable to statistical evaluation, the tracers were selected by a random method. The pilot experiment also revealed slight indications of possible cross correspondences and strengthened our wish to continue this line of investigation. We seized on an opportunity for further experimentation when Mrs. A, a Texas businessman's wife who had been engaged in psychic activities most of her life, reported her experiences to the Parapsychology Laboratory at Duke University.

Events Leading to Cross Correspondences

Mrs. A related the following events: Ross, a businessman friend of hers, had committed suicide in October, 1953, after a heavy financial loss. After his death he appeared in her dreams and visions. These "visits" consisted of conversations. At one point in a dream she challenged his identity. I quote in part from her report:

Early in March of 1955, I dreamed that Ross was with me. I said, "I just can't believe you are really here." [He replied] "So you want me to prove it, I suppose?" His voice was teasing. "Yes, give me a sign," I said. "Would the return of your locket do?"

Several years before I had left my baby locket while visiting his mother's home. He asked me if he could keep it for good luck. I think he carried it for a while in his wallet.

* The age range of the biologist could be inferred from the photograph; his wife, however, was twenty years younger. The month and day of birth, of course, could not have been inferred from the picture.

I told my friend Mrs. B about the dream. A few days later I visited in New Orleans. In a telephone conversation with my husband I asked if I'd received any mail. "You had a letter and I opened it," he said. "It had nothing in it except an old-fashioned locket."

In answer to my inquiry, Mrs. A's friend, Mrs. B, wrote to me as follows:

This is how I remember it—A called me one morning and said, "Ross was here last night." I asked if they talked and she said, "He told me someone had my little locket and it would be sent to me."

I interviewed Mrs. B later in New York; her verbal account was consistent with the information given in her letter. Mrs. A's phone call to Mrs. B occurred several days before the locket was returned. The incident was discussed between them, both before and after the arrival of the locket.

Of course, the locket had not come from heaven, but from Canada! Ross' widow, who had not been in contact in any way with Mrs. A for years, suddenly sent it to her. The important point is that the widow sent it a week or two after Mrs. A's dream and not at any other time between October, 1953 (when Ross died) and March, 1955. In answer to my query, Mrs. A wrote: "The dream was probably in the first week of March; the necklace probably arrived the middle of the month." There is a certain vagueness in Mrs. A's memory of the incident, but it seems likely that the locket was mailed after the dream occurred.

In her dream Mrs. A challenged Ross to give proof that he was "really there" and he promised to "return" the locket. There was no hidden meaning or obscure symbolism—it was a straightforward predictive promise followed by fulfillment. If, in view of the timing involved, we accept that there was a causal connection between the promise made and the return of the locket, then several alternative explanations for the incident can be tentatively considered:

(1) Precognition on the part of Mrs. A. But this does not satisfactorily account for the fact that Ross' widow made the sudden decision to return the locket at that particular time. (2) Telepathic influence exerted on Ross' widow either by (a) Mrs. A or by (b) the surviving personality of Ross. In regard to (a), very little is known about the occurrence of telepathy between hostile persons (hostility characterized the relationship between Mrs. A and Ross' widow), but it would appear to be rare; as for (b), it involves the difficulty of having to assume survival after death. Thus, although we may eliminate the precognition hypothesis, we are not able to make a firm choice between the two hypotheses in-

volving telepathic influence. On the surface, however, it looks as though the motivation behind the incident was Ross' intention to assure Mrs. A of his continuing existence.

In addition to this dramatic instance of ostensible contact with the deceased Ross, Mrs. A reported other psychic experiences connected with him. In 1962 I learned that six months before his death she had a dream foreshadowing it. In answer to my question whether her experiences were dreams or visions, Mrs. A wrote:

The dreams were the beginnings of visions, I'd say. For instance, the time I was dreaming that I was at the post office to get a box that Ross had mailed us—on opening the box I found orchids. I wrapped a leaf about my finger and the leaf died. Then the box turned to a casket and Ross was in it. I awakened screaming and it—the dream or vision—continued. Once I was driving the car and I saw all the details of Ross' death so I couldn't have been asleep. In the promise of the return of the necklace I was asleep.

In this account a box containing something precious (orchids) is associated in a dream with a coffin and Ross' death. At the time of the experiment I did not know of this association (I found out about it only in 1962), but it was one of the leitmotifs in the cross correspondences which were found in the experiment we conducted based on Mrs. A's supposed contact with Ross.

The Cross Correspondence Experiments

First experiment: We decided that Mrs. A's contact with the Ross personality seemed definite enough to provide the basis for a second series of pilot tests incorporating our experimental principles. Mrs. A was agreeable and so we organized the first session for February 12, 1956. In contrast to the earlier exploration (with the widow of the California biologist), in these tests we put emphasis on the Ss' spontaneous, free responses to the entire Ross personality. However, we used two tracers which we had selected with the help of a random number table: the number 472 and the word "faint." Mrs. A, acting as an AM, was told to impress Ross with the idea that he should communicate these tracers in addition to anything else he might choose. In addition, Mrs. A gave me a few words which, according to her, Ross had suggested as his own tracers. We did not emphasize cross correspondences in this test, but hoped for them.

The pertinent part of the instructions to the Ss was as follows:

The main idea of this experiment is to get impressions from a certain communicator who wants to communicate through you if

you will concentrate on the name Ross at o'clock in the afternoon of the The communication method preferred by yourself should be used. No questions will be asked [of the communicator]. Please try to open up your mind to the impressions coming from that person at that particular time. The contents of the communication will supposedly be limited to simple, even trivial messages. The communicator might want to "get through" certain words or show a certain thing or might help to draw something, etc. He will also try to communicate a three-digit number.

The three assistants in Philadelphia, New York, and Munich, and the sub-assistant in England who had helped in the earlier work, made arrangements with three *Ss* for this session; two of these assistants also acted as *Ss*, bringing the total to five. Two *Ss* had participated in the previous experiment; one was in England and one in Switzerland (see Figure 4).

