

GENERAL DISCUSSION

DAY ONE

MILLAY: I am Jean Millay and I am president of the Parapsychology Research Group in San Francisco. For one research project that we were working on I was training people to synchronize their brainwaves with each other using biofeedback. When they were able to do that they would enter into a very powerful rapport with each other. Finally we got a small research grant to look at our results on chart recordings at Langley Porter Psychiatric Institute in San Francisco. This was extremely expensive, so the way we set up the experiment was to do base lines at Langley Porter, the training at the Washington Research Institute and back to Langley Porter for the final recordings. Jim Johnson had designed the equipment at Langley Porter to match precisely the brainwave instruments that I was using at the Washington Research Institute. With a signal generator we were getting the same signal on both machines. The training period was perhaps five or six sessions. We were taking one minute intervals for the testing. Some people ran up as many as 90 tests. They were learning well to synchronize with each other. However, at Langley Porter the results produced only a half or a third as much synchronization in that laboratory setting. The subjects were in a shielded room and the electrodes were a little more difficult to put on. We did publish that data in the *Psi Research Review*. When you are looking at something like PK you are going to have a change in the brainwaves. Everybody is different and everybody's EEG is like personal handwriting. But there are some very different things across the board that we see. For instance, Ruth, you were asking the difference between channeling and daydreaming. If you are just visualizing you might have a lot of simultaneous alpha, but as soon as you go into channeling the high amplitude alpha drops down to a very fast frequency. There are varying amplitudes, but it is still synchronous. It is as though focusing your attention you step into the doorway of hyperspace. Then you have access to more information and it does seem to come from another place. So I wanted to confirm that.

I was fascinated by your anthropological slant on those cultural transfers from different cultures. But how about past life memory? Most of the time when people think they have known each other in a

past life it may be symbolic and they do not have the same past life memories. One time I was using the hypnosis process because two people felt they had known each other in a past life. They wanted to get married using the ceremonies that they had before in their past life marriage. The couple was here in California but their past life was in Africa. In this particular case I regressed them into a past life and they both had the same memories of that particular wedding. That could be one explanation why a culture would accept certain stories, not because they are genetically linked, but because they have their past lives linked. My interest in research is like the focus of attention on the need to know. If you set out to prove something you run into all kinds of nit-picking difficulties, but if you have a real need to know sooner or later you are going to find out. Dean Brown and Hugh Crane developed an eye-track machine. There are lots of them now, but they did research with it tracking where the eye was going and they could tell where the focus of attention is going. Dean later set up a whole computer education program for Spain through Unesco. They found that when a person would look at a column of numbers, if it was added up correctly they would automatically know it and the eye would wander off. They would just go on to the next page. But if it were added up incorrectly they would know automatically and then try to find the error. By teaching the children to trust that first intuitive feeling they could learn to get through their work books faster.

ISAACS: It is part of the folklore of physical mediumship that any major or sometimes minor changes in conditions will inhibit the phenomena. People then have to adapt to those conditions so the issue of adaptation is very important. I think what matters for us is to try and facilitate people's adaptation as fast as possible or to work in situations where we do not have to adapt people. In future PK experiments that we will be doing, I am hoping that we will be able to train people to produce PK at great distances from themselves. Then we can give them feedback through the telephone line. So they can stay in exactly the same situation with the same instrumentation each time even though the target system may be somewhere else in the country with a line back to the lab. It remains to be seen whether that is actually a feasible format, but that is where I want to go.

SIRAG: I have a question to direct to Julian Isaacs about the experiments that he reported. Was success defined as being both more spiking than background as well as less spiking than background, perhaps something like psi-missing? Were you including both as success?

ISAACS: Our protocol was to only count larger spikes as PK. We got very large spikes within the experimental periods where the participants

were, but we also got large spikes during control runs. All control run spikes were treated as non-PK. What is unclear is whether those were artifacts or whether they were some form of PK, where somebody had thought about the machine and flicked out some PK. We had some evidence that possibly some of our people could cause PK at a distance. One of the problems with this type of proof-of-principal experiment is that if you are expecting a perfectly clean baseline during your control period you have to have a psi-proof housing. No one has found any way of preventing psi from getting into instrumentation. I think that the best way that we can discuss this, since it is pretty technical, would be off the microphone so that we do not take time for technical issues here.

