

## GENERAL DISCUSSION

### DAY TWO

HASTINGS: This is in the nature of a report to the observers and panel members of some curious coincidences. First just a simple one with Dr. Stanford and myself. As you will see when you read the proceedings he has mentioned the yoga sutras of Patanjali. I have also mentioned the yoga sutras of Patanjali. Now that is understandable because we talk about that from time to time, but he has mentioned intercessory prayer by name in his talk. I mentioned intercessory prayer in my paper by name. It is very curious.

STANFORD: Yes, and we both lost all of our data on the computer.

HASTINGS: That is the second thing. Rex lost all of his final copy of the paper. I lost all of my copies of my paper and my computer disc; physically lost it. Helen Palmer lost her copy of her paper. Vern Neppe lost all of his copies of his material between last night and this morning.

NEPPE: They were purely physicalistic.

HASTINGS: I just wanted to report these curious coincidences.

HARARY: I would like to know how many of the folks here are from other planets?

SCHLITZ: No, I am not from another planet. This is in response to Rex Stanford. I have a couple of comments. I would suggest that gambling is in a sense a popular culture phenomenon that stimulated the psychokinesis research and certainly has been very productive. One of the things you mentioned was about Christianity and the suggestion that one acts something out as though it were true. You find that in sympathetic magic there are also parallels in terms of the cultural traditions there. One thing that I think might be of use in terms of the popular culture or the cross cultural literature about generating hypotheses and setting up a conducive laboratory environment, is to look at the ritual literature and to see some of the common denominators across that literature that could be helpful in terms of psi-conductive situations. The enhancement of belief that you suggest is certainly manifest in a ritual setting. There is the idea of manifesting or manufacturing a safe environment within the context of a ritual; the idea of the release of individual responsibility that is generated in the context of a ritualized environment. And also I think one really important area

is the idea of shifts of consciousness in that sort of area between states of consciousness that can be really fruitful. And then just one final point was that in your comments on vicarious suffering there is a really interesting section in a book called *Christianity and Healing* where the author talks about the pay-offs of illness, one of them being that prolonged illness can be seen as communion with God, that, in a sense, it is a positive reinforcement for being ill for many people who adopt the Christian framework.

STANFORD: I would suggest that one possible reason we have had as much success with the ganzfeld as we have is that it is a rather strange and bizarre setting for a client—on a recliner chair looking like a bug-eyed monster with ping-pong balls over the eyes and headphones on and noise pouring through those headphones—but it says to the subject “This is very special. You can do something here that is interesting and mysterious and you are closed up in a sound-proof chamber and no body will ever hear it and it does not affect your life outside of this. This is a special occasion.” I think that the more we can create special occasions in the lab the more we can help circumvent some of the defenses that people use.

SCHLITZ: I had a personal experience about a week ago when I was in Princeton at Chuck Honorton’s lab. He asked me to be in this “special subject’s ganzfeld experiment” he is running. Well you know the mere thought of that put all kinds of anxiety in my mind. I was just very nervous about doing it. What I did was to go into it and really consciously make my mind recognize that the ganzfeld is a psi conducive procedure, that it had absolutely nothing to do with me at all and that Honorton was a psi-conductive experimenter. I divorced myself from the situation and got a beautiful direct hit. So I think that there is really something to that.

HARARY: The idea of making a safe environment for people to experience their own potential, their own psi possibilities in the laboratory is an interesting one. The ganzfeld is a particularly interesting case because I have seen it work both ways. I have seen situations in which people come in and feel divorced from the possibility that they could ever do anything like they are being asked to do. They are not really sure what you are talking about. You say, “Go into this room here and we will put these ping-pong balls on you. We will put on the headphones and the red light and we will shut the sound proof doors. Just act natural and relax.” If that is done in a caring way then people get the message that this is really special. They loosen up and they just say, “I am not responsible here. Therefore I can just go with my images and we will see what happens.” You get the kind of free associative imagery