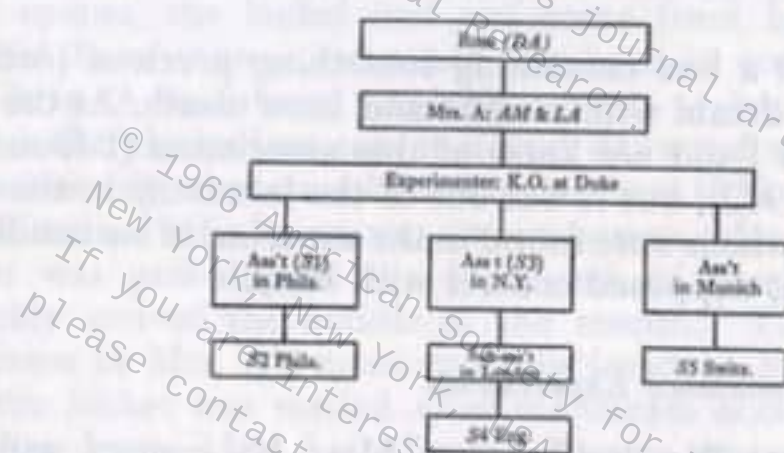


FIG. 4. Links and participants in the first "Ross" experiment (February, 1956).

Results: Only two of the five *Ss* indicated a three-digit number; one got the first two digits of this tracer correct, the other got none right. The sample is, of course, too small for probability statistics, but such a close coincidence on the part of one *S* seems rather striking. The tracer word "faint" did not appear in any of the statements, nor did Ross' own tracer words. However, the *S* in Switzerland wrote in automatic writing a word which she interpreted as "Amen." Actually, the word written was "Ane." According to Mrs. A, when Ross was alive he used to deliberately misspell her name, Ann, as "Ane." This appears to be a rather improbable coincidence, however.

Two *Ss* indicated that Ross had been connected with the Rosicrucians: the *S* in England stated this explicitly and the *S* in Switzerland drew the Rosicrucian symbol of God's all-seeing eye. Ross had actually belonged to that organization.

In contrast to these less significant correspondences, the most

striking thing in the experiment was the number of apparent allusions to the locket incident. The locket was suspended on a fine chain and worn as a necklace. The *S* in Switzerland automatically drew chains in three variations and also something that looked like lace, such as a lace collar on the neck of a woman's dress, that is to say, "neck-lace" in a literal way. Her automatic writing also stated, "A graph, eine Tabelle, belongs to this drawing and will be reproduced in another place." In other words, she was saying that the drawings were incomplete and would be supplemented by another *S*, the basic idea of cross correspondence. There were no graphs in the scripts of the other *Ss* in this first experiment, however.

The British subject also made a possible allusion to the necklace, emphasizing lace: "Old-fashioned, with lace, bedspread, or something to do with lace. . . . It is a symbol, I think." Then later, "I got jewelry and bits of gold things and material things in my hands."

Mrs. A commented on this statement: "The lace bedspread the English medium got was, I am sure, a beautiful coverlet that Ross' mother had knit. I also have a number of other things she made—pillowcases, tablecloths, all with lace." Thus, lace could have a sentimental meaning of its own for Ross and Mrs. A. However, in the Swiss *S*'s automatic production "lace" and "necklace" seemed to be closely linked. It makes the British *S*'s statement that lace is a symbol (i.e., it stands for something else) much more meaningful. The possibility of real cross correspondence in these statements can be singled out from chance coincidence only by seeing the basic associative links that are repeated.

Although these findings are interesting, the amount of cross correspondence is not as great as we would need for substantial evidence. However, Mrs. A got a "message" from Ross at the time of the experiment: "The letter is on its way—good news, but will find many delays before delivery, say, May first." I felt that this statement might possibly be a hint that the promised cross correspondence might be forthcoming in a subsequent session.

Second experiment: In preparing for this experiment (in which there were two sessions), I wrote to Mrs. A and told her that to corroborate the findings of the first experiment it would be necessary to try to get similar results in a second series. In the letter giving her approval Mrs. A stated that Ross had suggested a certain perfume as a tracer. I thought this was too indistinct to be an effective stimulus and turned down the suggestion. Mrs. A persisted, however. In a letter dated April 6, 1956, she said, "I still think the perfume is a good target. I have a bottle that Ross gave me called 'Golliwog.'"

An additional impetus to use the perfume as a tracer came in the same mail. I received a letter dated April 7, 1956, from the assistant in Philadelphia who was also serving as an *S* in which she discussed the steps to be taken for Ross' next sessions. She said that she had had to interrupt the writing of the letter to me because "a wave of wonderful perfume suddenly surrounded me." She interpreted it as "spirit perfume" given by one of her communicators. She said this was the first time such a phenomenon had occurred in her apartment and that investigation had shown that all her perfume bottles were tightly closed.

We took this *S*'s olfactory hallucination coinciding with Mrs. A's letter as a good omen and decided to use the perfume tracer. If the hallucination meant anything in connection with the experiment, perhaps it was a hint that the *S* who had had the hallucination would be important in the next session. The other tracers used were the number 574 and the word "fallow-deer."

The next two experimental sessions took place on April 9 and 18, 1956. A total of eight *Ss* participated: one in Iceland, one in England, three in Philadelphia, and one in Texas; in addition, the two assistants in Philadelphia and New York also served as *Ss* (see Figure 5). Unknown to us at the time, Mrs. A had brought the Texas *S* into the experiment. When we heard of this, it seemed a senseless whim because this *S* had known Ross and had many memories of him which could have masqueraded as "messages." However, this was not the case and, as will be seen below, she made a significant contribution.

The instructions given to the *Ss* were the same as those for the first experiment (see pp. 103-104).

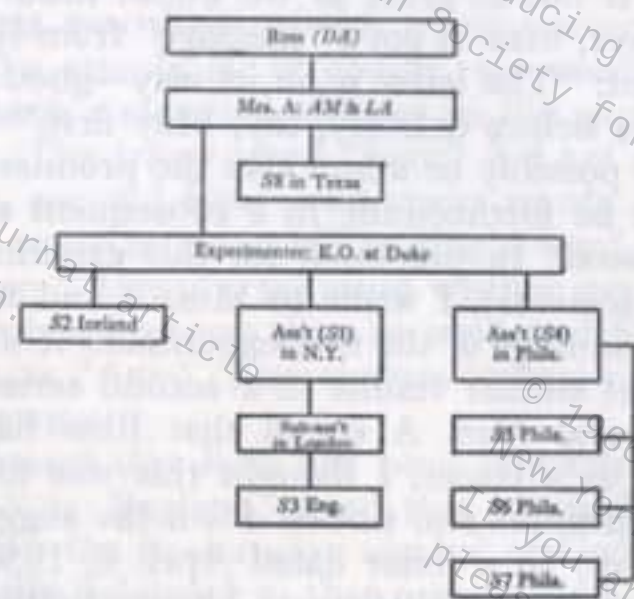


FIG. 5. Links and participants in the second "Ross" experiment (April, 1956).

