

SRI International

Final Report—Task 6.0.6
Covering Period 1 October 1988 to September 1989

October 1989

**AN EFFORT TO IMPROVE REMOTE VIEWING
QUALITY USING HYPNOSIS**

*Stanford
Hypnotic
Susceptibility
Scale*

Prepared By: Nevin D. Lantz

Prepared for: SG1J



Contracting Officer's Technical Representative
SRI Project 1291

Approved by:

MURRAY J. BARON, Director
Geoscience and Engineering Center



ABSTRACT

This report details a 3-year effort to improve remote viewing (RV) quality utilizing a hypnotic trance to increase the amount of target-related data produced by a remote viewer. Two separate protocols were used. In the first, all RV data were obtained in the waking state. A session consisted of two RVs against the same target. The first of these was conducted in accordance with SRI's normal protocol. The second, however, occurred after a treatment period. During this period, the viewer was either hypnotized or given written material to proofread. In the hypnosis condition, the viewer was instructed to recall the first RV and supply additional details posthypnotically. A strong improvement was seen for a single viewer during a pilot study. This result did not replicate in a formal study using two other viewers. In the second protocol, RV data was collected while the viewers remained in trance. No statistical improvement over preestablished baselines were observed. In summary, hypnosis does not seem to be a productive way to enhance remote viewing quality.

TABLE OF CONTENTS

ABSTRACT	ii
LIST OF TABLES	iv
LIST OF FIGURES	iv
I INTRODUCTION	1
A. Overview	1
B. Objective	1
II METHOD OF APPROACH	3
A. Hypothesis	3
B. Viewer Selection	3
C. Target Selection	3
D. Hypnosis Procedure	4
E. Protocols	4
F. Analysis	5
III RESULTS	
A. Hypnotizability Scales	6
B. RV Results	7
IV DISCUSSION	11
REFERENCES	13

LIST OF TABLES

1.	Rank by Trial and Condition: Viewer 455 (Pilot)	7
2.	Summary Statistics: Viewer 454 (Pilot)	7
3.	Average Rank by Trial and Condition: Viewer 330	8
4.	Summary Statistics: Viewer 330	8
5.	Average Rank by Trial and Condition: Viewer 137	8
6.	Summary Statistics: Viewer 137	9
7.	Interanalyst Reliability	9
8.	Rank by Trial and Viewer	10
9.	Summary Statistics: Viewers 373 and 137	10

LIST OF FIGURES

1.	Sequence of Events in Hypnosis Experiment Protocol 1	5
2.	Sequence of Events in Hypnosis Experiment Protocol 2	5

I INTRODUCTION

A. Overview

The search for a mental state wherein an unselected subject would score better on an ESP task than during the normal waking state has recently generated considerable interest. This has resulted in the study of various altered states of consciousness for their psi-conductive properties. Many researchers consider hypnosis to be such a state. In 1986, SRI was tasked to explore the use of hypnosis as a method for improving remote viewing (RV). The rationale for choosing hypnosis as a tool for improving RV was twofold. Hypnosis has been associated with the manifestation of psi phenomena since the days of Mesmer. Experimental work in the area has shown that there is consistent improvement in ESP scoring with a trance-induction condition compared to a no-induction condition (Schechter,^{1*} Honorton and Krippner²). This report summarizes the results of three studies with four remote viewers, conducted during the past 3 years, using hypnotic processes in an attempt to significantly increase the effect size of experimental RV.†

B. Objective

One metaphor that conceptualizes the RV process is that of a radio transmitting system. Three subsystems interact to transfer information from point to point; a transmitter produces a signal, a medium carries the signal, and a receiver transduces the signal into an intelligible message. In the RV process, the viewer acts as the receiver. Because nothing is known about the transmitter or the signal-carrying medium of the RV process, the most logical approach to improving RV is to maximize the efficiency of the receiver. While most of the reported studies of psi enhancement with hypnosis have used forced choice guessing tasks as the measure of psi (Schechter¹), there was no reason in principle to believe that hypnosis could not be applied to the RV process. Our specific objectives were to learn as much about the hypnotic process as possible and to test its applicability to the improvement of the RV process.

In particular we were interested in whether hypnosis could be used as a recall agent after an RV session to bring additional unreported material to consciousness, in much the same way that hypnosis has been used in clinical situations to recover unconscious material. A pilot study with

* The references may be found at the end of this report.