MISHLOVE: I would like to comment briefly on Marilyn Schlitz's paper on psychic unity. I had a feeling in the discussion following that paper that possibly a major point was missed. There was a diversion about Sheldrake. It seems to me that when we are talking about a concept like psychic unity we are not really talking about a concept. I would like to call it an idea rather than a concept. I refer to a distinction that Jacob Needleman makes in his book *The Heart of Philosophy* and also a distinction Theodore Roszak makes in his book *The Cult of Information* between ideas and concepts or between ideas and information. They say that a concept is something we can analyze: Is it true? Is it false? How does it fit in with experiments and with data? But an idea is something that moves us deeply. An idea is something that touches us and transforms us. Psychic unity to me is an idea with that kind of power. It is not just a concept. It seems to me that in parapsychology the difference between experimental laboratory parapsychology and what is going on out in the community of people who have their own systems of psychic development, as Arthur Hastings said earlier, is that they are working with ideas of great archetypal power, such as psychic unity. We could also be working with those ideas if we are clear that we do not need to try and analyze them. We do not have to treat them as concepts. We can treat them as ideas and introduce their power into the laboratory setting, not for the purpose of proving them or disproving them, but for the purpose of allowing the power of those ideas to enhance our work. I wonder if you were not trying to get at that a little bit in your own paper?

SCHLITZ: I think that is a good point that you are making. In fact the whole notion of truth that I brought up at the end I think reflects on your argument that there is a certain forum or framework for articulating information and that it is the concept form that is more

acceptable within a framework of science. I think that just putting forth ideas tends to strike a cognitive dissonance for many people.

CRISWELL: First of all, I would like to say I have been really interested, over the years, in how it is possible to use the null hypothesis in parapsychological research with such perceptive subjects who perhaps would like to be compliant or even resistant. Secondly, I am interested in the difference between the spontaneous psi event and the attempts to voluntarily control it or intentionally produce psi. In the field of biofeedback, in many instances, if you want to make a physiological change you have to use passive volition rather than try to make it happen. I am interested in the brain mechanisms that are involved in the psi event. What happens when you shift over into an analytic mode or when you are trying deliberately to make something happen at a precise time? So I would like to go with the notion that the spontaneous event in the lab might occur if you sneak up on it and intend to do it, but go about it in a more passive and allowing way, try to catch it within the framework in which it is more likely to happen.

ISAACS: What you have said covers a wealth of important issues relative to PK. It is certainly the case that trying stops people from producing PK. I have even coined the term "trying inhibition" because the effort of trying really does stop people from succeeding at doing PK. The other thing that we found very clearly is that our participants report to us that analytic states of mind block their PK. We find people vary from day to day in how effective they are in getting out of an analytical state of mind. In terms of the passive volition aspect, pretty well all of the people who were successful used passive volition. Some of them may have used complex and very well designed mental procedures. Our best participant used an 11-stage induction procedure. She grounded the apparatus, grounded and sealed off the experimenter, shifted the energies, threw out her negative thoughts in a pot at the door and went through a whole series of different steps to be able to get to PK. The last step was to form a link with the overall God creator and give up and let everything happen. So passive volition seems to be successful. I have been thinking of using a biofeedback task to train people to get into a passive volitional state before they even started doing PK training. We have not done this. I would regard this as an interesting experiment to do. I originally wanted to do my Ph.D. looking at the brainwaves of people who were producing PK. That seems to me to be a way of investigating a very crucial and interesting question, which is where does the PK come from even assuming that it is the brain that is causing the events?

SCHLITZ: I think this again points up the idiosyncratic nature of the

psi process and also the difficulty in talking about a psi conducive mind set. Looking at the phenomenology of successful experimenters, I found that Helmut Schmidt, who has the most outstanding track record for doing psychokinesis research of anybody, employs a very active volitional set. He strongly discourages people from being passive in the least bit in undertaking any kind of PK experiment. I mean he is very specific about the recipe that he employs, i.e., you sit in a straight-backed chair and you concentrate very firmly on the task and do not let your mind wander. So I think that we can notice trends in terms of state specific kinds of patterns, but I think we need to be careful in terms of over-generalizing.

HASTINGS: Do you have to speak or think in German to do that?

ISAACS: Well, maybe that is Prussian PK. The point which I think emerges from this is that there is an interaction between personality factors and strategies. The task and that interaction are very complex and, therefore, there is no single way. But in our experience we found that with most of our people the passive approach seems to be more effective than the active approach. The point that Batcheldor would make, is that any form of ritual that you really seriously believe, in no matter what it is, even if it is voluntary effort, will work for you providing you really seriously believe that it is successful.