Results: The results were again inconclusive. None of the *Ss* gave any of the experimental tracers. However, the New York *S* described Ross' grave as being on the "northwest side of a hill," which was correct, according to Mrs. A. The New York *S* also gave Ross' daughter's name correctly and made strong allusions to his son-in-law's occupation (involving photography and drawing).

The Texas *S* received the impressions "lace, handkerchief, cornish or coffin." The lace idea appears close to the coffin association in her automatic writing, as if they had been associated at random.

The *S* in Philadelphia who had hallucinated the perfume usually produced "philosophical" messages by means of a pendulum over a circular arrangement of letters. To her great surprise, she received (on April 9, 1956) the following commands using that technique:

"Take your pencil and draw a line. Draw another line across the end. Half of this line has been intersected very straight in the middle. Take another line, heavier, over the first line. Take another line across the end of the two lines. Now join the bottom. On the left side put a mark like a hinge. Repeat on the right side. Place a rising sun on the side, and a hole in the middle of the sun. Place a long side knob at each end. Slow but sure."

As can be seen in Figure 6, the drawing the *S* made does not quite represent the commands. She told me later that she thought the drawing was turning out to be a coffin and became very frightened of its symbolic significance, implying her own coffin. In the drawing she seems to have shaped the "long side knobs" like coffin handles. Thus, there might be two aspects to be interpreted: (1) A command to draw a box with two hinges, a keyhole having a rising sun ornament, and two long side knobs, and (2) her own interpretation of the coffin and her emotions connected with it.



FIG. 6. "Box-coffin" drawn by *S* in Philadelphia.

When this quite definite piece of information emerged, I turned to Mrs. A for help in understanding the significance of the drawing. In a letter dated October, 1962, she gave the following explanation:

Yes, Ross did have a box resembling the one the Philadelphia subject drew—his mother also had one—but Ross had the necklace [locket] in his billfold when he was shot—I am sure he probably used both boxes at times . . . I'm not an artist, but Ross' box was oblong, leather, hand-tooled—I believe [made] in Italy. It had small compartments in it for rings, studs, cuff links, and watch. He carried it with him in traveling and it was on his chest of drawers in Toronto . . ."

Apparently Mrs. A recognized the drawing as representing the box where Ross might have kept the locket. The drawing did not suggest a coffin to her, as it had to the Philadelphia S.

Discussion of the Cross Correspondence Experiments

If we hypothesize that the two sets of experiments show real cross correspondences in which the Ross personality tried to prove its survival after death, we must try to see which allusions repeat, reinforce, or clarify one another when compared.

The Ss seem to have picked up references to the two spontaneous experiences which Mrs. A reported having had prior to the time of the experiments: the locket incident and the dream in which a box of orchids turned into Ross' coffin.

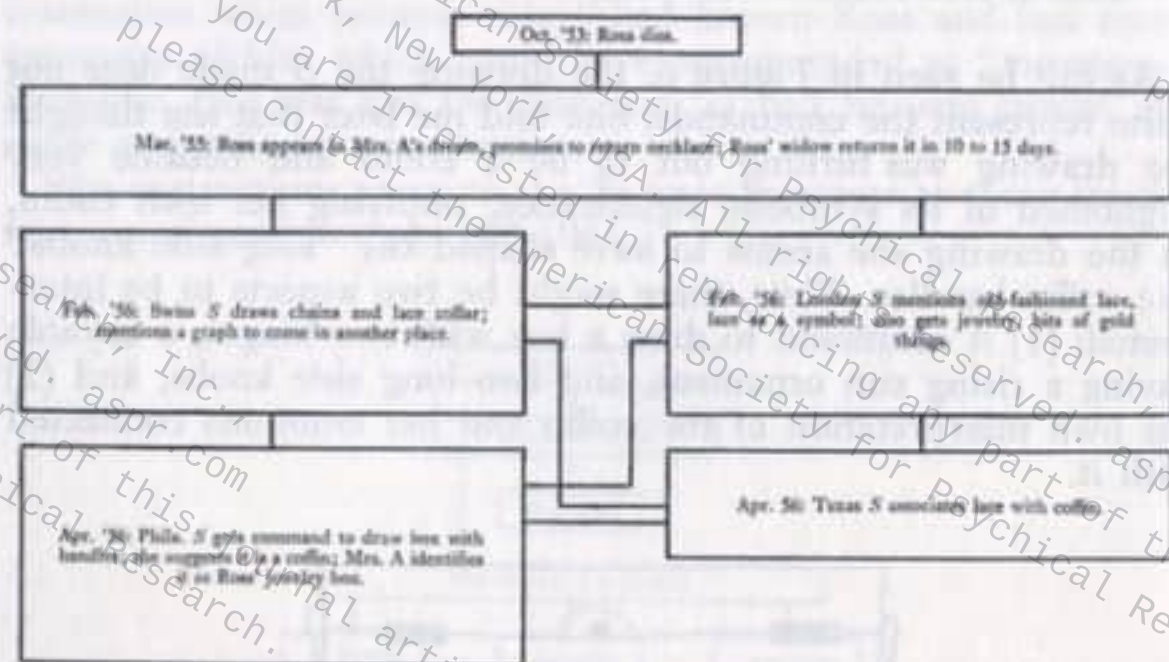


FIG. 7. Necklaces-chain-lace cross correspondences.

The necklace (locket) cross correspondences (shown in Figure 7) seem to be the most numerous, occurring prominently in the first experiment. Some references to this incident were oblique rather than direct; most allusions were to "chain," "jewelry," or "lace," which has a syllable in common with "necklace."