† This report constitutes the deliverable of the Statement of Work item 6.0.6.

one viewer and a formal experiment with two additional viewers were carried out to address this question. In addition, we were curious about how the trance state itself influenced RV production. Two viewers participated in an experiment where RV descriptions and drawings were produced and feedback was given while the viewer was in trance.

II METHOD OF APPROACH

A. Hypothesis

The rationale for conducting this series of experiments rests on the assumption that RV data are mediated through the subconscious and then raised to consciousness by memory, associative, and attentive processes. The hypothesis tested was that a hypnotic trance state would assist the viewer to focus on and report more target-related information than in an unassisted RV. Two different experimental protocols were used. Protocol 1 compared a hypnosis intervention between two RVs of the same target with a proofreading intervention. We predicted that when the quality of the first RV was poor, hypnosis would assist in raising it during the second RV.

Protocol 2 utilized RV production during the trance itself in an attempt to increase the RV quality over the duration of the experiment. Remote viewing quality could also be compared with work done in previous studies.

B. Viewer Selection

Four viewers were selected from a pool of individuals who had participated in previous RV studies, on the basis of willingness and time to participate. The range of viewing experience varied across the four from a novice who had participated in one previous experiment to an experienced viewer who had participated in experiments for over 10 years. Prior to beginning the study each viewer was administered the *Stanford Hypnotic Susceptibility Scale*³ (SHSS) both to aid in developing individually specific RV protocols and to begin a database for comparing hypnotizability and scoring on psychic tasks.

C. Target Selection

A target pool of 100 *National Geographic* photographs of natural scenes previously chosen as potential targets for RV experiments was divided into 20 packets of 5 targets each. The five targets within a packet were selected on the basis of their dissimilarity (i.e., to be as different from one another as possible). A specific target appeared in one and only one packet. Targets were numbered and stored individually in manila folders for ease of handling during the experiment. When a target was selected for a trial, the folder containing the number and target photograph was removed from the stack of targets and placed in a designated spot for the trial.

Target selection for each trial was conducted by a research assistant, after the viewer, hypnotist and monitor were sequestered in the remote viewing room. While aware of the general nature of the pool, the viewer, monitor, hypnotist, and assistant remained blind to the specific target photograph until after each trial was completed. Using a pseudorandom algorithm seeded by a computer system clock, a target packet was selected from the target pool and, by the same technique, a target was selected from within the designated packet. Targets were chosen with replacement, so that the same target could be selected more than once.

D. Hypnosis Procedure

A licensed clinical psychologist, with a wide range of both clinical and research experience and training in hypnosis, was contracted to administer the susceptibility scales, assist in the development of individually specific trance inductions, and conduct the hypnosis sessions.

After the hypnotizability scale was administered, an interview was conducted with each viewer to determine personal beliefs about RV, methods of preparing for RV, experiences during RV, confidence and characteristics associated with accuracy of RV, and suggestions for what might help the viewer perform at the highest level.

On the basis of strengths shown on the hypnotizability scales and specific answers to interview questions, an induction and RV protocol were tailored to the needs of each individual viewer. This protocol included specific instructions for initiating and deepening the trance, suggestions leading to subjectively defined levels of readiness and confidence (rated on a numerical scale), assistance in producing an RV response, help in evaluating the response, and presentation of the target stimulus as feedback with evaluation and support.

E. Protocols

Two different experimental protocols were used in these studies (see below). A pilot series of 12 trials with one viewer using protocol 1 was conducted to debug the process and familiarize everyone with the procedures. Several changes were made to the final protocol as a result.

Protocol 1 involved two RVs with a hypnosis or proofreading condition between them. The conditions were counterbalanced with an unequal number so that the viewer and monitor were always blind to which condition—hypnosis or proofreading—would follow the first viewing. After synchronizing watches with an assistant, the RV monitor and viewer were sequestered in an RV laboratory. In another part of the building, the assistant selected a target envelope and placed it on a table in an empty office (see Section II.C). RV1 was conducted and the response was copied and stored for safekeeping. The hypnotist then entered the RV room and either proceeded with the hypnosis session or presented the viewer with a printed manuscript for proofreading. After 30 minutes, the hypnotist left the room and a second RV was produced (see Figure 1).