HARARY: That has been said since the days of ancient magic. In other words, "do what you will."

BURNS: I am Jean Burns. I am author of one of the models of consciousness of which there are about 12 in the scientific literature. I wanted to comment about this business of relating brainwaves to psi phenomena. The interpretation of this is model dependent. I will give an example from my model, which is dualistic. My model says there are two realms. One is the physical realm which has its laws. The other is the realm of consciousness which has *its* laws. The realms have very different laws and they connect through an interface. In this case PK can give you some understanding about how mind connects to the brain and vice versa. In the model (as about half of us who have models say) there may be independent processing done by consciousness, such as free will and holistic information processing. Holistic information processing can account for the overall correlation of behavior, and it is difficult to see just how the brain might do it. But in this case you could view PK as working in a holistic way, using this unique capability of consciousness. This holistic capacity to correlate behavior could work with numerous modes and functioning of the brain. So you could measure your brainwaves that have to do with PK or psi and it may indeed tell you something about that specific mode of psi. But you are really

getting a brain signature, because consciousness is singly influencing the modes and functioning of the brain. The interpretations of how consciousness, or PK, is related to brainwaves is model dependent.

NEPPE: Let me just make a comment in relation to using electroencephalograms in parapsychological research. I think that people tend to perceive this as just a very easy and a very direct way of getting some kind of direct information about the brain. The EEG is a lousy instrument. It has been and it remains so. A lot of modern advances are occurring involving computerized EEG techniques and, following on this, a string of topographic maps. We do not know what most of these things mean. It is just something that is worthwhile keeping in mind. One has got to be very, very careful in terms of the kinds of interpretations one makes. It is very nice to say that the EEG changes from alpha to beta or from alpha to some kind of theta range. You have got to be aware that these things occur during normal physiological processes under certain circumstances. This is just as much an epiphenomenon of underlying symptomatology as the symptoms are themselves. There is no reason why these ought to be anymore positive or anymore revealing in terms of the real essence of life or of truth than the pulse or any other ordinary symptom. Having said all that, there is a rather neglected, but important study done by a colleague of mine, Gordon Nelson, who is a leading EEG expert. I was associated with Gordon Nelson in some follow-up studies. The initial study involved 12 so-called trance mediums. I use a lot of words like "so-called" because I don't like to commit myself in terms of the realities or unrealities of people's experiences. Ten of the 12 had EEG temporal lobe foci. The temporal lobe may well be an area of the brain that is involved in the experience of psi of one kind or another. Incidentally, I have extended this research work demonstrating that subjective paranormal experiences have an apparent tendency towards anomalous temporal lobe functioning. This does not imply that these experiences originate from the temporal lobes or that they do not. It implies that in some way they are involved. Also interesting is that 11 of the 12 subjects had inter-hemispheric asynchrony, and this asynchrony was equally distributed between the right and left hemispheres. We also had a group of control subjects who were, in general, within normal ranges. We have also tested the odd subject during states of apparent psi awareness. I remember one case all too well, a subject who, incidentally, in my later study had a completely normal EEG. We asked him to focus on a particular kind of experience. He decided he would obtain data from a colleague of mine who had given me a comb. He focused on the comb and there was absolutely no change in EEGs. Yet, he gave me about

12 pieces of information. I as a scientist wrote it all down. Then at the end of it all I said to him very nicely, "You know, I just want to tell you that I know for a fact every one of those pieces of information were wrong, but thanks for trying." He told me he had picked up something. I went back to the original subject and asked him 12 questions pertaining to the information he had given and this person had scored 12 hits, even though I thought he had scored 12 misses. But there was no EEG change.

MILLAY: Because people have individual signatures in their EEGs I did not mean to suggest that there are certain frequencies for certain things. What we do find is that the focus of attention is very clear. In other words, when you shift your focus of attention your entire electrical field shifts, whether it is going from beta to alpha or the other way around. So when a person is able to focus his/her attention it does not shift. It may set up a pattern, but it does not shift. The focus of attention seems to be the key to whatever you are doing, whether you are talking about a trance state or a meditative state or an active state for PK. It is the focus of attention that is sustained that allows one to move into higher dimensional states.

ISAACS: We found that we got quite a lot of PK just at the moment of the shift of attention. I don't know what that means, but we have that phenomenology, certainly in England, probably more than in America so far. There would be a sustained focus then a shift of attention, followed by another sustained focus and the PK would occur exactly in the slot where the shift of attentional focus occurred, as far as we could tell.

