## PSI EXPERIMENTATION IN INTERPERSONAL SITUATIONS

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RAO: I shall briefly summarize the contributions of the participants in our group and then make some specific suggestions of my own.

Dr. Servadio presented to us the different aspects of paranormal manifestations in various traditional cultures in the East as well as the West. He stressed the importance of mass behavior phenomenology in psi research. In psi occurrences there is a need for submergence of the individual, as well as self-identification. This is a paradox: how could an individual transcend himself, and at the same time pay specific attention to experimental targets? Dr. Servadio will elaborate on his

point of view and give more details on his paradigm.

Dr. Ehrenwald made some significant points. First, that psi seems to manifest itself more among sheep than goats. Therefore he suggested that we take into consideration whether a subject is a sheep or a goat before we experiment with him. He then felt (and I agree with him) that there is a greater chance of psi manifestation in functionally coordinated groups. Therefore, one ought to create experimental situations in which the groups involved would be functionally coordinated. This would lead to the creation of a subculture which accepts the phenomena. There may already be such subcultures in which psi experimentation might be fruitful. He also stressed the epidemic quality of the phenomena. The phenomena seem to occur in bursts, and this is something we should try to take advantage of. Finally, he warned us against placing too much emphasis on machines. Technology might tend to ignore the essentially psychological characteristics of psi. After all,

machines do not have ESP; it is individuals who have ESP. However, we all recognize the importance of hardware in psychological experimentation.

Dr. Maupin felt, from his own experience as well as from traditional Eastern practices like Yoga, that by concentrating on certain body states we might acquire paranormal abilities. He suggested that this be investigated.

Let me now make some specific suggestions for an experimental design. When I hear about experiences under drugs and under hypnosis, and about the physiological concomitants of certain states of mind, I feel that much of the mystery of Yoga is taken out. "Mysterious" phenomena have finally been brought into the laboratory.

How could we make use of these technical advances of modern science? The research of Dr. Kamiya struck me as very interesting. Yoga seems to generate states of mind similar to high alpha states. On the other hand, there is some evidence that relaxation might be conducive to the manifestation of ESP. I wonder whether we could not plan an experiment along these lines. One could repeat Dr. Kamiya's experiment under different circumstances and perhaps obtain ESP. If I understood him correctly, when the agent concentrated on the target, the subject in the alpha state was asked to respond. We can assume that, as soon as the subject responds, he comes out of the alpha state. Therefore, we are not testing him during the actual alpha state. We can only assume that an alpha state preceded his particular response. I believe that there is a technique by which a response can be recorded during the alpha state itself.

I shall broadly outline the procedure. The subject pairs should first be conditioned to give a particular physiological response following a target. Let us now suppose that two subjects, able by training to control their alpha rhythms, are in two different rooms. A simple stimulus is administered to the agent, and the physiological reaction of the percipient, who is in the alpha state, is observed. If the stimulus material requires it, one can *later* ask him for a description of his psychological reaction.

As ESP presumably is received at an unconscious level, it might be difficult to bring it into consciousness. In Dr. Moss's work, target recognition was facilitated by a forced-choice situation a posteriori. This procedure might be preferable to simple recall. On the other hand, one could keep the whole experiment at the unconscious level, with the conditioning procedure I outlined, as the percipient's physiological response can be assumed to occur at an unconscious level. In addition,

one could substitute emotional experiences for the physiological variables. I think we need to pay more attention to possible interpersonal relationships, including the experimenter. We should investigate how to integrate this variable into our setup based on objective indicators of response.

If Dr. Kamiya, the fastest Guru of the West, would act as the agent with his trainees as percipients, he could take advantage of the existing rapport between him and them. If I were to repeat this experiment in my own culture, I would pick a teacher, a Guru, as the agent, and some of his disciples as percipients. These people would have to have control over their alpha rhythms, which could be enhanced by training. Dr. Kamiya said that his best subjects were people who had previously practiced meditation.

MARGENAU: Any comments or questions?

LINDSLEY: Not only can we gain some control experimentally over sensory modalities, but we have evidence of people, such as the Yogi, who have control of functions normally thought of as involuntary. Thirty years ago, I studied a man who could make the hair on his hands stand straight up and lie down again.<sup>2</sup> There are also many people who have gained control of pupillary constriction, probably through ordinary conditioning procedures.

Dr. Walter Freeman, the neurosurgeon,<sup>3</sup> could demonstrate that a man who had auditory hallucinations literally talked to himself sub-vocally. Whether he was decoding his messages as proprioceptive signals or heard them in an auditory sense, I do not know; but we are all aware that we do not read our proprioceptive impulses at a conscious level. It seems that through conditioning procedures one can gain control over efferent and autonomic activities, which one generally is unaware of and unable to control. These procedures ought to be investigated in light of their possible relevance to psi phenomenology.