In the first experiment the Swiss S made sketches resembling three chains, lace, and a lace collar. These seemingly meaningless elements become significant when related to Mrs. A's experience with the necklace, keeping in mind the prelogical nature of psi imagery. Chains are an obvious common element between the two events; both lace collars and necklaces are worn around the neck and, as mentioned above, "lace" and "necklace" share a syllable in common. The English S's statement emerging in the first experiment that "lace" is a symbol for something else is not immediately clear, since lace is not a commonly accepted symbol for anything else. However, if "symbol" is taken to mean only a term with a shared significance for Ross and Mrs. A, then it is clear that the common syllable in "lace" and "necklace" could again be the association which could make "lace" a symbol for "necklace." This connection is bolstered by the same elements appearing in the Swiss S's message. The English S's additional impressions of jewelry and gold seem to reinforce the connection with necklace in her message.

Mrs. A's precognitive dream of the box of orchids which turned into Ross' coffin also seems to have stimulated a series of cross correspondences (see Figure 8). In this series of allusions, references were more straightforward. For example, one S got "coffin" and another made a drawing which she identified as a coffin.

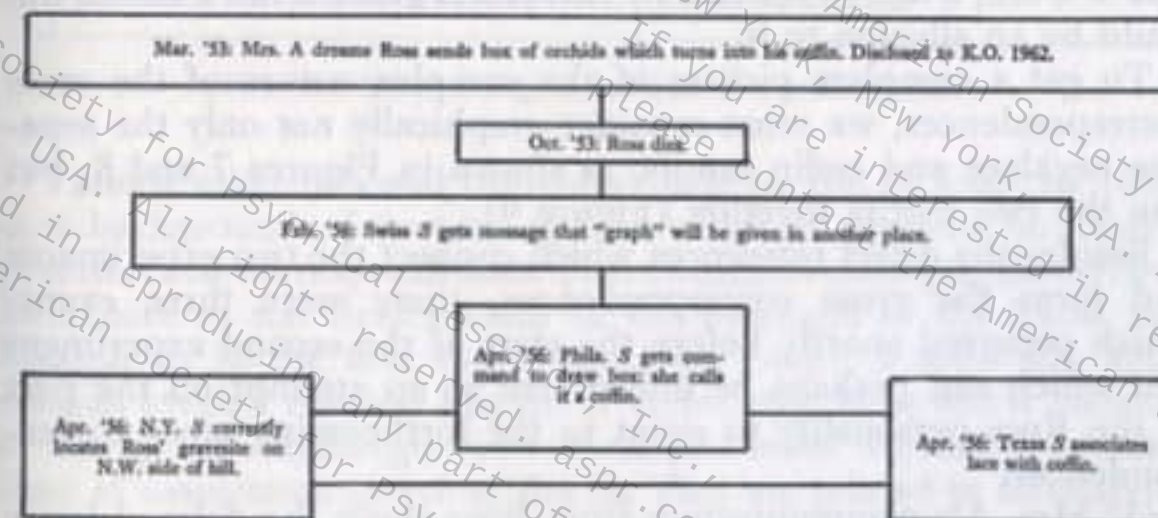


FIG. 8. Coffin cross correspondences.

In the first experiment the Swiss S had stated that a graph "will be reproduced in another place." This might also have been an indication of the relevance of the box-coffin drawing which emerged during the second experiment; the possibility of a cross correspondence between these two messages is perhaps not far-fetched because the drawing is schematic enough to qualify as a graph.

Although the second experiment seemed unproductive at first glance because none of the *Ss* mentioned any of the experimental tracers, the coffin-box drawing and the "coffin" and "grave" references which emerged are noteworthy. However, they do not seem to be closely related to Ross' individual personality or his life events.

The Texas *S* received the impression "coffin" preceded by "lace." In her message alone the two parallel series of associations are joined. For this reason her contribution is significant.

It was the Philadelphia *S*, however, who produced the most concrete piece of information during the second experiment: the box drawing. As we have noted previously, Mrs. A said that the drawing resembled Ross' jewelry box where he might have kept the necklace. The box drawing, therefore, becomes related to the necklace motif. The Philadelphia *S* thought the box drawing represented a coffin and, as already noted, the Texas *S*'s message made a connection between necklace and coffin. In this way, both motifs, necklace and coffin, are associated with the drawing of a box. These associations seem to parallel Mrs. A's dream of March, 1953, in which a box containing something precious (orchids) turned into Ross' coffin.

In addition, during the second experiment the New York *S* got a message indicating that Ross' grave was on the northwest side of a hill, a fact confirmed by Mrs. A. A grave is not a coffin, but could be an allusion to it.

To get a complete picture of the complex nature of the cross correspondences, we must consider graphically not only the separate necklace and coffin motifs, as shown in Figures 7 and 8, but also the two motifs together (Figure 9).

Besides the direct references which connect the two experiments and form the cross correspondences, there were three events which occurred shortly before the start of the second experiment and which can perhaps be interpreted as an attempt on the part of the Ross personality to point to the forthcoming cross correspondences:

(1) Mrs. A's communication from Ross about the delayed letter with good news seemed to me to indicate that another contribution to the necklace motif was to come later. The box drawing which emerged in the second experiment could possibly have been the fulfillment of that promise. The arrival in the same mail of (2) Mrs. A's letter suggesting (supposedly on behalf of Ross) that the perfume be used as a tracer and (3) the Philadelphia *S*'s letter reporting the hallucination of perfume provide a striking coincidence. Because of it our attention was directed to the messages produced by the Philadelphia *S*, although her previous ones had

been uninteresting. This proved to be a fruitful lead because she was the *S* who produced the most valuable material in the second experiment.

