

Psychosynthesis Research Foundation, Inc.

ROOM 314, 527 LEXINGTON AVENUE. NEW YORK, N. Y. 10017
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January 1, 1971

Dear Colleague:

The fourth meeting of the 1970/71 series of Psychosynthesis Seminars (held on the third Friday of each month) will be held on Friday, January 15th at 7:30 P.M.

Our speaker will be Dr. Stanley Krippner, Director of the Maimonides Dream Laboratory, Brooklyn, N.Y.; his subject will be "The role of mental imagery in experimentally induced telepathic dreams - and its relation to psychosynthesis." Following Dr. Krippner's talk will be the usual group discussion.

We hope it will be possible for you to be with us at this meeting.

Cordially,

JACK COOPER, M.D. FRANK HARONIAN, Ph.D.
914-669-5105 PLaza 9-1480

DATE & TIME OF MEETING: Friday, January 15, 1971 at 7:30 P.M.

PLACE: Directors' Room, Mezzanine floor, Park Sheraton Hotel, 7th Avenue & 56th Street, New York City. (Please consult notice-board in hotel lobby in case of room change.)

SPEAKER: Stanley Krippner, Ph.D.

SUBJECT: The role of mental imagery in experimentally induced telepathic dreams - and its relation to psychosynthesis.

PSYCHOSYNTHESIS SEMINARS

1970-71 SERIES

Fourth Meeting: January 15, 1971

Speaker: Stanley Krippner, Ph.D.
Director
Maimonides Dream Laboratory
Brooklyn, N.Y. 11219

Subject: The role of mental imagery in experimentally induced
telepathic dreams - and its relation to psychosynthesis.

Participants:

Arthur Becker	Stanley Krippner, Ph.D.
Paul Bindles	Dan Malamud, Ph.D.
Jack Cooper, M.D.	Ann Malamud
Rena Cooper	Esther Levenberg
Marvin Dworkin, D.C.	Florence Miale, Ph.D.
Frances Geer, Ph.D.	George Miale
Judy Gould	Victorija Mickans, M.D.
June Gordon	Thomas A. Mikula
Frank Hilton	Carl Morsen
Hilda Hilton	Birger M. Salberg
Charlotte Himber	Frank Shames
Sydelle Hollender	Dorothy Shames
David Holsberg	Steve Solow
Michael Horsley	Beatrice Springer
David Husband	Holly Stillman
Alex Imich, Ph.D.	Nancy Taylor
Joan Kellogg	William Wolf, M.D.
Mr. Kellogg	(plus 7 others)

Psychosynthesis Research Foundation
Room 314
527 Lexington Avenue
New York, N.Y. 10017

The role of mental imagery in experimentally induced telepathic dreams - and its relation to psychosynthesis

Introduction

Dr. Frank Haronian: Over the past three or four years, our speaker tonight, Stan Krippner, and I have crossed tracks occasionally at various meetings and conferences. And every time I've had the opportunity to listen to Stan, I've been excited and stimulated and had a lot of fun. So, when it was my responsibility to help to devise the program for the psychosynthesis seminars this year, I thought very quickly of asking Stan if he would come and talk to us about his work, and he very graciously accepted.

Stan has a Bachelor's in education from Wisconsin. He worked as a teacher of brain-injured children, doing therapy with them in the public schools, and then went on for a doctorate in educational psychology at Northwestern University. He subsequently was director of the Child Study Center at Kent State University, and after three years there, he went to Maimonides Hospital where he has been doing research in dreams, ESP, and other related matters he is going to discuss with you, for the past six years.

Every time I talk to Stan or listen to him, I find that he has been doing something quite different from what I thought he was doing. He seems to range all over the place. He was telling me tonight that one of the reasons he got interested in studying communes was because it seemed there was a lot more ESP going on between commune members than other people. And one of the things I remember his describing about his commune experience was a birth experience - under the stars, with everybody encouraging the woman in labor, then greeting the child when it appeared and was born. I think the child was passed around to everybody, if I recall correctly.

He has always got something exciting to say. At the present time he's working in Maimonides, and he's also a part-time professor at New York University, teaching a course on communications. He is also a director of research at the New York Institute of Child Development.

I think that's about enough to convince you that whatever he has to say will be interesting. Stan, I'd like to turn it over to you now.

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DR. KRIPPNER: Tonight we are going to discuss the role that visual imagery plays in our experiments at Maimonides in investigating ESP and altered states of consciousness. I think that there are some implications both for the process of psychosynthesis and the techniques of psychosynthesis.

Of course, I do not see ESP as a major factor in any type of psychotherapy. But I think that it plays a small role in any type of psychotherapy that attempts to deal with the whole individual and that attempts to utilize various levels and layers of consciousness in changing behavior and transforming the self.

Practitioners of psychosynthesis talk about a thorough knowledge of one's personality. They reflect the work of Carl Jung who emphasized reconciling disparate elements of the personality, such as the animus and the anima. In doing

this, dreams may have constructive or prospective tendencies, and the dreams are often of superconscious origin. Thus, in dreams we often observe a great deal of ESP material.

By extrasensory perception I mean behavior that is not easily explained by conventional science. Various types of extrasensory perception would include precognition, having some information about a future event; retrocognition, having some unusual information about a past event; clairvoyance, having some information about a present event; and telepathy, having some information about what another person is thinking. Once one begins studying dreams or working with dreams, these are the types of phenomena that sometimes occur in a patient-therapist relationship.

The realization of one's true self is another emphasis in the process of psychosynthesis. In the realization of self, one is taught to experience directly. One is also taught to advance in various discrete steps toward this realization.

At dinner tonight I was discussing with Frank Haronian the reason for many bad LSD experiences, especially if the LSD is black-market LSD and if it's taken illicitly. Oftentimes the individual is not able to proceed by various steps toward the realization of some ultimate truth or insight; he is propelled toward it at a much faster rate than he can assimilate.

In psychosynthesis one may get to the same place, but he gets there in a logical, step-by-step fashion and is able to use the experience once the knowledge is obtained. There is no shortcut to growth. There is no shortcut to truth. Therapists that use psychosynthesis are aware of this situation.

As an individual grows and as he approaches new levels of consciousness, there is often a great deal of ESP that occurs. Gardner Murphy, perhaps the most distinguished parapsychologist alive today, feels that ESP most often occurs as one makes shifts in consciousness. My feeling is that as an individual starts to grow, as he starts to attain greater insights, as he starts to explore new levels of the psyche, he will often have experiences that we've labeled extrasensory in nature. I think that the practitioner of psychosynthesis should be aware that these experiences might happen during the course of therapy.

Another stress in psychosynthesis is the control of the various elements of personality. Here I think that one has to realize that ESP experiences are not unnatural, they are not psychopathological, they are not abnormal. They are part of the entire nature of man; they are part of the human potentiality and should be accepted as such.

In other words, if a therapist runs into ESP, if a patient happens to have ESP experiences, rather than be alarmed about these experiences one should accept them. ESP is one of the many elements of personality.

Another stress in psychosynthesis is the formation or reconstruction of the personality around a new center, and here we have transmutation and sublimation of the various energies available. Psychosynthesis stresses the development of inadequate or deficient aspects of the personality. It also emphasizes coordination and subordination of the psychological energies and functions. These

developments are often carried out through autosuggestion, creative affirmation, training of the memory and training of the imagination and the will. It is just in these areas that we frequently have ESP experiences occurring.

To illustrate this, let me mention two of the many techniques that psychosynthesis therapists often use. One is the technique of visualization, where the individual takes inner trips and where he is taught to picture things in the mind's eye. This is the basic technique that we use in our ESP experiments, both for the person who is sending the image and the person who is receiving. The individual who is telepathically transmitting something that he is looking at, is told to close his eyes, to get an image of the picture that is in print before him, and then give it an imaginary mental shove and propel it through space to the dreamer or to the person in the other room.