that you get in ganzfeld which I think is related to the procedure and not necessarily the nature of psi functioning. It is an interesting way to see psi functioning expressed in the laboratory. I have also seen a situation where people feel that they are being manipulated, that they are being plugged into a socket in a wall so that they can glow for the experimenters. They feel out of control and the message given is that they have no hope of ever consciously controlling or utilizing their own psychic capabilities, therefore their only hope is to come into the laboratory and let us create this for them. I have seen the situation where ganzfeld is not used such as in remote viewing, and it is still possible to create a safe environment for people without all the paraphernalia. It may help some people loosen up, but the most important consideration may be the attitude of the experimenter. You need to explore some of the cultural restrictions that people put on themselves, their own fears. If you first work with them on that basis then let them know that this is perfectly normal and comfortable to do and other people have done well and exactly how to do it, you are paying attention to the kind of mental processes you are using rather than just letting it go with the flow. The thing is that there are many possible types of safe environments. It is not necessary to put people in the soundproof freezer. The ganzfeld can be safe, but don't think of it as a psi-conductive procedure in and of itself. It is much more than that and it is really relevant in that it allows us to see the way psi functions in that particular inner-directed type of situation. If you compare that to remote viewing, one is not obviously better than the other at eliciting psi. They just show you the manner in which the functioning expressed in different kinds of situations. I agree, though, with the idea that it is important to make things safe. I am not sure that you need to go all the way out on a limb in order to improve the actual level of functioning. The more you interfere with the process, the more removed you may become from the basic functions and the more you may be measuring the secondary results of your particular method of interference.

STANFORD: I do not think you go out on a limb with ganzfeld, but I certainly agree that the experimenter is very important. It is not a magical formula or an apparatus. There is that human contact and that is really what makes a difference, whether it is remote viewing or anything else. My experience at least out at Psychophysical Research Laboratories was that when I walked in there I feel like I was the only person in the world. I might have been the only subject they ever saw. I felt "This is really something special." It was not just part of an experiment. I may know that it was an experiment intellectually. But it was a feeling of concern for the individual. Let us share something

interesting and exciting together. It is that kind of thing—if somehow we can communicate that.

HARARY: A real appreciation for the person's being there I think is essential. But let's not confuse the effects of making someone feel special with the effects of putting ping pong balls over their eyes.

ISAACS: I wanted to make a brief comment on the point raised by Scott Rogo regarding how it is that aboriginal and so called primitive societies seem to have their psi specialists as well. He presented this as if it was very mysterious. I think that there are a large number of relatively mundane factors there. I offer this for general discussion. I want to say first of all that, as Rex has pointed out and I agree, there seem to be people who are simply born gifted with ESP. Secondly, there are people who have parental acceptance and expectations of psychic functioning. Thirdly, in primitive societies the boundary between the spiritual and the psychic is less marked than in our society. As a result psi is seen as dangerous, so it must have a boundary made for it so that there should be specialists who can handle this dangerous thing and not expose the other members of the group to that danger. But it also seems sacred as well. That is another reason why it should be valued that there should be a boundary around psi. One thing that we ignore, which is very ethnocentric of us, is the frequently long-time training required to become a psi expert in those societies. It is not surprising that not all members of those societies should be motivated enough to actually go through that long period of trial and tribulation to perform the training necessary. In addition, the training is often within an apprenticeship system where the sanction of higher level authorities within the group has to be obtained. There is also often an economic factor there, that the psi practitioner has to accumulate a clientele like they do in California. All of these are very mundane reasons why there should be psi experts in those aboriginal groups.

KEIL: I would just like to remind you that in the sitter group you have special occasions where people tend to act at some point as if it is true, so in many ways this overlaps at least partly with what Rex said. If I can put a question to Dr. Neppc, I think he pointed out that for his rather large number of categories we need an awful lot of subjects or participants. I wonder whether they can be categorized so that we can actually get some benefits from a more practical smaller number of participants.