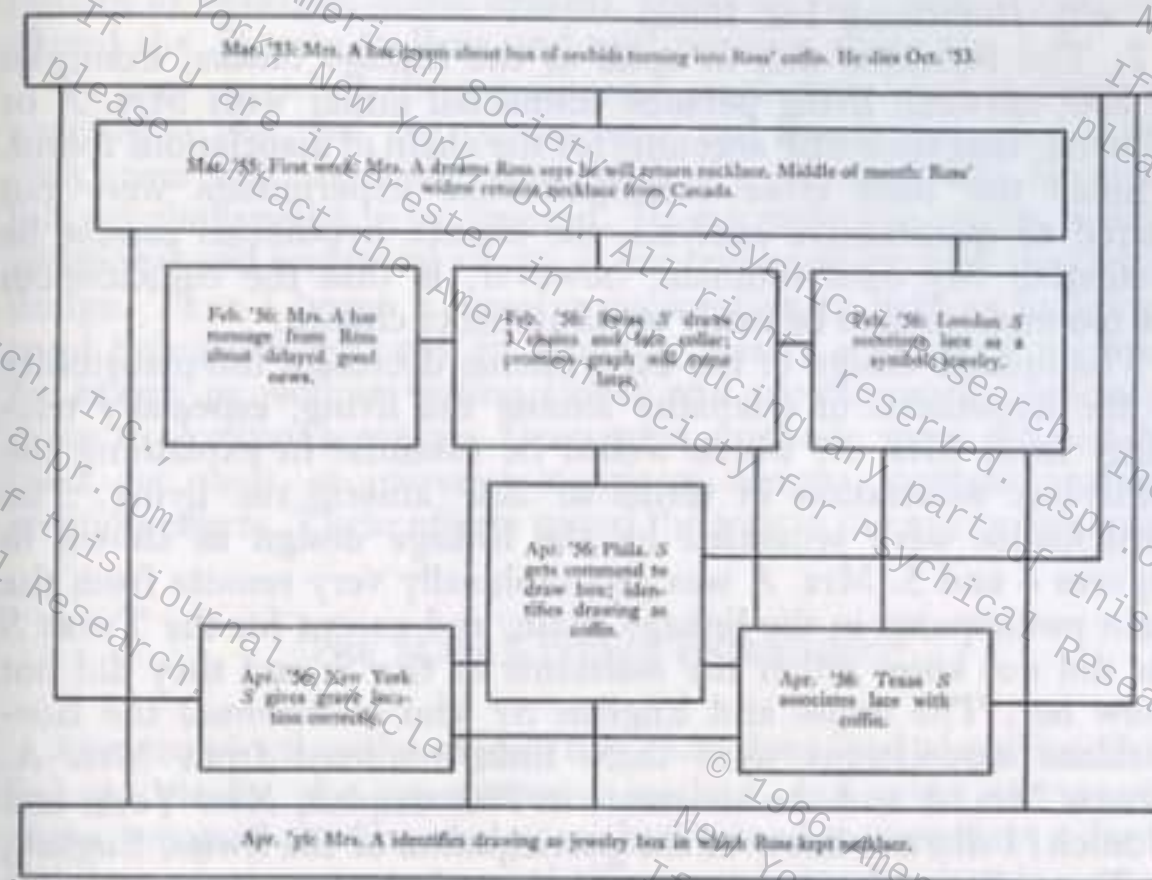


FIG. 9. Interlocking of necklace and coffin motifs.

Various other hits and near-hits made by the *Ss* must be taken as a background of success against which to evaluate and interpret the cross correspondences. There were, for example, the isolated references to the Rosicrucians in the messages of the Swiss and English *Ss* in the first experiment; the Swiss *S* drew the Rosicrucian symbol and the English *S* stated that Ross was a member of the group. Although these messages seem unrelated to other lines of association given by the *Ss*, they are related to facts about Ross' life. Moreover, one *S* reproduced two of the three digits in the first tracer number. Another *S* wrote "Ane," said to be Ross' special misspelling of Mrs. A's given name. A third *S* gave the name of Ross' daughter and came close to getting his son-in-law's occupation.

Tentative Interpretations

The same difficulties involved in interpreting the classic cross correspondences of the British automatists in the S.P.R. group

remain in the Ross case also. The two main alternatives to the survival hypothesis are the following:

1. The incidents are only a series of strange coincidences into which I projected meanings in much the same way as subjects do with Rorschach Ink Blots.

2. The incidents are, in spite of the linkage blocks, examples of ESP between living persons connected either with Mrs. A or with me; that such ESP accounts for the chain of associations found.

Since the Ross cross correspondence experiments were not geared to quantitative analysis, the chance hypothesis cannot be evaluated. My own estimate, however, is that the coincidences are too numerous to be easily attributable to chance.

The linkage design of the experiments decreases the plausibility of the hypothesis of telepathy among the living, especially telepathy from Mrs. A, which would be essential in explaining the coffin-box association in terms of ESP among the living. The participants were separated by the linkage design as shown in Figures 4 and 5. Mrs. A was geographically very remote from the main participants in the linkage chain, and except for the Texas *S* she did not know either the assistants or the *Ss* and they did not know her. The Swiss and English *Ss* who contributed the lace-necklace associations were three links removed from Mrs. A. I knew Mrs. A and the assistants in Philadelphia, New York, and Munich; I did not know of the participation of the Swiss, English, or Texas *Ss* until after the completion of the experiments. I also did not know the sub-assistant in London who formed one more additional link.

Did the links we used really eliminate information about the *DAs* (the biologist and Ross) in the *Ss*' statements? Important information appeared in the statements of the "far" *Ss* (Swiss, English) who were separated from the *LAs* by several links as well as in statements of the "near" *Ss* (Philadelphia, New York) whom I knew. It looks as though the introduction of more links did not eliminate the occurrence of cross correspondences and veridical statements about the *DAs*; whether the links decreased such cross correspondences and statements is not ascertainable without quantitative evaluations.

Did the introduction of several links really exclude telepathy between *LAs* and *Ss*? The information is too scant for a definite answer to this question. However, no information concerning the *LAs* emerged in the linkage sessions which could not have been drawn from the *DAs*' memories. It is true that some questions were asked about the *LA* (biologist's widow) in the first pilot experiment, e.g., date of *LA*'s birthday, and some approximately correct answers were given. However, the material was well within

the range of the biologist's memories, e.g., his birthday was on the same day as his wife's. In the Ross experiments nothing emerged in the *Ss*' statements connected with the life of the *LA* (Mrs. A) except items which were vitally concerned with Ross (return of necklace, coffin dream). However, our instructions sensitized the *Ss* only to Ross and said nothing about the *LA*.