At the same time, the individual who is trying to receive the message will either be in a dream state or hypnotic state or relaxed state of some sort. He tries in some way to prepare his mind to receive images. As he receives an image, especially a strange and unusual image, he will report it to us. For this reason, I would not be surprised if, from time to time, the individual who is a patient in psychosynthesis should happen to have an image that in some way reflects something going on in the mind of the therapist. As I say, this is a phenomenon that occurs in various types of psychotherapy. This is basically how our project got started in the first place.

Dr. Montague Ullman, who is the Director of Mental Health Services at Maimonides, had any number of patients who started to have dreams about his personal life. This was especially true of individuals he felt were trying to communicate with him and who lacked the verbal facility to communicate, or who lacked the emotional drive to communicate, because of various psychopathological blocks.

One patient came to Dr. Ullman one day and said that he had had a very strange dream a few nights before about an alcoholic cat. It so happened that on that same night Dr. Ullman had been at a scientific research meeting in which he had seen a film of a cat that was drinking milk that had been laced with whiskey. The investigators had been trying to determine the effect that whiskey had upon dreams. As many of you know, whiskey cuts down or cuts out dreams, and this effect was observable in the dream pattern of the cat.

In another case, Dr. Ullman was building a house and the workmen happened to leave an extra chrome soap dish in the bathroom. Dr. Ullman saw the chrome soap dish and put it away, thinking that he might have use for it in the future. The next week a patient came in and said, "I've just been ridden with guilt. I had this dream about stealing a chrome soap dish." Of course, Dr. Ullman didn't have any feelings of guilt because he's a psychoanalyst and worked all of those things off in his therapy years before (laughter). The patient, not being that far advanced, did have horrible feelings of guilt, and he was saying, "I know the chrome soap dish is a symbol of something." Dr. Ullman said, "No, it's not a symbol of anything. You dreamed about an incident that I personally experienced."

So, Dr. Ullman started to use these ESP experiences as a part of therapy and felt that when a patient had an ESP experience, he was trying in some way to do something within the therapeutic context.

Dr. Ullman also observed that when a patient deteriorated, he lost the ability to have ESP experiences. Ullman found that chronic schizophrenics, although they claim they have ESP, rarely do have valid experiences. He felt that the chronic schizophrenic that claims he is hearing voices or getting messages might be looking back to a time of his life when he was having genuine ESP experiences. He invented other experiences out of a longing for ESP, as a link between himself and other people that he had lost due to his very severe illness.

This has been my experience as well. One often finds that mentally ill people have ESP experiences, but usually as a way of communicating with the therapist, a way of trying to attain some sort of rapport and relationship with the therapist.

There is a second technique in psychosynthesis that I think is very important. This is noted as psychosynthesis therapists stress techniques for the developing of intuition. I think intuition is a very important aspect of the human potential, and of course much of what we call intuition actually has a parapsychological element to it. Most intuition is the unconscious pulling together of many bits and pieces of information that one knows about through one's experience. But every once in a while some information comes into the picture that the individual does not have any easy way of knowing about. This, perhaps, is due to precognitive, retrocognitive, clairvoyant or telepathic information.

These are the ways in which I think parapsychology as a science relates to the work done by psychosynthesis therapists. As I summarize the work that we've done in our laboratory, you might even see additional connections and additional associations.

We have worked with altered states of consciousness throughout the years. There are several reasons why we have stressed altered states of consciousness. First, as we looked over the parapsychological literature, we found that most psychical researchers had stressed the rational waking state and had been doing very little work in the altered states. For us to make our contribution with the very little amount of money we had at our disposal, we felt that we should stress different areas that other people were not investigating.

Secondly, we did an extensive survey of the anecdotal literature, and found out that when somebody reported an ESP experience, more often than not he was in an altered state of consciousness. For example, we went back and made a survey of Dr. Louisa Rhine's thousands of spontaneous cases and found out that more of these cases were in dreams than anything else, dreaming being an altered state of consciousness.

Tonight I'm going to discuss a number of alterations in consciousness: the dream, hypnotic induction, sensory bombardment, automatic writing, and bio-feedback.

(Slide) When a subject comes into the dream laboratory, we introduce the subject to the agent, the agent being the transmitter or sender, the person who is actually going to try to send a message to the sleeping subject during the course of the night. In this particular picture we have the agent putting the electrodes on the head of the subject. The agent will have a lengthy conversation with the subject, attempting to establish rapport, attempting to establish some sort of communication that will not be broken once they are in two separate rooms at some distance.

You note that we have electrodes on the subject's head to pick up the brainwaves and around the subject's eyes to pick up the rapid eye movements. Four or five times during the course of the night we have a series of rapid eye movements that indicate to us that if we awaken the subject we will get a dream report.

(Slide) Here you have a close-up of the electrode connections. When the subject first goes to sleep, we see brain waves indicating that the subject is in a sleep that could be very easily roused or disrupted. As the night goes on, the subject enters into a sleep pattern indicated by very slow brain waves. Then the subject starts to emerge from this slow wave sleep and before long we notice the eyes going back and forth just as if they're watching a moving picture.

After ten or fifteen minutes of this rapid eye movement activity, we awaken the subject. The first dream of the night is usually very short. The last dream of the night is usually very long. As the night goes on, the subject appears to be having dreams that are more complex in nature and longer in time.

(Slide) This is the EEG machine, and this is the recording paper that we utilize to measure the brain waves and the rapid eye movements and to record them.

(Slide) Here is the subject in bed, and we are plugging in the electrodes.

(Slide) Now we are turning on the EEG machine and we're watching the brain waves come through on the paper.

(Slide) Here we are adjusting the tape recorder, because whenever a subject tells us a dream we write it out on the clipboard and we also tape record it, so that if one approach or the other breaks down we're always sure to have a copy of the dream.

(Slide) Once the subject's dreams have been recorded for the night, we take the tape and we send it to a typist who types a transcript. We have three different versions of the dream so that we're sure that we can get the verbal report correct. We have the written account on the clipboard. We have the subject's voice recorded on tape. And we have a transcript of the subject's voice. So, if there is a word or a group of words that we want to go over, we can check all three and discern what the accurate wording might have been.

(Slide) At this point the subject is asleep. Once the subject goes to sleep we start going in shifts so that different people will watch the machinery at different points during the night.

(Slide) This is a picture of my son who is one of our most competent EEG watchers, who enjoys staying up late, and he takes his shift towards the beginning of the evening.

(Slide) This is one of the college students who has helped us, and he often takes his shift toward the middle of the night.

(Slide) Here the student is recording a dream. The subject is now speaking, and the college student is making notes in terms of what the subject has to say. Then he'll tell the subject to go back to sleep.

(Slide) This is Mr. Charles Honorton, our full-time research associate, who often takes over in the morning and who then gives a post-sleep interview to the subject to go back over the dreams and to get associations on the part of the subject to the dreams.

(Slide) Here the subject is coming out of the soundproof room. Remember that during the course of the night the agent or sender has been in another building, another room, and sometimes in another city trying to send a message to the sleeping subject.

(Slide) Now the subject looks over a large number of pictures. At this point, none of us knows which picture was actually used. One of these pictures was randomly selected by the transmitter before the transmitter started to send the image. Random selection is usually accomplished by consulting a random number table. Sometimes we have the agent throw dice, count up the number on the dice, and then consult this column on the random number table, and add up the numbers. This matches the number on an envelope. This envelope is opened, and it contains the picture that is used.