In the hypnosis condition, the hypnotist guided the viewer into a trance and when a previously agreed-upon trance depth and confidence level were achieved, the viewer was given suggestions to relive the experience of the just-completed viewing and to recall and remember posthypnotically all target-related information. The trance was then terminated and the hypnotist left the room.

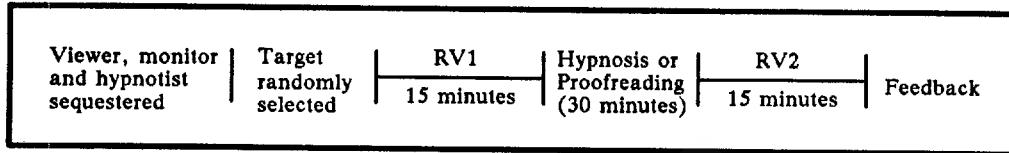


Figure 1. Sequence of Events in Hypnosis Experiment Protocol 1

In protocol 2, an experimental trial was conducted as follows. The viewer, monitor, and hypnotist were sequestered in an RV laboratory where the hypnotist assisted the viewer into a trance. In another part of the building, an assistant selected a specific target from the pool and placed the target in the designated spot (see Section II.C). After the trance was established, the hypnotist gave specific suggestions to focus on target material, to have a full sensory experience of the target, and to remember and accurately communicate that material. Following the RV session and while the viewer was still in a trance, the viewer was shown the target photograph as feedback. (It was hoped that this would facilitate state-specific learning for association between response and target elements.) After the feedback, the trance was terminated. (see Figure 2).

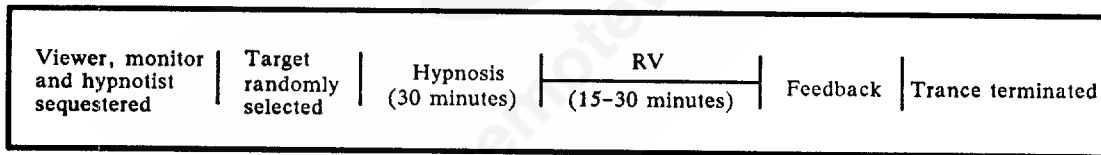


Figure 2. Sequence of Events in Hypnosis Experiment Protocol 2

F. Analysis

RV responses were ranked by an independent analyst, who was blind to the target, using the visual correspondence method. The target and the four decoys from the designated packet were presented in random order, along with the viewer's response. The analyst's job was to rank-order the targets by decreasing similarity to the response; a rank of 1 means that the target best matches the response, and a rank of 5 means the worst match. (In the pilot study, six decoys were used, giving a rank of 1 through 7.) The output from each trial was the numerical rank the analyst assigned to the correct target. The sum of ranks across trials was used to calculate the p-value and effect size for each viewer in the experiments.

III RESULTS

A. Hypnotizability Scales

The novice viewer (330) scored a 12 on Form A of the SHSS. He was then given Form C, a more difficult scale, to test the limits of his hypnotizability. He scored an 8 on this 12-point scale by failing auditory, visual, and olfactory hallucinations as well as the amnesia item. This score placed him in the high general level of hypnotic responsiveness, with a centile equivalent of 81. The hypnotist also noted difficulty establishing rapport with this viewer because of analytical, agnostic, and preestablished beliefs regarding the reality of hypnotic processes. Despite this difficulty, the viewer was able to show profound relaxation, detailed visual imagery (though bound to reality), effected motor functioning, and demonstrated amnesia.

The moderately experienced viewers (454, 137) produced scores of 10 and 7, respectively (92 and 71 centile equivalents), on the 12-point SHSS: Form C. Viewer 454 was not able to alter his perception of ammonia or produce a negative visual hallucination, but showed high imaginal ability in all sensory fields, produced a deep state of relaxation, was able to regress, performed posthypnotic suggestions, and demonstrated amnesia, hypermnesia, and posthypnotic automatic writing. Viewer 137 produced a deep state of relaxation, showed ability to regress and to be absorbed in imagery, performed posthypnotic suggestions, and showed amnesia. This viewer showed difficulty altering sensory phenomena, and did not demonstrate hypermnesia, trance logic, or the ability for cognitive and role distortion. Again, for this viewer, imaginal ability was highly rated with the ability to create, manipulate, and experience imagery in all sensory fields.