HARLIN: I did an experiment at Washington Laboratory with Dr. Helmut Schmidt. I consistently missed the lights which the random generator was supposed to again flip on, repeatedly to the mutual frustration of both myself and Dr. Schmidt. Needless to say, I became more and more frustrated whether I recognized it at the time or not as did Dr. Schmidt. Finally, all of a sudden, all the lights in the Washington Laboratory went out. When they went on again after quite a bit of hustle and bustle I wanted to know what happened. Dr. Helmut Schmidt peremptorily dismissed me saying that he had not really wanted me to turn the lights off, he wanted me to turn the lights on! I later realized this was an excellent example of psi-missing. I went to see another parapsychologist, who said that it would have been interesting to see if Dr. Schmidt would have been able to set up an experiment in terms of making the lights go off. I wonder if any of you who do active work with subjects have ever really thought of doing that in the flow of the

moment as the experience seems to require or if it would be too demanding?

HARARY: I think it is really crucial to notice the way psi is manifesting in your experiment and then determine what to do about that, rather than assuming that you know everything and then the subject should just conform to whatever you set up. I have not had a chance to finish this experiment but I got to do one trial at Maimonides. I noticed that in certain experiments in which free-response material was being generated and targets were being randomly selected, it appeared subjectively as though the material that was being selected for a particular target seemed to have some relationship to the people who were the percipients in particular experiments. In one case someone had just come from the dentist and the target was randomly selected to see if it compared with his mentation or imagery. It is hard to know whether the description was pertinent to the experience of having come from the dentist or the target, but the target that came up was in fact a dentist's chair with a big tooth, so I thought that was interesting. I brought someone into the laboratory then and said "Okay, let's do an experiment." I only got to do one trial before I left the laboratory but I asked the subject to push a button. He had actually generated a random number which was associated with a particular slide picture. The following week I put that slide together with three other slides randomly chosen and put in random order. In this rather casual way I asked the percipient to go into the room by himself, look at the slides, determine which one most related to his experience of the past week in his life and then to come out and tell me what that was. Then he could explain to me which one it was and why. He looked at all four slides. There was only one slide that seemed to have any relevance at all. He became quite excited at this slide and why it had all the relevance that it did, detail by detail, about all the things that were going on—seeing people going off on vacation, packing their car, sweaters and all. This apparently related to exactly that in his own life. That was the slide that he had randomly chosen the week before. However, in experiments in which slides are randomly selected for people, the focus is often to see whether their description of the target or their experience of their spontaneous imagery somehow relates to this randomly selected target. It is approached as though that were where the connection came from as though the person reached out and touched the target. But isn't it possible that the person and the target selection methodology are part of some larger process? I need to pursue this experiment further before saying much more about it, but it is interesting that in this particular case the percipient was able to pick the correct target based not upon

any kind of overt psi "mentation" but purely upon the information in his own life. So that was the situation. I see it all the time, subjectively, but I have to do more experiments. If you want to ignore what the data appear to really be telling you, you can often do that and still get interesting results. It is even more interesting sometimes to go a little further with it.

ISAACS: There does seem to be an electrical PK effect. Brook-Smith reported conductivity effects. J. B. Hasted, in London has reported electrical effects. It seems that some people can cause the kind of "lights off" phenomena that you are talking about. But if you are not set up to trap the given phenomena, the problem is that you do not know whether or not they are happening by chance. As parapsychologists part of our goal is to exclude all other causes. Unless we have a well-characterized system, that is a system we have played with and worked out how it behaves and excluded possible sources of artifact, we can not be sure of our results. In the world of science we have to be able to put our results on the line. That is why you find parapsychologists unwilling to work with purely flukes, spontaneous events, because it means that they can't then write a paper and claim that this was a well-designed experiment. That is one of the problems. When we encounter people who start getting their PK into bits of our equipment that we do not want them to, we ask them very politely to refrain. They redirect their PK and so we can be polite and they can do what we want. One does not have to run the subject out of the lab at all. It is a question of saying what we want.

HARLIN: I have a pragmatic question to do with linking up appropriate parapsychologists with appropriate subjects. Since it has been so very successful in Jungian analysis, where they actually do select Jungian psychiatrists based on their typology according to the Myers-Briggs, and the Craig-Wheelright tests, have any parapsychologists thought of actually typing themselves and their subjects to see how it might effect the experimental results?