The subject tries to look over all of the pictures and choose the one that comes closest to her dream for the night. Once we get the dreams typed up, we send copies of the dreams as well as all of the possible target pictures to outside judges. The judges do the same thing. They read the dreams and they choose the picture that seems to go with the dream. This is where we get our statistics.

We're able to find out if the judges choose the right picture more often than is expected by chance. If the judges are able to choose the correct picture more often than we would expect by chance, then we have reason for saying that telepathy or other forms of ESP might have been operative in that case.

What we have done is to separate the sender and the receiver so that if any information gets through the receiver, it must be by some sort of unconventional or unusual means. To evaluate this possibility we have outside judges trying to match the pictures to the dream, and if they do this at an above-chance level, the telepathy hypothesis is confirmed.

(Slide) The current issue of the Journal of Nervous and Mental Diseases has a very lengthy article by us describing our most recent ESP experiment. We had a subject by the name of Robert Van de Castle, who is a very eminent sleep and dream researcher in his own right, with us for eight nights. On these eight nights he was the subject. A sender from another room, 100 feet distant, with three intervening doors and three intervening hallways, tried to send a message to him.

On one of the nights this particular painting turned up as the target for that particular night. The name of this painting is "Gangster's Funeral" by Levine. It shows a dead body in a coffin. It shows a policeman on the upper left. It shows a wide variety of gangsters who are also mourners on the right.

I am just going to read you a few excerpts from the subject's dream. This is the first dream.

"I had done something wrong, and a policeman came in to arrest me." He dreamed about a policeman and there is a policeman in the picture.

Second dream. "I was in the laboratory and one of my students brought in this box. It was a little match box. I opened the box and in the match box was a dead rat." All right, there's a dead rat in the match box, there's a dead gangster in the coffin.

Third dream. "I was looking at a group of men who were very unusually dressed. One of the men had on a vest which did not match his suit coat." Depending on your aesthetics, there is a man on the right of that picture that has a vest that some people would think would not match his suit coat.

Those are the three basic dreams through the night, and each one has some element in it that perhaps does match the target picture. As you can see, these come very, very close. In one way it's more symbolic. We have a dead rat instead of a dead gangster. But, on the other hand, we do have a policeman, we do have a coat and a vest, and those are very directly represented in this picture.

(Slide) On the very next night of the study this picture came up which is by Cezanne. It's called "Trees and House." The subject had six dreams. At the end of the night, the subject made this statement: "This is either the best night we've ever had or the worst night we've ever had. There were absolutely no people in any of my dreams. I can't even remember having dreamed before without having people in my dreams. All I kept dreaming about was a house, a lonely house on a hill. And in one of my dreams there was a telephone pole. The colors were brown and orange and white. The house was bleak, desolate, and deserted."

That particular night was something that was picked out by all three of the judges as matching this particular picture. This subject was with us for eight nights, and on all eight of the nights the judges were able, with some degree of accuracy, to match the picture to the dream; and so for this particular study we did get results that were statistically significant.

Let me repeat just once again what the subject was doing. He was going to sleep and when he was awakened, he was reporting the dream that he had. He was giving us color. He was giving us vivid detail. He realized that an art print was being sent to him, so he tried to describe the visual elements of the dream as well as possible.

While he was sleeping and dreaming, an agent or sender 100 feet distant was looking at a picture, was closing her eyes and visualizing the picture, was writing out associations to the picture and was trying to get emotionally involved with the picture, and through a combination of these means was trying in some way to influence the subject's dreams.

In some of our experiments the subject and the agent have been 14 miles distant, and in all of the experiments there has been a considerable distance between the sender and the receiver.

(Slide) To facilitate the process of telepathic transmission, we have tried to add something beyond the visual in some of our experiments. Some of you know Dr. William Erwin, a New York psychoanalyst. He was a subject for us in an experiment that was recently published in Biological Psychiatry. He also was with us eight nights. And the judges were all able to match the dreams and the pictures on all eight of these nights. So, here again was a study that was highly significant from a statistical point of view.

What Dr. Erwin was trying to do was pick up the messages that were being sent from a distance. One night this particular painting was used. It's really not a painting. It's a photograph called "The Major Pelham Exhibit" from the Civil War Centennial Display in Richmond, Virginia.

The interesting thing about this experiment is that we didn't only use an art print or a picture, we also used something that the sender or agent could manipulate physically.

(Slide) In addition to that picture, he had a number of toy soldiers and he arranged the toy soldiers to fight out the Civil War, and he arranged the toy soldiers in the same way that the soldiers were printed on the picture. In addition, he visualized them. He tried to send the message through visualization. He bit into the soldiers to taste them. He sniffed them to smell them and get the odor. He invented dialogue between the soldiers so as to get an auditory feedback. He manipulated them with his fingers and hands to get tactile kinesthetic stimulation. And by both of these techniques, all of these techniques, the multi-sensory technique, he tried to become very, very involved with the target material.

Here is the subject's first dream. "I was talking to someone. All I can remember is that there were people. I can't describe some of the feelings. It's like it's too soft. That doesn't tell much, but I have a feeling of softness. I guess it's something like being too soft, and I can't pull it together. It's like all immersed in a very soft texture, like skin, soft skin. This very soft feeling was overcoming me."

Let's think back in terms of these materials. Here we have rubber soldiers which certainly could be soft skin. The photograph is of wax soldiers. This could be soft skin. In neither instance is it real skin or is it even a picture of real skin. In both instances it's some sort of synthetic skin. So, the subject's dream about soft skin was given a very high rating by the judges in terms of matching the dream and the target material.

Here is the next dream. "Let's see, it was something about a military band, a military band. I think it was the marines. A marine band. It seemed that the uniform would be the marine blue with a khaki shirt. My feeling is that they were outside on a parade area rather than inside. It seemed to me that they were standing. There was no movement that I recall, just that they were there."

This dream is more direct perhaps because he is dreaming about a military band, and he says there's no movement and once again the wax figures don't move and the rubber soldiers don't move. So, he's picking up perhaps some very accurate information about the material that's being sent.

Here is the last dream. "I can't remember too much about the dream, but it has elements of a canteen, a temporary sort of canteen setup. I think about a military campaign. I think perhaps of the rape of the Sabine women." So, here we have the subject's third dream and once again he's talking about military, he's talking about soldiers, and so the judges had no problems in terms of making the connection. After all, this is a fairly direct sort of thing. The skin element is direct. The military band element is direct, and the military campaign is direct.

(Slide) During that same study, we used a target picture called "Both Members of the Club" by Bellows. It's a boxing match. And along with that picture the agent had a boxing glove to work with.

(Slide) What he did was to put on the boxing glove. He bit into it so as to taste it. He sniffed it so as to smell it. He shadow-boxed with himself. He beat against the wall with it - to try to get the idea of aggression, violence, boxing and competition into the dreams of the sleeping subject.

I am going to review the dreams of the subject and you will notice a very interesting thing. The subject does not dream about boxing at all. And you judge for yourself whether you think the dreams are about the target picture. The outside judges felt that the dreams were about boxing but in a very symbolic and perhaps secondary way. This is the first dream: "There were a lot of people. There was a lot of activity going on. There were a number of people and it had to do with competition, competition in some way."

Here's the second dream. "I was watching some cars parked on the beach being pounded in. One of them was pounded in and hit another car and completely broken to pieces. And then I was in this car with my mother and father, and the ocean began to pound and knock the car back. And the way it pounded it hit the car, and I thought it was really going to hit the other car hard. I think I enjoyed the violence in the dream. The violence was exciting."

Here's the next dream. "The only thing I can remember is cleaning a shoe, a leather shoe, cleaning a shoe with some sort of solution. It was just a dirty shoe, just a man's shoe. It had laces on it, just a leather shoe."