NEPPE: Yes, thank you very much for that question. It is a very important one, something that I have mulled over. There are 16 categories with all sorts of subcategories within each. One classifies patients or subjects along each continuum, applying the categories both to pa-

tients with psychopathology, subjective paranormal experiences and control groups of non-experiences. One would certainly need many thousands of subjects in order to demonstrate many different important facets. However one should look at those data not as pieces of data, but rather in the kind of qualitative way that Rex was trying to portray. I think that one has got to be rather intelligent in terms of the way you approach things. You are recording information in as much detail as you can. Dr. Heinze's classical case description yesterday was enormously detailed and very good from that point of view. Ultimately what one extracts are the kinds of features that I was listing. After listening to 50 or 100 such cases in this kind of detail one begins to get a feel for clues to do research. It is almost the situation of not testing out hypotheses. It is a situation of trying to generate ideas. It is philosophy coming before science in a way, phenomenology being an all-encompassing kind of perspective of where one can potentially go. It is an attempt at making sense out of the data which are available and which can be easily available if people discipline themselves in terms of recording these kinds of components for the experiences. I have found it frustrating at times hearing people describing their experiences. When asking about detailed categories they cannot answer anymore at that time. I make an appeal for subjects at a prospective level to try to record their own experiences in detail; researchers could utilize questionnaires that are available to help this process; also, of appeal to researchers both in field and laboratory research to note down what may appear obvious, such as the temperature and the physical conditions and the person's emotional state. This is the fundamental point I am making. There are a couple of things I wanted to say. Scott Rogo raised the other question of what kinds of animals experience psi. Is this something that is occurring in everyone or just in special people? I think you partly answered that, Scott, and we pointed out the high incidence of occasional subjective paranormal experiences in the general population. But there are kinds of experiences, where you get a different kind of animal. I have used that word "animal" deliberately because Keith was portraying them as aliens, as somebody aberrant. Actually, the media were and emphasizes the fact that this is how our culture at times perceives people who are very psychic. As I see it if one looks at psychophysiological correlates such as temporal lobe symptomatology, people who have the occasional psi experience do not have any anomalous temporal lobe functioning. It is the group that have large numbers according to certain stringent criteria that seem to come out with three, four, five different kinds of possible temporal lobe symptoms each time. This is rather interesting because it does

suggest, as Julian was saying, that there are two sub-categories. One is the natural kind of psychic and the other is the person who may be able to develop those abilities, but at a deeper level and over a long period of time. Just a couple of other comments. It seemed to me in relation to Rex's very excellent presentation that one of the groups that may in fact have directly benefited from field research are those in which phenomenological analyses have been valuable, so I have cited olfactory hallucinations as an index. My *déjà vu* research is another one. Both of those came initially directly out of descriptions of people having these kinds of experiences and then trying to formulate them in a more structured field setting, whether or not there were specific qualitative differences in terms of their kinds of experiences. There are two other groups that I am wondering whether or not one almost needs to put them into the laboratory, and those are the ones where you can directly observe psi effects. If I did some research and generated results at the .00001 level, I would be very delighted and publish very quickly but if I saw this table lift, I would take every kind of experimental precaution available to make sure that this was not an ordinary physically explicable phenomenon. I would probably not publish it. And yet at what point does one decide that one single observation really will overwhelm all kinds of statistical data which, after all, are based on the probability of things being just a chance phenomenon. It just fascinates me. The same kind of thing may well apply to precognition. Certainly macro-PK and precognition are the two most obvious phenomena and they are just along the same lines we were talking about when we discuss vicarious experiences. Something very similar is the so-called telesomatic ESP experience, which a lot of people do not talk about. It involves some kind of bodily reaction in picking up ESP data. I know one person who, when she gets a very itchy foot on the left side, knows something bad is happening to a member of her family and will consistently "hit" under those circumstances. This is not an equivalent kind of pain of childbirth that the one person is experiencing when the other person is giving birth. It is a way of redirecting her psi. I was wondering if you had any comments in relation to any of that.