ISAACS: We have Myers-Briggs profiles of all our experimenters and PK trainees.

HARLIN: With what results?

ISAACS: We did not really try to match people in a careful way. We found that people really liked ENFP experimenters.

KRIPPNER: For the sake of the tape could you spell out those abbreviations?

ISAACS: Yes. The Myers-Briggs uses a four element classification system. The bipolar categories are extrovert-introvert, sensing-intuitive

thinking-feeling and perception-judging. There are 16 combinations of these four different bipolar characteristics.

HARARY: I do not think it is as complicated as you are making it. I know a few warm, furry researchers but not when people are talking about terms like parapsychologists and subjects. First of all, I am only one psychologist, not a pair, and second of all the people who participate in experiments in which I am currently involved are not even participants. They are consultants. They are people who are teaching me as much as I am teaching them. I do not think it is mysterious who is going to hook up with which researchers and who is going to get turned off. You should treat people in psi experiments with decency, with kindness, when they are participating in your experiment, they are giving you a gift by using their psi functioning in that mundane and contrived way. If you appreciate people and treat them decently you will find all sorts of wonderful things happening. That does not require getting into deep personality variables. It just requires something that may be much harder, for some, which is just relaxing, making people feel good about what they are doing and showing them some normal human decency and appreciation. That is what is missing in most of psi research as it is currently practiced. The usual freak show is far from appealing to well adjusted people.

HARLIN: That sounds ideal. We were talking about the sheep and the goats at lunch. It occurs to me that sometimes there are sheep and goats in terms of the experimenter and the subject. If you get an experimenter who unconsciously or semi-consciously seems to be denying and wanting to disprove the parapsychological effect, that is going to effect the clairvoyant subject. This is why I thought that the typological model would be of service to the experiment.

STANFORD: Actually I am in that corner that seems to be making jabs at Julian today. I agree with what he was saying, about parapsychologists not generally liking to say this was PK or this was ESP when it was a fluke and it was not planned. We do not want to go into print with that. I heartily concur with that, but I want to urge Julian to heed his own very good advice. He said a while ago that we get a lot of PK in a certain situation. I think I know what he means by that, but I would be much more comfortable if he would say something like "We get a lot of spikes on our record under these circumstances." Do you agree with that, Julian?

ISAACS: Absolutely, Rex. Yes, one should not make claims in this type of forum without being really sure that one has actually got a real effect there for absolutely certain. These results were provisional. So thank you for that.

STANFORD: I do not mean to suggest that they are not real. I am just saying we need to use neutral language.

ISAACS: Agreed.

NEPPE: May I just say in this context that at times some of the descriptions of spontaneous cases, obviously may well be genuine, but they may also not necessarily imply some kind of psi component. I assume I speak for some of the other more scientific parapsychologists on the panel saying that we do not necessarily accept that these were instances of psi; they may or may not be. They are spontaneous descriptions by people that are called subjective paranormal experiences.

HARARY: If they are interesting as normal experiences, we do not need to call them "paranormal".

SCHLITZ: In terms of this issue of rapport between experimenter and subject, for lack of a better word, another tactic is for us to design experiments using targets that have been selected by subjects or participants. It is particularly relevant in a free-response situation, where it appears that certain targets are more easily describable than others. It is possible without any kind of sensory cuing whatsoever to give people a series of targets and ask them to select which ones they want to use as their own pool. In that way in a sense you are matching not only the experimenter with the subject, but the target with the subject also. In fact, Charles Honorton right now is doing an experiment with the ganzfeld that I participated in when I was in Princeton last week. He is working with people who have a successful track record as subjects and is using a specific target pool that has a known hit record. He has done nine trials and eight or nine out of the nine have been direct hits.

TARG: I have a question that pertains to the role of ritual and imagery in psychic functioning, which has been regarded in a number of contexts here. One of the more important ideas that came out of the early remote viewing research was that it was not actually necessary to employ crystals and meditation and clearly mind altering techniques in order to generate psychic phenomena. People were not necessarily enlightened and yet were able to produce good psychic functioning. As this research continued however, many people have recognized that there really were rituals and that there may have been experimenters' superstitions in the laboratory setting. Dr. Heinze had a very interesting description of her transpersonal experiences in relation to what may be psychic phenomena as well. I am interested in what people think is the role of specific kinds of imagery that might be employed in rituals to support and sustain psychic functioning. What really is the relationship between these more metaphysical experiences which seem some-

how to be related to, but not necessarily requisite for psychic functioning to occur?