Here is the next dream. "Well, we were talking about the war in Vietnam, the pros and the cons, why we should be there, why we shouldn't be there, the arguments of why we should be there and some of the arguments of why we shouldn't."

There are the subject's four dreams. None of them is about boxing. None of them is about a boxing glove. But they do contain competition, aggression, pounding, a leather shoe, and an argument. Sometimes we have a very direct incorporation; sometimes we get an indirect incorporation.

This subject was with us for many, many nights. He actually participated in two studies. We've gone over all of these nights and we found a very interesting thing happening. Whenever the target material was aggressive in nature, the subject gave a very indirect incorporation of it. When the subject matter was sexual in nature or when it was religious in nature or when it was artistic in nature, the subject gave a very direct incorporation.

So, we feel that the way the subject incorporates these materials into his dream varies in terms of his own personal psychodynamics. And, of course, Dr. Erwin, those of you that know him, know that he is a very peace-loving person, a very gentle person, and I happen to believe that the dream basically reflects the way that you are in everyday life.

I agree with Calvin Hall and Alfred Adler that the dream discloses rather than disguises. The dream symbolizes in a very summarized way what is going through the subject's mind - as well as what has happened in his daily life.

(Slide) In our studies to date we have achieved the following results. Our very first dream study involved 12 subjects, and we had results that were significant statistically. The second study, which was with Dr. Erwin, involved seven nights. That was statistically significant. The third study with 12 subjects did not give us significant results. The fourth study with Dr. Rubinstein, another psychologist, did not give us significant results.

(Slide) At this point, we did a study with hypnosis, which I'll be describing in a few minutes. This study gave us highly significant results.

(Slide) Our study number six did not give us significant results. We were involved with one subject for 16 nights. Study number 7 with Dr. Erwin for eight nights gave us significant results. Study number eight with Dr. Van de Castle gave us highly significant results.

There are some studies that we just finished I'll be talking about also, but in terms of our first eight studies we had results confirming the telepathy hypothesis on five out of the eight.

(Slide) I would like to tell you a little bit about our first hypnosis study because we had some very interesting materials here in terms of the nature of the telepathic process. With half of the subjects, we used hypnosis, with half of the subjects we didn't. The agent tried to send the subject a telepathic message every night for seven nights. The subject kept a dream diary and brought back his dream at the end of the seven nights.

Also, we had the subject produce an image for us while he was in the laboratory.

What happened was extremely interesting. For the hypnosis group we got statistically significant results from the images that were produced in the laboratory. Once the subject went home and recorded his dreams, we did not get significant results.

For the non-hypnosis group that wasn't hypnotized, we got no significant results from the laboratory images, but we did get significant results from the dream diaries. What seemed to happen here in this study was that hypnosis really speeded up the telepathic process, and the subjects in hypnosis got the message right away. The subjects that didn't have hypnosis took longer and brought the message back after a week.

Here is a target picture that was used for a subject in the non-hypnosis group and a subject in the hypnosis group. The subject in the non-hypnosis group brought us back dreams that went like this: "I am taking Spanish and I was thinking of the word arboles. It's the Spanish word for 'trees.'"

This target picture is "Unicorns" by Davies, and there are trees on the right side of the picture.

Here is another dream. "Men and women, horses, at the race track." You don't see any horses on the picture, but you do see unicorns. And so the judges were able to match that particular item up.

The hypnosis subject came up with the following image while he was in the dream lab. "I saw vague mountains and clouds, stratus clouds. A man on a horse like a cowboy. And now a horse is coming toward me from left to right with his mane flying. The sunset expanded into a sky with mountains and terrain and a cowboy and a horse coming in from the right side."

Here you have an image actually elicited at dream laboratory under hypnosis or as the result of hypnosis, and once again it doesn't have unicorns in it but it does have horses in it.

(Slide) A similar thing happened when we used Van Gogh's painting "Portrait of Lieutenant Millet." First of all, let me tell you what happened with the subject that was in the hypnosis group. While the subject was in the laboratory, the subject came up with the following image. "A smiling man with a beard." That's really sort of a direct image, and the judges had no trouble putting that together.

The subject in the non-hypnosis group came back with some dreams, and here were some of his dreams. "West Point Cadets. They were standing, looking up. They had the big plumes in front of the hats they were wearing. They were at an angle looking up. The uniforms were blue and the plumes were dark purple."

Here again we get something, but it comes in a little later.

Here's another dream. "A wool suit, continental cut, dark olive. Somebody on the scholastic committee that I have an encounter with. He was wearing a blue suit."

(Slide) "Rabbi with a Lemon" was one of the target pictures. This is a painting by Chagall. The subject in the non-hypnosis group had the following dream. "Outlines of a tall apartment building could be discerned, and a woman approached me with a doll-like figure and I had a feeling that she would use the doll-like figure with some magic incantation."

You can see a doll-like figure on the top of the rabbi. Also the lemon that he's holding might be interpreted as some sort of an image.

Here's another dream. "A painting of the sky. God stretching forth his hand and touching the finger of a man whose hand is outstretched too. The picture seems to say that man is dependent on God for his discoveries and intuitions. Religion and God and the search for some new discovery and reality seems connected with this picture in my thoughts right now. I feel embarrassed by these thoughts as if I'm a religious fanatic. Yet at the moment they fill my head."

The subject in the hypnosis group came up with the following image while he was at the laboratory. "A person walking against a yellow background. He is sketched in different shades of grey and black, a yellow background and a green after-image, a street scene. The top of a building sticking out. A man with black, curly hair. He's an organ grinder and he has a little monkey with him. I see the head of a monkey anyway. The monkey is superimposed over the man. I get an image of a carol, 'God rest You Merry Gentlemen.'"

This gives you some indication of what we got with the hypnosis group, what we got with the non-hypnosis group, and we're continuing to do work with hypnosis along this particular line at the present time.

(Slide) The next project I will discuss is our bio-feedback with alpha training. A subject is put into a room and told to relax. Electrodes are put on her head. Whenever she produces alpha waves on the EEG, she hears a pleasant little tone and this indicates to her what the "alpha wave" feeling is like. She goes on to try to produce more and more of these tones. Many of our subjects are able to increase the amount of tones that they hear because they start to learn what it is like to be in the alpha state.

As many of you know, there are four basic brain wave patterns. The delta wave, which is one, two and three cycles per second. The theta wave, which is four, five, six and seven cycles per second. The alpha wave, which is approximately eight, nine, ten, eleven, twelve, and thirteen cycles per second. And the beta wave, which is fourteen cycles per second and over.

Several Zen monks and yogis have been tested. When they're in meditation, there are many, many alpha waves in their EEG record.

In our studies we found that those subjects that were able to shift very dramatically between producing a great deal of alpha wave activity and holding back on alpha wave activity were those subjects that had the most ESP. ESP in this case was tested by card-guessing where they actually guessed geometric forms on cards - circles, stars, crosses, wavy lines, and squares. The subjects who were able to make the transition very quickly between a lot of alpha and very little activity in the alpha wave spectrum were the ones that gave us the most ESP. Once again, this confirms what Gardner Murphy said: ESP seems frequently to occur as somebody makes these shifts between various states of consciousness, shifting from one state to another.

(Slide) Here we have the subject in the sound-proof room, and there you see Mr. Bindler, who is with us tonight, in the upper left and Mr. Honorton on the right.

(Slide) Here is the view from the EEG room where the subject's record is being inspected. We could devote an entire lecture to this work, which is very important and very exciting, but I'm going to skip on to another study at the present time.

(Slide) One study which we just completed was a study involving a sensory bombardment chamber. We had four subjects, all four of which were psychic sensitives. And the subjects had eight experiments while they were in their typical waking state, eight experiments while they were in a meditative state, and eight experiments while they were undergoing sensory bombardment by this multi-media machinery.