Servadio: I will try to expand on Dr. Rao's summary. First of all, let me call your attention to techniques traditionally used to attain altered states of consciousness, accompanied by phenomena of paranormal cognition. Some of these ancient techniques are still used in some cultures in Latin America. I was invited to attend some Voodoo ceremonies in Haiti, and a ceremony of initiation in Brazil. Although I have no scientific proofs, I had a distinct impression that something paranormal was occurring in such settings.

As to the phenomenology of mass behavior, in groups specifically attuned to certain aims, a lowering of individual mental function levels

and of self-control is concurrent with cross-identification and collective empathy. Most of all, there is a diminution or loss of identity, which is not necessarily a regression, psychologically speaking, and, in accordance with certain schools of thought, such as Yoga, is actually conducive to the state of total disidentification, or Nirvana.

We might think of deliberately and systematically creating homogeneous groups trained in reaching these states, but without religious, mediumistic, mythical, or occult overtones. A project of this kind could be carried out based on the techniques of concentration and meditation used in Yoga, or on the imagery-evoking "exercises" of St. Ignatius. In all these procedures there is a necessity of relinquishing the ego function, while the participation in scientific experiments based on these states requires individual attention. To what extent can these two opposite requirements be fulfilled? I am sure that capable observers furnished with suitable instruments could study the products of these group interactions, but to what extent? Would their observations remain on the purely descriptive level (as have those of many anthropologists), or would they succeed in probing more deeply into the situation, thereby presumably interfering with the phenomena? This is a dilemma which really intrigues me and something to which I would like to call your attention.

TART: There is a book by Maslow, "The Psychology of Science, a Reconnaissance" on the problem of how much the observer can participate in a phenomenon and still be critical of it.

EHRENWALD: I think this conference, more than previous ones, represents a turning point in the development of parapsychology as a science. Yet this move from the pre-scientific to the scientific stage also has dangers, and I want to caution against some of its implications.

In psi research, it is often the tracer effects which carry real information. They are common in the psychotherapeutic situation, but are much more difficult to catch in the experimenter's net. They do not conform to the experimenter's expectations as to what a decent psi phenomenon should look like. In the psychotherapeutic situation, there is a highly complex configuration of responses which may or may not be identifiable as psi. They are part of a series consisting of tracer effects, doctrinal compliance, therapeutic responses, and perhaps even psi-missing.

It is not only the great dramatic event which contains the seed for a good psi experiment. It could be a trivial little incident, and if we try to force this into the straight-jacket of rigid experimental procedure, the experiment might succeed, but the resulting information may be misleading.

Maupin: I would like to expand on the relevance of body awareness for psi research. When we train subjects to have a greater awareness of subtle body cues, we get a striking increase in ordinary interpersonal sensitivity and empathy. These are not yet psi abilities, but when people get in touch with their own bodies, they seem capable of paying more attention to each other. Other people come to be experienced in much the same way that one experiences one's own

body. This procedure could foster psi experiences.

Most psychological events are accompanied by shifts in body awareness. To maintain a tightly controlled transaction on a cognitive level, we unconsciously control our bodies. These almost imperceptible shifts in tension are quite important. By specifically training sensitives, it should be possible to increase their ability to feel these subtle body shifts, thereby providing us with more information about psi states. Mr. Johnson confirmed the differences in awareness when his psi information comes in the form of imagery, and when it comes in the form of feeling. Every psychological experience has its reflection in the physical level, which is easier to make contact with. Mental activity is infinite, but body experiences can be reduced to more specifiable parameters.

We could also test Yoga assertions about relaxed states produced by concentrating on specific parts of the body. Relaxation of the body relates to eliminating its tensions and the historical ego so that the phenomenological self can be detached from the body and become sensitive to other forms of experience. I suggest that it is worthwhile to focus on the experienced body prior to the physiological body. It may be possible to specify where attention is being centered and possibly find its physiological correlates. It is important not to lose the intactness of the phenomenological body experience as a source of experimental variables.

I feel there is a danger in the excessive preoccupation with the CNS, with the brain, as opposed to the body.

PRIBRAM: Where do you think feeling is?

MAUPIN: In my opinion, there is considerable evidence to suggest that the body serves as its own reservoir of memory.

PRIBRAM: Do you mind if I oppose your views because they run counter to so much of what we know. I do not want to say that the body is not important in triggering memory, but when you sit on a

tack, you do not feel it where you are sitting. You feel it up here [pointing to his head]. The phenomenological body is in your head.

MAUPIN: On the physiological level, yes. If you want to argue on the physiological level, I cannot answer you, but I am saying that it is worthwhile to study the phenomenological level.

PRIBRAM: I am perfectly willing to do that, but the phenomena are generated by the brain in the head. The experiential aspect is learned.