HEINZE: I am talking from direct field research in Southeast Asia. All psi experiences take place in a ritual context which seems to be the prerequisite for the psi occurrence. Since we do not have these rituals in the West it may be valuable to think about how to ritualize some experiments. I am not against science; I just want to avoid science getting into a blind alley. I am for clarifying issues and making these experiences available and teaching how these experiences can be achieved and utilized. So I am not against science at all, but I see certain blind alleys and wanted to point to them.

STANFORD: I have been for some time interested in the question of ritual in PK. I am also interested in ESP. I have not done the kind of research that allows me to have any empirically founded opinions about this, but from observation of folklore and some of the things that emerge from laboratory experiments, I had one thought that I wanted to express. In a lot of PK tests and outside the lab too, persons claim that they use vivid visualizations of the goal involved. Dr. Morris has done some research in that area. I will be alluding to it in my talk tomorrow. But suppose you visualize end results that you want in a PK experiment, does it have anything to do fundamentally with the fact of visualization or is it that the visualization is one means by which the end result becomes real to you and it seems as though it actually exists? I would suggest that folklore indicates that it might be the latter. We do not have a shred of empirical evidence on this yet, as far as I know, but I would suggest that one of the primary roles of ritual is helping to foster an inner realness. There are many ways to reach that objective.

HEINZE: The function of ritual actually is to separate the people you are working with from ordinary reality and create a ritual space which provides a possibility that something unusual can occur. You lead them into another reality where the possibilities open up, the element of expectation occurs. You evoke whatever you want to evoke, a deity or whatever higher power you choose because it works on the belief that the space is there, the sacred time is there, different from ordinary space and time. Then you also have ritually to leave this place again. So people are already cued into entering a different space and time. They have the expectations. They fully believe that it will occur and this makes the whole process much easier. I was not talking about visualization. Ritualization does not necessarily include visualization. What they use in Asia is kinesthetic process. People act out the transitional phases and then they are completely open to what is occurring. I was not talking about visualization.

HASTINGS: I would like to add to what Ruth-Inge Heinze said. It seems to me also that you have to recognize that the rituals in, let's say, a tribal situation are for purposes of divination or social cohesion. They serve a particular social purpose. They are designed to create a reality in which that purpose can be furthered by whatever paranormal events occur. For example, the divinitary dream or ritual is designed to keep the ego, with its biases and hopes and wishes, from interfering with the process that produces the response. In an oracle divination there is a certain ritual. The oracle goes into a trance state and the ego is presumably set aside, so that, if the process works, the answer does not depend on what might be people's wishes, but draws on deeper levels which can give a more accurate perception of what the answer should be. So this is not the typical ESP experiment, which is not designed to give you an answer for a particular social need. Possession is a very good example, because it occurs in many societies when there is a dilemma that the society itself cannot resolve. The possession process is engaged in because then the deity comes and gives an answer which everybody can accept. Is that right? Or partly?

HEINZE: That is one of the many possibilities. I was thinking mainly of healing. In Southeast Asia they talk, for example, about soul loss and a ritual is necessary to restore the soul to the patient. You get social support from the ritual and this process becomes possible in a different reality. You should read my book *How to Contain the Essence of Life*. There are soul restoring rituals to reinforce the weakened ego through social and ritual support.

PALMER: How to develop one of these immersion experiences into another world of experience depends on very simple things. What are you aware of? Can you tell the difference between internal and external objects? What fills up all the space? Those are the three precepts of the Buddhist practice: discrimination, awareness and space. From that point of view things get really simple. The objects of attention are the particular ritual, the particular kind of psychic phenomena that you are trying to develop, whether a divination or a prediction. Whether it is a recapturing of a soul. Whether it is going into the emptiness of the void. Whether it is going into energy and trying to exchange energy with another in a healing. The objects of attention and the ritual that develop the focus toward that object, toward that particular phenomena, vary a great deal from culture to culture. One is interested in restoring the soul. Another one is interested in predictions about what weather conditions will be for the good of the tribe. There are many different sociological and personal objects of attention. From a practice point of view what you are trying to do is to immerse all of your aware-