This is an item specially constructed for us by Jean Mayo, a celebrated California film maker, and artist. When we put the individual in the chamber the lights start to flash on and off randomly. Water and fluid of different colors runs through this construction. Stereophonic earphones are put on the subject. To standardize the conditions we played a selection of music by the Grateful Dead "Dark Star." This is highly complex rock-and-roll music which all of our subjects seemed to react to positively.

Of the three different conditions, the judges found that it was the sensory bombardment condition that produced the best results.

(Slide) Here we have another subject, and you can get a slightly different view of the multi-media device. We call this the Altered Consciousness Induction Device or ACID.(Laughter)

(Slide) This is once again a slightly different view of the ACID.

(Slide) Here we have a closeup. Of course, the subject gets very close to the center and there are lights flashing on and off to cover his peripheral

vision as well, so he is completely encapsulated by these lights flashing on and off, the fluid going through, and the music playing.

(Slide) This is one of the target pictures. It shows two dogs in a basket. I am going to give you the images of the four subjects. Subject one: "Saint Bernard with a keg. He was in bed."

Second subject: "A man and other figures. Blue. A star."

Third subject: "A dog carrying meat. I think it is a bit repulsive."

Fourth subject: "Deep blue. A face with a long straight nose."
(Laughter)

The name of this is "Red Ribbon Royalty," and as I said before it shows two prize-winning dogs in a basket.

(Slide) This painting is called "Philosophy in the Boudoir" by Margritte. It's a surrealist painting that shows a woman's dress from which breasts protrude and a pair of high-heeled shoes from which toes protrude.

Subject number one: "A Madonna, dark pink or flesh color, rocks, a magic show. Pull a person out of a hat. A comic air about it."

Second subject: "An interior scene. A French artist or in France."

Third subject: "A woman dressed in flowing robes. It may be a bizarre element but a rational theme."

Fourth subject: "An oriental goddess. Perhaps the Goddess of Mercy, a white figure."

(Slide) This is a painting by de Chirico called "The Enigma of Arrival." It shows two figures, one in blue, one in red. They are standing in front of a wall behind which the sails of a ship protrude and flags are flying from a building. If you listen, you will see that among the four subjects they hit just about everything in the painting.

Subject number one: "Red and yellow, but blue is predominant. A sail boat, rolling sea, beach, a setting sun. Probably an abstract or semi-abstract painting."

Subject two: "The name of the artist begins with a 'c.'" Of course, the name was de Chirico, and Chirico does start with a "c."

"It's an abstract painting. Black, blue, white lines, red, a flag. A tall building. It may be symbols."

Subject three: "Nostalgia, turbulence, a red sunset."

Subject four: "There is blue. A man in a blue suit. He is standing up."

(Slide) The last thing that I am going to do tonight is to devote a little more attention to one of the subjects in the study. She's a woman that came in and told us that she was able to do automatic writing and that she was in

correspondence with spirits. We said, "All right, if you're in correspondence with spirits, maybe they can help us with an ESP test. Do you think that they could tell us the contents of a sealed envelope?"

She said, "I'll ask them." And she put herself into an altered state of consciousness. Her hands started to write across the piece of paper and the spirits said, "Yes, we will help."

We attached her to the EEG and found out that when she went into this altered state when her hands started to write, she was showing a lot of theta wave activity. Remember what I said before - theta waves give us brain waves of approximately four, five, six, and seven cycles per second. So, this does represent a psychologically and psychophysiological different type of conscious awareness.

Instead of going into meditation, this particular subject went into her automatic writing state. I am going to show you the pictures that were used and what the spirits said.

The first picture that came to her was this one, the same one we mentioned before, the de Chirico painting, and here is her correspondence with the spirits. She writes, "Dear friends, are you there?" And they guide her hand back, "Yes, we are."

"I am holding an envelope with a picture inside. Can you see it?"

"Yes, we can see it."

"What is the picture?"

"There is blue. There is a blue boy."

"What else do you see?"

"We see another person. We see a young man in a blue suit. He is standing up."

(Slide) This painting is a painting of three Japanese dancers. The subject said, "Can you tell me what's happening in this envelope?"

The voices came back, "We see a great mountain of fire. It is orange and red with lava running down the side."

She said, "Is it in a tropical situation?" "Yes. Red, orange, hot in Hawaii. It is the tropics."

(Slide) The next picture is by an Indian artist, and it shows an Indian warrior prince surrounded by certain members of his army, and there's a very peaceful scene in back and yet the men are walking off to war. This is what the spirits say. "Water blue sky. Clouds."

And the subject says, "Now dear friends, I am going to hold the envelope a little differently and maybe you can tell me more."

They answer back, "There is a man in the scene. He is moving away from us. It is outdoors."

Then she says, "Do you want me to let go of the picture?"

They say, "Yes, that's better. Your mind is in the way when you hold it."

We can see it more clearly now. There are clouds in the background. It's an outdoor scene."

The subject says, "Is it a tranquil landscape?" The voices say, "No, not at all that tranquil, not all that serene."

"Is there anything else?" "No, that should do it. Goodbye."

(Slide) This painting is "The House that Burns" by Chagall. Red with fire in the background, and there is sort of a checkerboard effect in the lower right made up of the stone, and the subject says: "Thank you for being so marvelous. Now will you please tell me what you see in this new envelope."

The voices say, "Now hear this. We are so glad for all of us. Wheeee! Your new envelope contains a checkerboard effect. There is something hanging down and there's red in it and there's a window in it. It's a very pretty scene."

(Slide) This particular painting is by Margritte and it shows a room which is completely covered by a huge red rose. This is what the subject says: "Can you identify the painting?"

The voices say, "Wheeee! This is an interesting painting. We will give you a clue. You have to stretch. You have to reach wall to wall. Stretch your arms and reach the sides of a building. Reach, stretch."

The subject says, "Is this a clue?" And the voice says, "Yes."

The subject says, "May I touch the envelope?" The voice says, "No, it does no good. It does no good."

The subject says, "Is the picture happy?" The voices say, "Neutral." "Thank you." "You're welcome. Goodbye."

(Slide) Here we have a painting by Van Gogh called "The School Boy", and the school boy has a very puzzled look on his face and he's on the way to school. The subject says, "Are you there?" "Yes, we are here. Wheeee!"

"Would you please try to describe what the picture is?" "Now hear this. It's like a clown."

"Is he a clown?"

"He is not a clown, but he looks like one."

"What colors do you see?"

"Reds and blues. The scene is of a man in a suit. Look for a man and you'll find him."

(Slide) This painting is by Daumier and it's called "Art Collector", and it's of a man looking at art prints from a large folio. This is the dialogue:

"Dear friends, can you describe the target for me?"

"Now hear this. It's a box of something very expensive. It's a box of jewels. The jewels are in a basket. The colors are gold and brown. Goodbye."

(Slide) The last picture is a painting of five little kittens in a basket. This is the dialogue:

"Dear friends, thank you for being so marvelous. This is the last time. What can you tell me?"

"Something about females, females sitting down, perhaps on a chair. Sitting in a chair."

"Shall I hold the envelope?"

"Well, you can, but she's still in the chair."

"Could it be a boy?"

"No. It's a girl, females."

"Are there colors in the picture?"

"Yes. Yellows, reds, and some whites."

(Lights) This particular subject, as you can see, did automatic writing. The subject really didn't have visual images per se. The imagery came out in the form of words, and the outside judges were able to connect the words with the pictures in seven out of the eight cases. And some of the judges were able to connect the pictures with the words in eight out of eight cases.

We don't know where these voices are coming from, whether they are coming from the spirit world or whether they're coming from some subsystem of the individual's personality. But the voices, the automatic writing, were highly successful in this controlled clairvoyant experiment.