The experienced viewer (372) produced a score of 10 on the 12-point SHSS: Form C—a 92 centile equivalent. Though he was unable to inhibit hand movement on suggestion, failed to respond to a hallucinated voice item, and experienced conflict during value and meaning alterations, he produced a deep state of relaxation, became absorbed in imagery processes, was able to regress, performed posthypnotic suggestions, and showed amnesia and hypermnesia, trance logic, and cognitive and role distortion. Imaginal ability was highly rated with the ability to create, manipulate, and experience imagery in all sensory fields, especially when the image was positive and productive. The hypnotist noted several attempts to minimize conflict between visualized behavior and internalized values, particularly around distortion items and inhibiting imagery. He

suggested that further hypnotic work be positively framed, with minimal conflict between hypnotic suggestions and the viewer's belief system.

In summary, three of the viewers rated in the highly susceptible range and one in the medium to high range. Though none were true somnambulists (highest level of hypnotic susceptibility), all were able to profoundly alter their waking state of consciousness through the use of hypnotic processes.

B. RV Results

1. Protocol 1

Tables 1 and 2 show the results for viewer 454 using Protocol 1 in the pilot study. Table 1 shows the individual ranks assigned by a single analyst for all sessions in this pilot study. RV1 occurred prior to the treatment [i.e., hypnosis (H) or proofread (P)], and RV2 occurred after.

As predicted, viewer 454 demonstrated improved RV performance only after the hypnosis condition ($X^2 = 3.441$, $df1 = 5$, $p \leq 0.632$).

Table 1

Rank by Trial and Condition: Viewer 454 (Pilot)

Trial	1	2	3	4	5	6	7	8	9	10	11	12
RV1	2	4	3	3	1	5	2	5	4	4	7	4
RV2	4	1	4	7	2	3	1	1	4	4	1	1
Treatment	P	H	H	P	P	H	P	P	H	P	H	H

Table 2

Summary Statistics: Viewer 454 (Pilot)

	sum of ranks	p-value	effect size
Prehypnosis	27	0.758	-0.071
Posthypnosis	14	0.025	1.000
Preproofreading	17	0.094	0.786
Postproofreading	19	0.183	0.643

Two viewers (330 and 137) participated in the formal experiment using Protocol 1. In addition, the ranking was performed by three independent analysts. Tables 3 and 4 show the results for viewer 330. In general, viewer 330 showed nonsignificant decline in RV performance during the hypnosis condition, whereas a slight improvement was seen during the proofreading condition.

Table 3

Average Rank by Trial and Condition: Viewer 330

Trial	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Pre-T	2.7	4.3	3.7	2.0	3.0	2.3	1.0	4.7	2.7	3.3	1.7	4.3	2.3	4.3	2.3	2.3	3.0	1.0	3.7	3.7
Post-T	2.7	3.3	1.7	3.7	3.7	3.7	1.7	3.3	4.3	2.7	2.3	4.0	4.0	3.7	2.0	3.0	1.0	5.0	3.7	2.3
Cond.	P	H	P	P	H	H	H	P	P	P	P	H	H	P	P	H	H	H	H	H

Table 4

Summary Statistics: Viewer 330

	sum of ranks	p-value	effect size
Prehypnosis	31	0.376	0.129
Posthypnosis	35	0.701	-0.129
Preproofreading	27	0.546	0.000
Postproofreading	26	0.454	0.079

The results for viewer 137 (see Tables 5 and 6) showed a nonsignificant improvement in RV performance, but the RV did not reach statistical significance in 10 trials.

Table 5

Average Rank by Trial and Condition: Viewer 137

Trial	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Pre-T	3.7	3.7	3.0	3.3	2.0	4.7	2.0	2.0	2.7	4.0	2.7	1.0	3.7	2.7	1.7	4.0	3.7	4.7	1.3	4.7
Post-T	1.0	2.0	2.3	3.3	2.3	5.0	3.7	2.7	1.7	3.7	4.0	1.3	3.0	3.7	2.3	1.3	2.3	4.7	2.7	3.3
Cond.	H	H	P	H	H	H	P	P	P	P	P	H	H	H	P	P	H	P	P	P

Table 6

Summary Statistics: Viewer 137

	sum-of ranks	p-value	effect size
Pre-hypnosis	28	0.636	-0.079
Post-hypnosis	24	0.233	0.236
Pre-proofreading	33	0.542	0.0
Post-proofreading	32	0.458	0.064

To estimate interanalyst reliability, we used the Spearman-Brown expression for computing the reliability of a composite analysis,

$$\text{Reliability of Composite} = \frac{N\bar{r}}{1 + (N-1)\bar{r}}$$

where N is the number of analysts and \bar{r} is the average correlation coefficient. Table 7 shows the interanalyst reliabilities. Generally, reliabilities of 0.5 or larger are considered good. The results are in qualitative agreement with what would be expected; the better the RV quality, the better the interanalyst reliability.