ness so that it is not sequestered by thoughts or emotions or personal reactions. Then you have a full immersion of awareness into a particular object of attention. So what you visualize is clearly very important. And the ritual is very important, because it predisposes you to consider a lot of group support and the whole history of your society. There is a complete shift of attention. I am just proposing that the ritual is to support the immersion of the awareness. That immersion of awareness into an object of attention can happen under a variety of conditions. And so ritual is one way to provide a variety of conditions. Extreme stress is another one, where you are off the bridge, not literally, but in a psychic or an emotional way. You have to grasp at something and so your attention moves into an unknown area and you come up with an answer because you need it so badly, your survival is attached to it. Stress can do it. Meditation can do it and ritual can do it. These are all different areas that may be the results of immersion of attention, but they are not under the control of the operator and they are artifacts. They do not teach you how to achieve the immersion. That is a voluntary thing.

DIDART: This is directed to Julian Isaacs. When you were speaking about your work, the personal nature of the trainer and trainee, it made me wonder if perhaps what we have going on is really a team PK effort in the training.

ISAACS: Yes, very much so, there must be good rapport.

DIDART: You were speaking about a trainee coming in after a two-week drinking binge and your thinking that this woman was not going to be able to do PK.

ISAACS: My sense is that the experimenter being in the appropriate state is a necessary, but not sufficient condition of getting PK. This is not data. This is merely an informed observation on the part of an experimenter. There seemed to be effects where the morale of the entire group was impacting on results. I want to do an experiment where we get people to chart their day-to-day states and see if we can show that we are getting collective effects in our experimentation. It is a team effect. That is not to say that the experimenter produces PK, but it is to say I believe that the experimenter can block PK.

RUBIK: As a scientist and also as a mystic I feel there is something extraordinarily limited about the scientific method of exploring psi. I would like to address this specifically. I have done a number of experiments, both with Elizabeth Rauscher and more recently on my own, looking at psychic healing. I thought Elizabeth and I had developed a fairly standard protocol in the study of psychic healing. Some years later I was involved on my own in an experiment with a psychic who

walked in and said that he went to see a channel, Lazaris, who predicted that certain results would come true in the experiment if we followed a certain protocol. I decided to change the whole thing right on the spot and follow these channeled premonitions which would be a rather unscientific thing to do. Nonetheless I got the most dramatic results. It made me look at these things rather differently. I never published the results because I did not believe it was hard-core science. I didn't have a lot of baseline experiments to go along with that. But I feel that there is something very artificial about closing the laboratory door and thinking that we are excluding some larger reality. Psi is really a property of the whole cosmos. To think that we can limit it to our experiment is to exclude too much. We are seriously delimiting ourselves from the bigger picture when we apply that current scientific paradigm. And then there is the notion of replicability. I don't think that anybody could take my place as an experimenter and produce exactly the same psychological conditions, including the same rapport with the participant and try to reproduce all the other conditions that were very highly specific to a certain time and place, a unique moment in the cosmos. Do you think that we can replicate that? Who are we trying to fool? That is one reason why I stopped doing these experiments. I have become rather deeply involved in mysticism. To tell you the truth, I have had a lot more psychic experiences both collectively and individually since then. I feel that we have to take a serious look at the adequacy and the limitations of the scientific method and what that means for parapsychology. I would like to hear more from Ruth on this because she gives an inkling of also feeling the inappropriateness of that method.

HEINZE: I fully agree with what you are saying. I think this is what I said at the beginning. We have to start with the whole and then go into the specific. What scientists are trying to do is to single out a specific detail and they never make it to the whole.

STANFORD: I think we make a mistake if we imagine that mysticism and science were ever intended to give the same kind of information or satisfy us in the same kinds of way. I have said for years that there are some people connected with the field of parapsychology in a fairly direct way who should not be pursuing their mystical or religious paths because they are in search of something that I don't think they are ever going to be able to get through science. Science has definite limitations. It serves the specific purpose of public verifiability. That is the nature of science. It is an open question, as many parapsychologists have fully acknowledged, whether we are going to show that psi phenomena are tractable as a scientific objective in that sense. I am not going to kid myself for a moment to think that science is going to give

us the kinds of answers that you were just speaking about. I do not think it is a dichotomy. It is not science versus mysticism. Science can give us the little window through which a little light may shine, so to speak. It may show something. It may provide hints, but it seems to me that there may be a larger reality through which we only see through the glass very darkly with science, but nonetheless it is a window and it is, we hope, a publicly verifiable kind of event. Replication is not a simple topic. Those of us in parapsychology, would I think, fully agree with you. It is extremely difficult. It is probably simplistic to think that we can replicate in this field in the sense that you can in physics, but nonetheless despite all of that I think that there is a remarkable track record of some degree of replicability in parapsychology. The road is not easy, but it is one that we have pursued and I think we have had some payoffs from that.