In summary, what I have been doing this evening is to show you the whole range of the experimentation that we've done at Maimonides over the last six years, experiments in dreams, in hypnosis, in alpha training, in sensory bombardment, in automatic writing. As we have gone back over all these data we can hazard just a few very tentative conclusions that we might have come up with over the years.

First of all, it seems to us that when we have a telepathy experiment, more ESP comes through but it's more likely to be distorted, perhaps because the person sending the message adds his own information to it. When we have a clairvoyance experiment, less ESP comes through but it's more liable to be direct. In other words, the images are shorter and there is not as much ESP in them. But when they are correct, they are less distorted, they are less symbolic, they're more direct.

As far as our telepathy experiments go, we have gone back over five years of study and we found that when we have a male sender and a male receiver we get the best results. A female sender and a male receiver are almost as good. But for two females, we get virtually no ESP at all.

As far as the time of the year, we have checked this out in terms of months and we've checked this out in terms of signs of the zodiac. It doesn't seem to make any difference. But it does seem that when we have nights of the full moon we get the best results.

In terms of the material that is being sent, we find that if we use pictures that are colorful, vivid, highly emotional, very dramatic, we seem to get the best results.

In terms of the nature of the telepathic process, it seems to us that either the ESP is there or it isn't. It flashes on or off at no particular time of

the night. Sometimes at the beginning of the night, sometimes at the end of the night. But it seems to obey an almost on-off phenomena; it's there or it isn't there. It's something that perhaps represents something like two lightbulbs at a distance; sometimes one is on, one is off. If the two are ever on at the same time, you seem to have ESP.

So, in conclusion, this is our very small contribution to the whole area of parapsychology. This is a field in which it is very difficult to be doing research. But it's also a field that we think yields some very interesting information in regard to human personality and the human potential.

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DISCUSSION

HIMBER: In checking out the data, did you try this kind of control, where you had no agent at all and just took a record of the dreams or the dream content and picked up a bunch of pictures and just took one picture, any picture at random, to see whether there was any matching element in the dream content without the agent?

KRIPPNER: Yes, that's a good question; we did this and this is written up in great detail in our article from Biological Psychiatry. That is a very interesting type of control when we have done that, and the results were pure chance.

GORDON: You mentioned that whiskey inhibits dreaming. Would you say that's generally true of all alcohol?

KRIPPNER: It's not only true of all alcohol, it's true of almost all drugs. Alcohol in any form inhibits dreaming; even beer and wine inhibit dreaming slightly. Barbiturates often knock dreaming out completely. This is why a person who has to resort to barbiturates to get to sleep often feels very badly the next morning because he hasn't dreamed sufficiently. A person who uses amphetamines, even though he uses them during the day, this seems to cut down on dream time at night.

Therefore, most of the commonly used drugs cut very severely into dream time. This is a reason why so many of the people who are using amphetamines and barbiturates illicitly develop emotional problems. They do not have enough dream time, and they start to hallucinate during the day. The psyche tries to produce the visual imagery and the fantasy material while they're awake.

MRS. MIALE: Are there any drugs that enhance dreams? (KRIPPNER: LSD enhances dreams slightly.)

QUESTION: What about marijuana?

KRIPPNER: The only data we have on marijuana is coming out in a book by Charles Tart which is a very detailed in-depth study of marijuana users. From their subjective reports something like this seems to be happening: If they smoke a little bit of marijuana, it seems that they do go to sleep more quickly and it seems as if they do remember their dreams better in the morning. Now, this is not to say that they've had more dreams. But perhaps they've had more vivid dreams.

If they smoke a lot of marijuana, it often keeps them up. They sometimes report unpleasant effects in the morning.

COOPER: One has to remember that the quality controls on marijuana are pretty bad too. There may be opium or other adulterants.

WOLF: Near the end you mentioned that the worst ESP results were female to female, and the best results were male to male. Have you any idea of why that is and also whether it has to do with femininity and masculinity or female or male as such?

KRIPPNER: My hunch is that this represents what anthropologists call "male bonding."

Over the course of history, men have had to stick together. They have had to stick together to go out on a hunt. They have had to stick together to defend their tribe. Back in the days of primitive men, bonds between men were much more important than bonds between women. I think that this interesting finding that came out after analyzing five years of telepathy experiments perhaps reflects the vestiges of the "male bonding" that occurred in evolutionary development. No such bonding was really necessary in terms of females.

COOPER: Maybe the Woman's Liberation Movement will change that. (Laughter)

SPRINGER: I once read an article a couple of years ago that proposed that ESP is really a function of the lower brain and that as man evolves to higher consciousness, ESP is disappearing, and that thousands of years ago or the beginning of evolutionary time, ESP existed to a greater extent. What is your opinion of this?

KRIPPNER: Nobody knows the answer to this, but I'll be happy to give you my opinion. First of all, I might say that you have some very competent observers who take exactly the other point of view, like McDonald Critchley, one of the great neurologists of our time; he feels that we are going to have more ESP as time goes on, that if the world survives for a couple of thousand years, people will actually be able to communicate through telepathy. He sees ESP as being the evolving function.

I personally think that ESP has been around since the very earliest types of life. I think there was a type of ESP that characterizes the lower brain areas: the reticular stem, the cerebrum, the cerebellum. I think there is another type of ESP that is characteristic of the cerebral cortex. I think that we could do some very interesting neurological studies to really check this out, especially with animals.

I think that we would find differences in terms of ESP, depending on what part of the central nervous system we tried to plug it into. The way to do these studies would be to take animals and to actually destroy certain parts of their brain ; give them ESP tests and see what sorts of ESP came into the picture.

GEER: Did I understand you correctly that you studied brain damaged children at one time?

KRIPPNER: I still do, yes. Parapsychology is a field which perhaps has the least job security of any field in science. Right now our money is running out. We'll be completely out of money in March, and so I'll be working with brain damaged children again instead of doing the telepathy work. (GEER: I was wondering if brain damaged children or brain damaged people might have a different - might have more ESP.) In my opinion, they have less. Once again, this is just subjectively from what I've observed. People who have higher communicative skills verbally seem to have more ESP.

MALAMUD: I'm interested in the possibility of ESP as a vehicle for promoting some personal growth. This may sound a little science fiction maybe, but I can conceive of mentally hygienic messages being transmitted as you did this art work.

Also I was fascinated by your observation that amongst the four recipients of a particular picture, it seemed to be covered in their composite descriptions, and my association to that was group problem solving with ESP as somehow an interconnective vehicle.

And, finally, in relation to this I was curious about the effect on subjects who engage in this and what kind of personal growth reactions, if any, take place following such participation.

KRIPPNER: I certainly agree with everything you've said in terms of possibilities. I do know of some psychotherapists who send messages to their patients telepathically and who tell the patients they're going to get these messages. Whether this is a self-fulfilling prophecy or not remains to be seen. But there are some therapist-patient combinations where ESP is built into the therapy. I also know of a therapist who does work with groups and he actually has one of his groups sending healing, therapeutic, growing messages to another group at various times.

We do have some interesting data on this, done by the way, by Judy Malamud. This was an experiment where we divided each of the dream protocols into units of meaning and tried to find out what variables were associated with ESP for the subjects we studied intensively. We obtained some provocative results. With one of our subjects, the ESP experiment did not produce significant data. We noted several correspondences, but they were not strong enough to pull in data which were at the above-chance level. When we did this detailed analysis for units of meaning in the dream, we found out that the subject refused to let herself become passive, to sink back, and to become receptive to outside influence.

The experiments in which statistically significant results were obtained, included subjects who incorporated ESP when they were watching the dream, when they said that they were passive, and when they said that they were witnesses to the event. In other words, ESP was associated with subjects who relaxed all controls, surrendered all inhibitions, and let the ESP effect filter through.