Table 7

Interanalyst Reliability

Viewer	Judge 1 vs 2	Judge 1 vs 3	Judge 2 vs 3	Average	Reliability
330	.316	.132	.303	.250	.500
137	.423	.472	.590	.495	.746

In summary, during the pilot study, viewer 454 showed significant evidence of remote viewing in the posthypnosis RV sessions ($p \leq 0.025$) and increased the effect size from $r = 0.071$ to $r = 1.000$ comparing pre and post hypnosis RVs. There was no statistical difference in effect sizes pre and post proofreading. This result did not replicate during the formal test.

2. Protocol 2

In this protocol, RV data were collected while the viewers remained in trance. Tables 8 and 9 show the assigned ranks (by a single analyst) and summary statistics, respectively, for this experiment.

Table 8

Rank by Trial and Viewer

Trial	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Viewer 372	2	1	1	4	5	3	2	3	2	4	5	2	2	4	5	5
Viewer 137	3	5	3	2	2	4	1	2	5	4	5	4	4	2	5	5

Table 9

Summary Statistics: Viewers 372 and 137

Viewer	sum of ranks	p-value	effect size
372	50	0.669	-0.088
137	56	0.933	-0.354

The sum of ranks for viewer 372 is 50, with an associated p-value of 0.67. For viewer 137 the sum of ranks is 56, with an associated p-value of 0.93. Viewer 372 showed a significant decrease in performance as the study progressed, as evidenced by a linear correlation coefficient of $r = .510$ between trial number and rank ($df = 15, p \leq 0.044$). Viewer 137 showed a nonsignificant tendency toward decreasing performance from the beginning to the end of the study ($r = .348, df = 15, p \leq 0.269$).

IV DISCUSSION

In his recent critique of the hypnosis and psi literature, Stanford⁴ concludes that, although 40 years of investigation have provided evidence that hypnosis often enhances ESP performance, there are presently no clear indications as to what it is about the hypnotic process that favors ESP scoring. Many views on why hypnosis may be psi conducive have been expressed. Casler⁵ suggested that hypnosis offers the possibility of maximizing task motivation. Honorton⁶ found that relaxation, reduction of exteroceptive input from peripheral receptors, and internalization of attention are the important elements. Sargent⁷ reported an effect when controlling for state, trait, and personality variables, but did not control for relaxation. Fourie⁸ proposed that the effect is due to the nature of the interaction between the hypnotist and subject. Barber and Wilson⁹ speculated that hypnotic susceptibility may be the important variable. Rogo¹⁰ argued that any conclusion is premature, because state and trait factors affecting the results have been confounded, and that personality factors are probably the operative variable.

Stanford further delineates seven methodological problems that hamper interpretation of the studies in Schechter's¹ review; (1) tremendous heterogeneity across studies as to the nature of the induction itself, (2) individual differences in the skills needed to manifest hypnotic effects, which were not measured, (3) use of same subjects designs, which can cause a variety of problems (e.g. possible motivation to lower scores in the control condition), (4) failure to make random assignments to induction and control groups in cases where the induction-control manipulation was applied to separate groups, (5) the experimenter who administered the ESP task not being blind to the condition, (6) lack of measurement of the degree of shift in internal state from waking to trance, and (7) little systematic work examining specific hypotheses concerning why hypnosis should work.

Before beginning this research, we assumed along with previous researchers in the field that hypnosis was a unitary process that could be applied in a standardized way to the problem at hand. We have learned that this assumption is incorrect. Our experience and the expanding body of hypnosis and psi literature suggest that the coupling of hypnosis and psi tasks involves an extremely complicated operation with the potential for multiple interactions when different viewers, experimenters, hypnotists, and hypnotic techniques are used. Though our studies addressed some of the methodological problems noted by Stanford, the number of viewers involved was too small to

statistically account for all the variance. However, several speculative conclusions, pointing to directions for further work, can be addressed.