To sum up, when the experiments were completed in 1956, my conclusion was that the results were not strong enough to carry conviction that communication with the deceased had occurred, but too challenging to be ignored. To my mind the results justified additional and improved efforts in experimentation with the linkage design. Thus I began a massive exploration to help in building a good linkage experiment by sampling nearly a hundred mediums for talent, as well as testing sitters and psychometric objects. In these explorations various assessment methods were devised and tried out such as paired-comparison designs, content analyses, position effects. These efforts paved the way to the next experiment.

THE MAIN LINKAGE EXPERIMENT³

After conducting the exploratory tests described above involving linkage blocks, the appointment method, and cross correspondences, we used the knowledge we had gained to construct a formal linkage experiment on survival. We hoped that by drawing on the past literature and on our own preliminary experience, we could arrive at a modern experimental design which would yield specific and reliable information on this problem.

Experimental Design

The main linkage experiment aimed at exploring two variables and their interactions:

1. The status (living or dead) of the agent being received by the *S*.
2. The effects of setting up a linkage block of several persons between the *S* and the *LA*.

We reasoned that if all mediumistic communication is based on information which the *S* obtains by ESP from an *LA* and his surroundings, one would expect:

³ Professor Malcolm E. Turner, Jr., was the statistical consultant for this experiment. Ann Jensen, Marian Nester, Richard Sheargold, and Sara Van Steenburgh were assistants in various capacities. The efficient help of these persons is here gratefully acknowledged.

(a) That the *S* would be more successful in getting correct information about the *LA* himself than in getting information from the *LA*'s memories of the *DA*.

(b) That the linkage block which seems to decrease the flow of information about the *LA* would also decrease the flow of information about the *DA*.

On the other hand, if the *S* obtains information by ESP from the surviving personality of the *DA*, then one would expect:

(a) That the *S* would be at least as successful in receiving messages about the *DA* as he would be in receiving messages about the *LA*.

(b) That use of a linkage block would decrease the flow of information about the *LA* obtained by ESP between the *LA* and the *S*, but would not affect the flow of information about the *DA* because ESP between the *S* and the *DA* would not be cut down by the block.

The experiment also incorporated a number of other variables such as the personalities and idiosyncrasies of all persons involved (experimenters, assistants, *Ss*, *As*), the psi capacity of the *Ss*, etc. While these variables were only indirectly important for our theoretical purposes, any one of them could have played a large part in determining the success or failure of the experiment.

Because the experiment involved so many variables, we had to analyze the factors statistically to gain an understanding of the effects of individual variables and the interactions between them. Professor Turner devised a complex statistical analysis of variance for our use. Therefore, we had to have the *Ss*' qualitative statements assessed in a manner which would give scores which we could use in this analysis of variance (see p. 118 below, and Appendix). After extensive consultation with Professor Turner, we concluded that scores obtained from a scaled paired-comparison technique would be most advantageous for our statistical analyses. Such a technique involves pairing each one of the readings with every other reading; this meant that each *LA* was asked to judge twenty-eight pairs at a time. He was required to choose which reading he preferred in each pair, rating each one on a 7-point scale on which minus 3 represented a strong preference for reading A, 0 represented no preference, and plus 3 represented a strong preference for reading B.

The paired-comparison technique introduced limits to the number of *LAs* we could use without making the checking task too cumbersome for them. We decided that we could not have more than four *LAs* and keep their task within bounds, while still retaining a balanced block design (see below).

Another limitation was the number of *Ss* available. Because we wished to control variation in the test situation to a degree by having a New York City assistant, Mrs. Marian Nester, conduct all the sittings, the *Ss* had to live in the metropolitan area. Moreover, out of the many *Ss* we pre-tested only four gave sufficient promise of producing psi in an experimental situation. These limitations were decisive in determining the experimental design.

As stated above, we used a balanced block design in which each *S* and each agent (*LA* and *DA*) was tested under manipulation of the two main variables. Each *S* gave four readings for each agent, as follows:

1. For an *LA* with linkage barrier.
2. For an *LA* without linkage barrier.
3. For a *DA* with linkage barrier.
4. For a *DA* without linkage barrier.

The only condition we could not balance out was the chronological sequence of readings with and without linkage barrier. The "with linkage" section of the experiment had to precede the "without linkage" section in all sessions because once an *S* had access to information the direct way (without linkage) he could not then be asked to secure the same information the indirect way (with linkage).

Procedures

To make the linkage block effective, each participant in the experiment had to be kept in ignorance about the other participants. We took precautions to insure this when we made our arrangements. As already stated, on the basis of previous testing we selected four New York mediums—A, B, C, and D—as *Ss*. Mrs. Nester, an assistant, was assigned the task of arranging and conducting the experimental sittings with these *Ss*. She was kept ignorant of the identity of the other assistants, Mr. S of London and Mrs. J of Dallas, Texas. These out-of-town assistants arranged sittings between *LAs* and "appointment mediums" (*AMs*) at their ends and supervised their *LAs* in checking the data in the later phase of the experiment. These assistants were asked not to tell their *LAs* who the experimenter (myself) was and they were not given Mrs. Nester's name. Each assistant arranged for two *LAs* to participate; their names were not given to me. The London *LAs* were close friends of Mr. S and the Texas *LAs* were close friends of Mrs. J. The linkage design of the experiment is shown in Figure 10.