The female subject who did not produce statistically significant data had erected some defensive barriers. In retrospect, she acknowledged it. She felt that she had not been as open as she might have been, and she thought that unconsciously she was refusing to let people invade her dreams. Her sense of privacy produced a barrier that refused to let her merge, even for an instant, with another person through the telepathic process.

The individuals who have been able to engage in this "merging" process often report a new dimension of self that has developed and a new understanding of the world and universe and their part in it. They say that they feel, more than ever before, that we are all one, that they are interconnected to the environment, and that they have group consciousness with other people.

Of course, this is something that psychosynthesis stresses: the unity of mankind, the unity of the universe. These subtle, unconscious links between man and man, among all living things, and among all elements of the universe is a philosophical point of view that many of our people have been delving into since their experiences in the laboratory.

I might mention that we do screen people. We are careful that we do not test people who have serious psychiatric problems that would make them unsuitable for our types of experiments. Most of the people we work with are people who are somewhat growth-oriented to begin with. Even so, many of them report back to us that their experience with us had influenced their lives in positive ways.

The woman, for example, who had the dream about God reaching toward man and bringing him to life was surprised by this image because she had never had

images like this previously. She had always been very skeptical of religion. This image triggered off a number of developments in her life and she is now more "mystically" inclined. This is something that, in retrospect, she has been very happy about.

MRS. MIALE: Have you looked at the differences, between receptions of the same picture by different individuals that were on target, for the relation of these individual differences to personal events or personal meanings, to the symbolic quality of one person's on target reception of the Chagall rabbi as compared with another person's on target reception of the Chagall rabbi, for their own inter-psychic qualities?

KRIPPNER: Yes, we've looked at this, and we find that each of our subjects has his own personal style. Sometimes a subject weaves his own personal events in with the ESP. One of our subjects had a dream that contained a great deal of the target material in it, but he also started to talk about having a massage, being in Toronto, seeing a house with two columns in front of it, and being in the house on business.

Two weeks after the dream he received a telegram telling him to come to Toronto. He went into a new foundation that was headquartered in a house with two white columns in front of it. The philanthropist backing the foundation just happened to have his masseuse available and she gave our subject a massage. The telegram involved an offer to come up and do some research for the new foundation. This personal event, which was precognitive, was very closely linked to the par-normal dream.

MRS. MIALE: Not knowing if these dreams had been triggered by a picture, could they have been used as the person's own dream in psychotherapy? Could they be used in the same way that a dream that is not, at least to any known extent, set off by such an outside influence?

KRIPPNER: Here again personal style is important. Some people have dreams that incorporate the telepathic material in such a way so that psychoanalysts could use it in therapy. Other people have dreams where ESP has a very strange intrusive quality. If a therapist tried to use this type of dream in therapy, he would be doing the patient a disservice, because the telepathic material would not make sense in terms of the person's everyday life.

Van de Castle's study presents an example of the latter phenomenon. When he had telepathic dreams, the ESP had an intrusive quality. It was so different from his usual dream that he kept saying, "Well, I never dream about such and such, so that must be the target material." So, for some people the ESP is very closely intertwined, for other people it is not.

MRS. MIALE: In relation to that, may I ask, when you read the dreams, were those the relevant excerpts or were those the entire dream?

KRIPPNER: In some cases I read the entire dream; in some cases I read just the relevant excerpts. But in all of the experiments, of course, the judge has the entire dream report to go by.

GEER: In your statistical study of dreams, did you make a correction - I don't know what the correction would be really - but I would think that a person who dreamed a great deal and had many symbols might become more significant unless you

made a correction for the fact that the person has many, many different varied symbols, and then you would sort of select the ones that match the picture.

KRIPPNER: The way we handle that problem statistically is to have the judges match every single picture to every single dream. Suppose that we have a person who continuously dreams about mandalas. In terms of the pictures that we have in the target pool, no more than one picture in the pool is going to have a mandala in it, because every picture is of something quite different. Suppose that a person dreams about mandalas every night. Suppose that he's with us for eight nights. Suppose that one of those nights involves a target in which there is a mandala. The fact that the subject dreams about mandalas on all eight nights, therefore, would completely wash the effect out statistically and the night that it was actually transmitted the mandala would have no significance.

If a person did dream as you suggest, the statistics would correct for this, the judgments would equalize the effect and the person would not end up with statistically significant results.

SLOW: I've heard of some positive results in ESP in telepathic experiments with plants, and I was wondering what the implications of that would be for your own study, since it seems that higher neural functions are not necessary, at least in some of the other studies, and perhaps there's a phylogenetic evolution in terms of the way these ESP experiences could be used or incorporated or received or projected and so forth.

KRIPPNER: It is my own personal judgment that most of the work that has been done on psychical effects in plants is poorly controlled. There are very few ESP and PK experiments in the plant area that meet very rigid standards. It would not surprise me if plants did have ESP, because ESP, or whatever you want to call it, is a basic process in the nature of things. I'm sure that these connections exist on the molecular level, on the cellular level, and at very basic organic levels. However, physical effects probably change as you progress up the phylogenetic and the ontogenetic scales.

MRS. HOLLENDER: Have you tried to condition a subject to be more receptive?

KRIPPNER: Yes. We published an article regarding this attempt. We obtained highly significant results. We repeated the study and once again we obtained highly significant results. We utilized techniques that are used in behavioristic psychology. We used the ESP cards that I mentioned before containing geometric forms. We created two groups of subjects. For one group of subjects, we ran each person through about 100 cards and he made a guess as to what geometric form was on each card.

We went through and totaled up the results. Then we went through another group of cards. This time we looked at the card as he made his guess and we told him whenever he was right. We gave him immediate reinforcement for every correct hit that he made. After we did this, we went through a hundred cards again and totaled them up. The subject's scores, on the average, did tend to rise the second time. This was especially obvious when we asked him which guesses he was most confident about.

We used different procedures for the second group of subjects. We went through a hundred cards. Then we went through a second group of cards, but this time we gave each subject incorrect reinforcement. Every once in a while, we said

"right" when he was wrong. Whenever he was right, we would tell him he was wrong. This group of subjects did not do better the second time around than they did the first time around.

This would indicate to us that ESP ability can be improved in some way. We do not know enough about it to make any wild claims or any generalizations, but, as I say, we do have two experiments now that indicate ESP is amenable to learning. These experiments are so simple that any knowledgeable psychology student could try to replicate them. We hope that many other people will attempt this experiment; it has been published in a recent issue of the Journal of the American Society for Psychical Research.

MRS. HOLLENDER: Along the same line, you mentioned the difference in the people who were dreaming, the way they receive messages, as being more passive or more receptive to the target picture. Can, for example, a subject like that before they go to sleep, can they be taught or conditioned to be more receptive?

KRIPPNER: Before our subjects are actually used in a study, we try to help them remember their dreams. Sometimes we have them do breathing or meditation or relaxation exercises, and we point out that our past experience has shown that if they take a very open, a very passive attitude and just try to let things filter in and flow in, that this will be helpful for the production of ESP.

We have done some pilot work with hypnosis in which we have hypnotized the subject beforehand and told him that he will relax his defenses and let these types of information filter in. My feeling would be that this type of work will be positive and productive.

IMICH: Do you use telepathy mostly or clairvoyance, too?

KRIPPNER: As a matter of fact, we're using both in most of our experiments. The fact that we actually have a target picture means that the subject can either get that information through reading the mind of the sender or by bypassing the sender and perceiving the picture directly. He might even be using precognition; he might be looking into the future to the day when he finds out the identity of the picture. Even though these experiments have given us statistically significant results, all of the telepathy experiments that we have done could be explained on the basis of clairvoyance or precognition as well as telepathy.