HEINZE: I am concerned about the generalizations which are made by scientists. There are some which can be acceptable. But I think you have to indicate how much you do not know about the topic. Then you are fairly safe. We are usurped by generalizations which seem to be generally applicable yet cover only a small area of the whole topic. Science has left out the huge area of the unknown. That is all what I am advocating here. Admit what you do not know.

RAUSCHER: I have not become a fullblown mystic because I have become a hard core physicist, again working on the NASA space shuttle and things like that. Also my program was not implemented, so I am not responsible. But in Dr. Rubik's and my experiments with Dr. Olga Worrall with bacteria, Dr. Worrall said that there would be anomalous growth in test tube number 20. I put that in the lab book. As it turned out test tube 20 was a control. It did not statistically override the positive effect she had on treated samples but I think recording that kind of subjective data is very important to our understanding because what we are doing is trying to find out what is the truth of what is going on. We are not trying to limit it to whether it is in this category or that category. I believe strongly in doing good science when you label what you are doing as science, but we are talking about trying to do only analytical science and not the other part of science which is the intuitive aspect. Unless you have the creative and intuitive view of what is going on and try to understand what the phenomena are you are studying, if you are so limited that you are taking a reductionistic view all the time, you are not going to really find out very much. You may be able to make good rubber or plastics or something like that, but you are not going to find out what consciousness is and what truth is. I feel that that is important. I have never seen an experiment without a ritual

and I have done a lot of experiments at the Bevatron accelerator, the large U.C. Berkeley particle accelerator. I also found the replicability rate is not that good in physics. Other physicists will look like they are doing the same procedure and get nothing. Even Martin Gardner says that if an experiment is very complex, the replication rate is not very good, because there are so many factors involved. I believe the individual experimenter not only has a role in psi, but he has a role in any kind of science—engineering, physics or anything else. There is a personal aspect to what consciousness is and I believe we can not draw a circle around a system excluding the human mind from it. It is not a closed system and the second law of classical thermodynamics does not apply; you have to consider a Prigogine open (not closed) system. No psi system is closed. It is an open system in which many factors, including the social context, always play a role. What you do in any experiment whether with a psychic or a physicist (who also may be psychic) is to make an agreement to do something. There are subjects I have worked with whom I really did not know very well, neither did they know me well, but we decided at some point in space and time to make an agreement to do something, as long as everybody in the experiment had the same coherent objective goal. The experiment worked and that is what is important. It is really the understanding of what an agreement is that is more important than personality profiles or childhood experiences, etc. So those were a couple of things I think really tie together in some way in my view. Do not be trapped by replicating physicists' views of how they do their American Physical Society. Realize that this is a unique field. We are asking what are the properties of consciousness and yet I do agree with you about rigorous protocols, but we do not have to exclude the reality we are studying, and there is a role for mystics in this world.

HARARY: Elizabeth aren't you the one who said to me in a conversation that the more you do physics the more it looks like psychology? I am sympathetic to what Beverly was saying, also to what Rex was saying. There is a place for mysticism. There is a part of that experience that can be very growth-oriented for a person, personally, privately. Do you want to just be on the mountain? There is nothing wrong with that, because it has its own deeper meaning. Do you want to come back into the society? This particular society is scientifically oriented. I think that science needs the mystics, visionaries, the people who come up with something out of their own inner depth and experience. This means something. What does it mean? Well, science cannot tell you everything that it means, but mystics also need science to assure them that they're not only off in their own private reality. You are not just

a kid who is having weird experiences or an adult who is having weird experiences, but there is something more to it than that. Seventeen or eighteen years ago when I came into this field, there was very little room for people and their experiences. It was all supposed to be statistics and breaking it down into simple numbers. We still break things down into numbers but some people within the field seem to have opened up much more to the experiences that are being studied. If people who have interesting experiences disappear from the field, the field will become a pretty vacuous place. I think it becomes a place where you go if you want to dehumanize what people are really experiencing or entertain yourself with "wowie" effects and your own confusion. I don't think we need to do that. In fact, we can give something to both perspectives by integrating them with each other. Then both psi research and human beings and society as a whole may benefit in some small way.