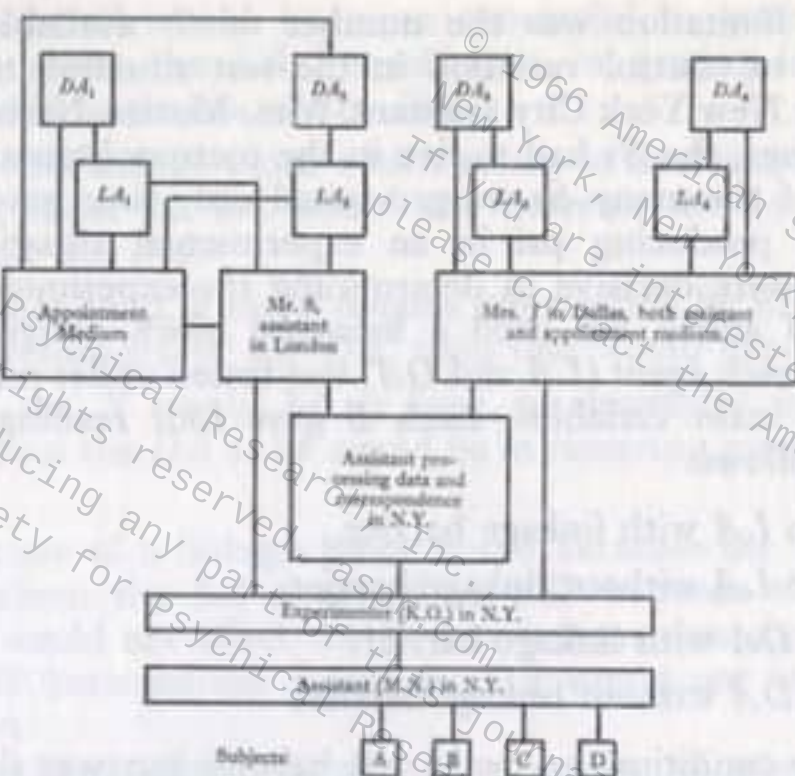


FIG. 10. Linkage design of the main experiment.

In preparation for each test session with the *Ss* in New York, a preliminary "appointment" session was held with an *AM* in London or Dallas. At the appointment session the *AM* made an appointment with the *DA*. The *AM*, whether managed by Mr. S or Mrs. J (who was herself an *AM*), gave a private reading to the *LA*, then asked the *DA* if he would like to communicate through a very good *S* who would be concentrating on his name at a specified future day and hour. As a rule, two *DAs* were lined up for each test session; twenty minutes were allowed for each. The *LAs* were instructed to do nothing in connection with the experiment on the day of the session, e.g., not to think about the *DAs*.

At the predetermined times, Mrs. Nester held the sessions with the *Ss* in New York. All statements were tape-recorded.

Blocked sittings: At these sittings Mrs. Nester gave the *Ss* only the names of the distant *LAs* and the *DAs*, alternating the order in different sittings. First and middle names or nicknames were used; last names were never given. The *Ss* then gave their impressions concerning the *LAs* and the *DAs*.

Unblocked sittings: Sittings without the linkage design were based on the use of psychometric objects. Although researchers do not understand how or why such phenomena take place, they do know that if an *S* holds an object belonging to a distant *A*, the *S's* ability to reach that *A* by ESP is improved. In our experiment the

psychometric objects were used at both ends as focusing points for the ESP connecting the *Ss* and the *As*. We assumed that this might help to offset the difficulties in finding the *A* which could be caused by the elaborate linkage arrangements.

The procedure for the unblocked sittings was as follows: Mrs. Nester had made psychometric objects of her own available to the *AMs* in London and Dallas through the assistants in these cities. It was hoped that the physical presence of the psychometric objects would facilitate ESP contact between Mrs. Nester and the *AM*. Each *LA* had provided Mrs. Nester with a psychometric object of her own and another belonging to the *DA*. Mrs. Nester gave the *S* these two psychometric objects at the beginning of the sitting. The objects were wrapped to conceal their nature.

Paired-comparison judging: After each session the *Ss'* statements were submitted to the *LAs* for paired-comparison judging. The *LAs* evaluated a set of twenty-eight pairs at a time without knowing which readings were intended for them. In this way eight sets of scaled evaluations were obtained from each *LA*, totalling thirty-two sets in all (see pp. 114 above, and Appendix). These data were submitted to the statistical analysis devised by Professor Turner.

Results

Statistical analysis: As shown in Table I, most of the mean squares produced in the statistical analysis are on a level with error variance, thus indicating no significant phenomena. Psi effects are indicated only in the interactions with the item "Experimental versus Control" statements, which represent the difference between *LAs'* ratings of statements intended for themselves as compared to those intended for other *As*. As can be seen in the table, when this variable was analyzed by itself, the results showed that in general the statements made by the *Ss* concerning a particular *LA* did not seem to that *LA* to be any more appropriate to him than the statements which were not intended for him. When this "Experimental versus Control" variable was analyzed in interaction with other factors, only one three-variable interaction showed up as marginally significant: the interaction involving the living status of the *As*.

Although this interaction may be simply due to chance, the hypothesis that it represents a real psi effect seems to be strengthened by the high mean squares produced by two other interactions dealing with the *As'* living status. Interaction between the living status variable and the presence or absence of linkage blocks gave mean

squares about three and a half times the error variance. Interaction among the three variables of living status, blocked or unblocked treatment, and identity of the *As* also gave mean squares which are high enough to be statistically significant. This indicates that idiosyncrasies of the *As* interfered either in their rating of the paired comparisons or with the *Ss*' success in making statements about them.

Table 1

ANALYSIS OF VARIANCE OF PAIRED-COMPARISON SCORES

Source of Variance	d.f.	M.S.	F	P
"Whole Plots"*				
Between Subjects	3	0		
Between Agent Status (<i>LA</i> vs. <i>DA</i>)	1	0		
Error	3	0		
Between Agents (<i>LA</i> & <i>DA</i>)*	3	0		
Between Treatments (Blocking vs. Unblocking)	1	87.8906		
Agents (<i>LA</i> & <i>DA</i>) x Treatments	3	73.0990		
Subjects x Agents (<i>LA</i> & <i>DA</i>)*	9	0		
Subjects x Treatments	3	29.7656		
Subjects x Agents (<i>LA</i> & <i>DA</i>) x Treatments	9	74.6962		
Agent Status (<i>LA</i> vs. <i>DA</i>) x Agents (<i>LA</i> & <i>DA</i>)*	3	0		
Agent Status (<i>LA</i> vs. <i>DA</i>) x Treatments	1	236.3906	3.40	.10
Agent Status (<i>LA</i> vs. <i>DA</i>) x Agents (<i>LA</i> & <i>DA</i>) x Treatments	3	225.1823	3.24	.025
Experimental vs. Control	1	27.0000		
Treatments x [Experimental vs. Control]	1	61.8802		
Agents x [Experimental vs. Control]	3	63.3333		
Subjects x [Experimental vs. Control]	3	65.2656		
Agent Status (<i>LA</i> vs. <i>DA</i>) x [Experimental vs. Control]	1	56.3333		
Agent Status (<i>LA</i> vs. <i>DA</i>) x Agents (<i>LA</i> & <i>DA</i>) x [Experi- mental vs. Control]	3	202.0060	2.90	.05
Subjects x Agents (<i>LA</i> & <i>DA</i>) x [Experimental vs. Control]	9	57.2407		
Error	192	69.5475		

* Because of the symmetrical paired-comparison rating matrixes, items involving "whole plots" cells yielded 0 variance.