Although the experiments have been designed to fit the telepathic model, they have not been designed to exclude the possibility of clairvoyance and precognition.

IMICH: If then you were to use clairvoyance - and I assume that clairvoyance is possible - what form would the sender take? (KRIPPNER: If we would use clairvoyance, we would not use a sender.) As you have just stated, it can be either clairvoyance or telepathy or precognition. The picture is not very clear. It seems to me that in order to sharpen the clarity, you should make the experimental design simpler. In other words, if you would exclude an agent, you would have straight clairvoyance. My basic question is: Why don't you concentrate on clairvoyance, which is a simpler phenomenon than telepathy? There you have to have the sender; reading mental states may be as easy as reading non-mental reality. But if the sender is forced to concentrate on certain contents, you don't know how well he is doing that. Then there is a complication. You don't know whether the perception was good or the sending was bad.

KRIPPNER: This is why we are doing so much work with clairvoyance at this time. The study that I mentioned with the sensory bombardment machine is a clairvoyance study.

Your question is a good one, and I agree with you that having a clairvoyance model does sharpen the focus and it does narrow down some of the variables you have to deal with.

HIMBER: I can see another use for this. If you're interested in, as Dan Malamud said, personal growth and interaction, telepathy would be a very useful thing to go on experimenting with, wouldn't it, to see how much you could increase the communication this way?

KRIPPNER: This is a question that many psychoanalysts and psychotherapists ask us. Once again we certainly do not claim that any of these experiments have produced data that are ready to be applied practically. I think that if the day ever arrives when there are practical applications, the point of view that you bring up will be central to the issues involved.

At the present time the fact that we do not claim practical applications for our work is both a curse and a blessing. It's a curse in that we are unable to get enough money to continue our work because there is no practical application of it. It's a blessing for the simple reason that our work cannot be co-opted by the military (laughter) or by business and industry. At least we are not accused of strengthening the military-industrial complex.

HARONIAN: Have you come to any findings that would have implications for matching therapist and patient?

KRIPPNER: I think that the best way that I can answer that question is to talk about what I feel is involved in telepathy. I think there is some sort of a resonance phenomenon operating in which one person vibrates in a certain way and another vibrates in a certain way; and when the vibrations are complementary, there is an exchange of information

I think there is also some sort of a resonance between a therapist and a patient. If the therapist has had experiences that will help him empathize with the patient, if the patient is able to engage in different types of communication activities with the therapist that are conducive to the therapy, I think you can have a mutually growing relationship. This is why it is important for a therapist to stop seeing a patient if the patient is not growing.

The therapist might be a very capable therapist, but he is not right for that patient. The resonance that permits the empathy to take place does not exist. Much the same sort of thing seems to be happening in the telepathy situation. One sometimes begins to sense whether two people will resonate before an experiment begins.

HOLTZBERG: You said that this communication is actualized by a certain vibration. And in the case of the receiver, he was in a passive state. You said the sender concentrated very hard. How would you explain that? It would be a different kind of vibration.

KRIPPNER: The vibration would have to be different for telepathy to take place. If the vibrations were exactly the same, they would cancel each other out. Can

you imagine two vibrations at the same frequency but with differences in volume and timbre? This is analogous to the sender and the receiver. To go one step further. I think that the receiver's memory bank is stimulated to produce an image which resembles what is being transmitted by ESP. Thus, there is no new data entering the nervous system of the receiver. However, his nervous system is being stimulated in such a way that there is a direct correspondence with what the sender tries to transmit.

MRS. MIALE: Have you used as sender and receiver people who you knew on other bases were on the same wave length?

KRIPPNER: Yes, we have. We have used mother and daughter, father and daughter, mother and son, identical twins, etc. (MRS. MIALE: Did it enhance or make it more difficult?) We do not do this as a rule for two reasons. The first reason is that whenever we use somebody from outside of our laboratory it creates an additional problem in terms of control, in terms of the possibility of fraud or collusion, and in terms of getting the person there physically. It is difficult enough to make sure that one person gets to our laboratory on time. If we had to worry about two people getting there on time, they would magnify our problems.

The other reason stems from our pilot studies. Although familial combinations do well, they do not seem to do any better than the nights on which we use one of our staff members as a sender.

MRS. KELLOGG: Tell me, before you got to the pictures that you used as material for sending, did you experiment at all with the geometrical aspects - the mandala, the triangle or the square - as sending material, not on the cards? And, if you did, what kind of material did the receiver come up with? Did they come up with the symbols or with something relative to it, a symbolic way of digesting it and coming up with it?

KRIPPNER: We did a great deal of experimentation before we decided on the art prints. One of the materials that we used was a collection of geometric forms.

The main problem in using geometric forms is that people's dreams are not equally divided in terms of geometric forms. Say that we used a trapezoid and a circle for two experiments. More people are going to dream about circular forms than trapezoid forms. Furthermore, there is a limit to common geometric forms that you can use. For purposes of control, statistics, and judging, our possible target selection pool had to be fairly extensive.

We did get some very striking results when we used geometric forms, and I'm sure that there is a place for this sort of target material. What we have done is to choose target pictures which often emphasize geometric forms, but they also emphasize other aspects, such as feeling, color, and emotion.

SALBERG: What decided you to send visual material rather than auditory or some other sensory material in the telepathy?

KRIPPNER: We decided on stressing the visual because in dream reports there are more visual reports than auditory reports. Dreaming is basically a visual experience.

I personally believe that we dream to train the eyes to work in a binocular fashion. I think there are other important reasons why we dream, but the most

basic reason is to get our eyes to develop depth perception and to work together in a binocular way.

Animals who have never developed binocularity, never dream or rarely dream. The animals that have eyes which work together have higher percentages of dreaming.

Also infants dream more than anybody else. Infants spend 50 per cent of their sleep time dreaming. The main reason for this, in my opinion, is that their eyes have to work, even at night, to get ready for binocular fusion.

As I say, dreaming is basically a visual experience. However, we have used other sensory modalities in a supplementary way. We have done experiments where we have used the visual, but we have tried auditory, taste, smell, tactile, kinesthetic, etc. So, there are many of our experiments in which we have hit various sensory bases.

HARONIAN: Stan, do you have any clinical data to support your theory that dreaming is designed to strengthen binocular vision? There should be some on the other end too. You say children dream more. Well, at the other extreme, if people suddenly for traumatic or other reasons lost their binocular vision - for example, people who see double after drinking versus people who do not see double after drinking, the former should dream more in theory. (MRS. MIALE: Or people with strabismus?) Strabismus or situations of that sort. Nystagmus, perhaps.

KRIPPNER: This work is just now beginning. The data which seem to be emerging demonstrate that people that have these sorts of problems have unusual sleep-drama cycles. Further, their eye movement patterns are very erratic while they're dreaming.

MUNSON: What about the effect of attempts to slowly change the electromagnetic fields on ESP - or radioactive fields or other kinds?

KRIPPNER: I wish somebody would do these studies. These are very expensive. I do not see the money available to do them, but we have talked about these studies for years. I think it would be very important to put individuals in a certain type of geomagnetic field and to test out the ESP between sender and receiver when both were in the same type of field, when they are in different types of fields, etc.

The Russians are starting to do some work along these lines. When Dr. Ullman was in Russia this summer, he found that the Russian parapsychologists knew about our work. They have repeated our work, supposedly with great success. They are doing work far beyond what the American parapsychologists are doing, especially in terms of magnetic fields.

MUNSON: Would you have any comment on the effect of these fields on normal personality?

KRIPPNER: Yes, I think that there are any number of gravitational influences, cosmic influences, biological influences, geophysical influences, and magnetic influences on the personality. I think we have ignored these phenomena for too long.

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