MARGENAU: I believe that what has crept into the discussion is a failure to observe the distinction between the immediate subjective, unanalyzed experience (Maupin's body experience), and the construct of explanation which holds the brain responsible for all responses. If this distinction were observed, there would be no contradictions between the statements of Dr. Maupin and Dr. Pribram.

RECHTSCHAFFEN: This discussion presupposes the resolution of the mind and body problem, for which there are several classical models. There is the interaction model, where a physical event causes a mental event, which may in turn cause another physical event, and so on. Then there is the psychophysical parallelism model, the mental events being paralleled by physiological events with no inherent connection between the two. Then there is the epiphenomenon model, where physiological events cause mental events, but not vice versa. Nobody has been able to resolve which one of these is correct.

PRIBRAM: How can you say that? Have you read what I wrote about it?

RECHTSCHAFFEN: I mean to my satisfaction . . . For example, Dr. Kamiya's insistence that we look at the physiological concomitants because the mental correlates might not accurately reflect the phenomena, really represents one position. Inherent in this is, in fact, the idea that conscious mental events are capricious representatives of unconscious physiological phenomena. If you want to get the best correlation, you have to look at the relationship between the signal sent and the physiological response. On the other hand, it is conceivable that the transmission in psi phenomena is on a conscious level. In this case, the physiological response might be simply a consequence of the verbal report, whereas the signal transmission occurs from consciousness to consciousness.

The point I want to make is that these are philosophical positions which may or may not be correct. You can evolve data on psi phe-

nomena completely independently of adopting one position or the other. In fact, the kind of data you get will not decide which position is correct. But if you adopt a priori one position, you limit the kinds of data that you can get. For example, if you insist on looking only for physiological signs of psi transmission, you are implying that transmission cannot go from consciousness to consciousness. You should not select a position. In any case, the experimental data will not contribute to this selection, and the validity of the phenomenon does not hinge upon the acceptance of one position over another.

Margenau: Thank you, Dr. Rechtschaffen. It may be true that the presently available evidence will not allow us to discriminate between these theories, but I hope that in the end a discrimination can be made. I do not think we ought to abandon hope that even some deeply philosophical theories may some day be verified by researchers on psi, as well as by researchers in more "orthodox" fields.

Tart: Using my model (see page 165) one can determine experimentally whether information is transmitted from consciousness to consciousness, or from brain to brain. There should be a difference in the time lags.

MARGENAU: Sure.

Ludwig: Since the focus of this section is on "Directions for Future Studies," I would like to point out that to a large extent the directions will depend on the conceptualizations behind the various experiments which have been suggested. In the development of any science, there has to be first an attempt to classify the existing knowledge, and I am not sure at this point that an adequate classification system exists in parapsychology. It ought to include not only those events in which there is a clear cut one-to-one relationship, but also incorrect premonitions, certain schizophrenic states, feelings of meaning in certain drug states, etc.

I believe first of all that there has to be an adequate classification system defining what are the range and scope of psi phenomena. Secondly, there has to be an attempt to differentiate between legitimate

and false psi phenomena.

There are a few questions which have to be answered before any real knowledge is going to be developed in this area. First, there is the interference problem, which is related to the jamming technique proposed by Dr. Kamiya. In a one-to-one telepathy experiment, I have difficulty in conceptualizing what is taking place between the sender and the receiver. There may be several million other people dreaming

at that time. How can we assume that this pool of mental activity does not influence the reception of the dream within the experimental situation? Why should it be assumed that in a laboratory setting, just because an experimenter sets up a condition, one will get direct communication and somehow all the other minds in the universe will not interfere?

Concerning the sheep-goat dichotomy, it seems to me that instances of negative results are as important as positive results. Is there an antipsi factor operating? Has this been conceptualized? In many primitive societies, there are good Shamans and bad Shamans, and they use

positive as well as negative spells.

I would raise the question of degree of conviction in the paranormal information transfer. When sensitives give paranormal communications, I am not certain that they have the same degree of conviction for everything they say. Perhaps future studies might try to differentiate varying degrees of conviction in both the sender and the receiver. Mrs. Garrett mentioned that she had an absolute feeling of certainty about some types of communication and not others.

RAO: Some of these questions have already been raised. Most of my work in ESP is on what we call "psi-missing," that is the tendency to obtain significantly negative scores. When the subject scores significantly below chance expectation, we postulate another directionality in ESP operation. We were able to pinpoint at least some circumstances which contribute to psi-missing and others which contribute to psihitting.5

With regard to conviction, some work has been done<sup>6</sup> in which the subject was asked whether he felt confident that he would get a hit. The results were inconclusive for a very simple reason. There was the possibility that when the subject was asked whether he felt confident or not, his answers could be attributed to his ESP ability.

MARGENAU: Thank you, Dr. Rao.

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