* "Whole plots" is a term frequently used in experimental design and designates the largest unit or block in the experimental structure.

Inspection of data: Besides looking at the mean squares produced by the analysis of variance, we also inspected the data. Although this cannot yield statistically valid evidence, we felt that it might give us clues as to what went on during the experimental sessions. We must emphasize that none of the trends we found were expressed strongly and uniformly enough to appear in the variance table and they may all have been due to chance.

Inspection of the data revealed that on the whole the Texas *LAs* were much more successful than those in London both in identifying items which were related to themselves and in identifying those related to their *DAs*.

Inspection also revealed that one of the *Ss*, C, had much more success than the others. She was quite successful in all four conditions: blocked and unblocked, with living and deceased *As*. Subject A had success only in blocked experiments with *LAs* and slight success with unblocked experiments and *DAs*. Subject B performed best in unblocked experiments and with *DAs*, having only slight success with *LAs* in blocked sessions. Subject D had good success only with unblocked sessions and *DAs*. In all other situations she seemed to exhibit strong psi-missing tendencies; her scores were below chance expectation. Inspection of the data also indicated psi-missing effects in some cells of the data of subjects A and B.

Discussion

When designing the experiment we anticipated uniform trends with few strong idiosyncrasies among the *As* and *Ss*. We also expected a considerable amount of straightforward psi hitting, with scores varying from mean chance expectation to a positive deviation. In reality, there seemed to be a large variation in relation to the personality characteristics of the *Ss* and of the *As*, and some evidence of psi missing. These factors appear to have prevented uniform trends in the data.

The differing scoring patterns of the Texas and English *LAs* mentioned above—the Texans giving higher scores when identifying items concerning their *DAs*, the English *LAs* scoring positively only when identifying items concerning themselves—may have been due to ESP or to chance. Assuming that an ESP effect was involved, we could interpret the variance obtained to mean that some *LAs* have either more ability or more motivation to correctly identify items related to themselves, while others have more ability or motivation in the case of items relating to their *DAs*. This trend as it occurred in our data could also be explained on the assumption that the *Ss* reacted differently to the Texas and English *LAs* and *DAs*. We have no basis for discriminating between these possibilities.

The indications of psi missing in the results of three out of the four *Ss* were surprising. The analysis of variance design used was not well equipped to deal with psi-missing phenomena intermingled in haphazard fashion with psi hitting. This might have been one reason for the low level of results obtained. The concept of psi missing—the theory that the *S* uses ESP to “turn away” correct responses—has not been explored in any studies of mediumship of which we are aware. On the basis of our experience we believe that it should be considered in experimental design as well as in theory.

It would also seem that the statistical analysis design selected was not well adapted to detecting the sources of variance as they were actually encountered. For this reason, research designs should incorporate factors not only capable of detecting psi missing, but also idiosyncratic differences among participants. Or, to take a different route, constructing experiments in which a larger number of *As* and *Ss* are involved might be another way of overcoming the difficulties.

In general, it seemed to my colleagues and myself that the flow of psi imagery became more inhibited as the experimental situation was made more structured and artificial. The relatively unsophisticated preliminary experiments seemed to yield more definite ESP effects than the main experiment based on modern methods.

Although the main experiment did not yield much evidence of straightforward psi hitting, it seemed worth putting on record in detail because it throws light on possibilities for future research in mediumship: on what to do and what to guard against doing.

The computer age does offer new techniques for survival research. Extremely powerful methods are now available to separate factors hitherto deemed inseparable. We used one method—multivariate experimental design—in a bold venture into a little-known territory. In spite of extensive explorations, we did not manage to fit the new tools well enough to the old phenomena; for example, we did not anticipate marked psi-missing effects in mediumistic communications. However, this sort of “failure” is often the price one has to pay for radically new approaches in research. We do not believe that any of the difficulties are insurmountable. On the contrary, the rich yield of our exploratory experiments indicates that classical phenomena such as cross correspondences are still obtainable in our times. New machines certainly can be adjusted to grind the type of grain fed into them. They are capable of separating such entangled, but vital, factors as ESP between the living from messages ostensibly originating from the deceased. This can be done, but in my estimation long-term research efforts on the part of many investigators will be necessary.

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- A.S.P.R.
880 Fifth Avenue
New York, N.Y. 10021

APPENDIX

Judging Procedure

All repetitions and items of an unverifiable nature were edited out by a person having no knowledge of the correctness of the statements before the readings were submitted to the agents for judging.

Each agent was sent eight packages of paired readings to judge, one package at a time. Each package contained eight readings from one medium. The four "with linkage" (blocked) readings were randomly mixed with the four "without linkage" (unblocked) readings. Two of the readings (one blocked and one unblocked) concerned the particular agent herself. The remaining six readings were intended for the other three agents and so constituted controls. The readings were arranged in twenty-eight combinations of two readings, each pair in a numbered envelope.

The pairs were compared regardless of their order, i.e., whether A or B came first. If, for example, A had to be compared with B, the question would not later be asked about B in comparison with A; instead, the score of this comparison would be computed by reversing the sign for rating A versus B.

This feature of the paired-comparison technique made each judgment scaling matrix of fifty-six judgments symmetrical, i.e., the total score of each matrix is zero. Each score is used twice, with opposite signs. This feature did not interfere with the purpose of the experiment because the main interest was in comparing the differences between the two classes of statements: (1) "experimental statements" (those meant for the particular sitter or his communicator) and (2) "control statements" (those meant for other sitters or their communicators). The symmetrical nature of the paired-comparison matrix renders some items in the analysis of variance table zero.