In the RVs conducted while the viewer was in trance, it is highly likely that the trance state itself was not conducive to the kind of production our particular RV protocol requires (i.e., drawing and writing), thus producing a trance-task interaction. If one assumes that learning occurred and the viewers became better at entering and maintaining the trance state as the study progressed, this could explain why performance worsened over the course of the 16 trials.

In the case of hypnotic recall of a previous RV, though the promising results of the pilot study were not repeated in the subsequent experiments, factors related to hypnotist-viewer-hypnotizability interactions are relevant. Viewer 330 continued to have difficulty following the suggestions of the hypnotist, and a sort of competitive rapport developed between them that worked against a positive result. Viewer 137 simply may not have been hypnotically susceptible enough to produce the dramatic shift necessary for enhanced productiveness. Viewer 454 was also skilled in the use of self hypnosis, which may have contributed something to the positive result.

Additional work also needs to be done in the area of induction-subject interactions. It is evident that individuals respond differently to the induction process, which may interact with susceptibility and personality factors, in the viewer as well as the hypnotist. More time and effort resolving these issues prior to an experiment may be required.

The issue of hypnotic susceptibility in relation to psi performance remains unresolved and should be the starting point for further studies. Several other good viewers, who could not participate in the present study, showed high hypnotizability on the SHSS. Conducting a series of RV trials with a group of persons who have previously been administered a standardized test of susceptibility, such as the SHSS, could help to resolve this question.

An additional area that could be explored that would eliminate hypnotist-viewer interactions would be the use of a carefully constructed self-hypnotic protocol as a pre-RV procedure, for focusing attention processes on the RV task. A series of process-oriented studies could be designed to discover the optimum conditions necessary for enhanced RV.

In conclusion it must be said that because of the interaction effects of a large number of competing variables, the quest for a state of consciousness wherein *anyone* can improve psi performance is an ill-advised and illusive goal. The best that can be hoped for is that highly-selected individuals can be helped to improve performance under certain well-specified conditions.

REFERENCES

1. Schechter, E. I., Hypnotic Induction vs. Control Conditions: Illustrating an Approach to the Evaluation of Replicability in Parapsychological Data, *Journal of the American Society for Psychical Research*, 78, 1-27, 1984.
2. Honorton, C., and Krippner, S., Hypnosis and ESP Performance: A Review of the Experimental Literature, *Journal of the American Society for Psychical Research*, 63, 214-252, 1969.
3. Weitzenhoffer, A. M., and Hilgard, E. R., *Stanford Hypnotic Susceptibility Scale, Form C*, Consulting Psychologists Press, Inc., Palo Alto, 1962.
4. Stanford, R. G., Ganzfeld and Hypnotic-Induction Procedures in ESP Research: Toward Understanding Their Success, In S. Krippner (Ed.), *Advances in Parapsychological Research*, 5, 39-76, McFarland and Co., Inc., Jefferson, N.C., 1987
5. Casler, L., Hypnotic Maximization of ESP Motivation, *The Journal of Parapsychology*, Vol. 40, 187-193, 1976.
6. Honorton, C., Psi and Internal Attention States, In B. Wolman (Ed.), *Handbook of Parapsychology*, 435-472, Van Nostrand Reinhold Company, New York, 1977.
7. Sargent, C. L., Hypnosis as a Psi-Conductive State: A Controlled Replication Study, *The Journal of Parapsychology*, Vol. 42, Number 4, 257-275, 1978.
8. Fourie, D. P., Hypnosis and Psi, *European Journal of Parapsychology*, Vol. 4, Number 5, 455-473, 1983.
9. Barber, T. X., and Wilson, S. C., The "Fantasy-Prone Personality," the Psychic, and the Excellent Hypnotic Subject ("somnambule"): Are They the Same Person? In W. G. Roll, R. L. Morris, and R. A. White (Eds.) *Research in Parapsychology*, 41-42, Scarecrow Press, Metuchen, NJ, 1982.
10. Rogo, D. S., Research on Psi-Conductive States: Some Complicating Factors, *The Journal of Parapsychology*, Vol. 40, Number 1, 34-45, 1976.