STANFORD: Well, those particular cases that I talked about are based upon Louisa Rhine's very interesting paper in which she dealt with these seemingly extrasensorily mediated ostensibly physical symptoms—pain, physical suffering of different sorts—and I do not have a lot of comment on it except to say that her article is extremely interesting. It is the only systematic study of this topic that I know of. I think we need some more, but it is another example, too, where one

has to ask oneself what is really going on in that situation. If someone experiences the pain of somebody else, is it a way to communicate to the mind of the other person that someone is in a crisis because they cannot bring it to mind consciously? That is the way Mrs. Rhine tends to think about it. Or what is the explanation? We do not have enough data yet to speculate about the explanation, but I do find her case literature interesting because there are a few little hints about this possible vicarious suffering thing, as I call it. She did not, by the way, mention that hypothesis at all, perhaps because she was pretty strongly locked into the kind of perceptual-cognitive view and assumed that this was trying to express knowledge to consciousness, but that it got blocked in some way.

HEINZE: I want to go back to an earlier remark about when psi faculties can be considered normal and when they are considered abnormal. First of all they are not abnormal in every culture. This is not true at all. It is especially not true in Asia. I mean we have India with the yoga sutras and other manuals in Tantric Buddhism and Tantric Hinduism, even simple Theravada Buddhism. You will find many records about supernatural faculties. In Bali people trance naturally. It is not considered abnormal at all. When does it become abnormal? It became abnormal when Confucianism, for example, came to China. The earlier shamans were very effective and Chinese emperors and even Korean kings have been shamans. It was a threat to Confucian ethic and the state who felt its own legitimization threatened. Psychic faculties have indeed been used to legitimize power. A Southeast Asian King, for example becomes a god during coronation. These divine faculties can be later evoked in the person of the king. It even happened in Europe until the last century. Kings and queens were supposed to have the royal touch. People would come to them because during their coronation, divine powers were invested in them. Even during the coronation ceremony of the present queen of England, you heard the phrase that sacred powers are invested. So there may be even now people who still want to touch Queen Elizabeth and be healed. Just imagine we would go to President Reagan and ask him to heal us. Even the Catholic church provides legitimization.

Furthermore if you read the exercises of St. Ignatius it is a manual for inducing psychic phenomena. The Catholic church attests also the presence of spirits. Why do they have a manual for exorcism? If there are no spirits they could not be exorcised. This manual is still used. You see there is a power play, a secret power play involved. If psychic powers are considered to be a threat to the present power they will be called abnormal. This is my bottom line.

TART: I want to continue on a little bit from Keith's very exciting and very depressing paper on the way psi is portrayed in the media. It is obviously a problem. You showed that the house was on fire and you showed us specific fires and it is getting worse. But we did not have much time to deal with the question of what to do about it. If you think about our cultural heritage, we have two major cultural paradigms still operating simultaneously. One is the old God and the Devil kind of thing and psychic powers are generally aligned with the Devil. Obviously they are being depicted accurately in the media from that point of view. Second, we have the modern materialistic scientific paradigm in which psychic powers are basically insane ideas that show your inferiority if you accept them and certainly threaten the status quo if there is anything to them. So you can see a lot of psychological negativity toward that.

Now, the interesting thing is that we have the possibility of a new cultural paradigm emerging in the form of transpersonal psychology. We have a lot of people in general, as well as psychologists, now interested in the fact that we can not just go back to old time religion as a balance against the emptiness of scientific materialism, but we may be able to scientifically or at least experientially start to sort out what in the old religious spiritual practices creates values and makes some sense of life. What are cultural artifacts or things that are not suited for today? Now, where is parapsychology going to fit this? We have been working so hard for scientific respectability that we will almost never talk about the spiritual implications of the parapsychological phenomena we are investigating. That will not get us accepted by the establishment leaders who have all the prestige and money in science.

If we continue that way, I think parapsychology is going to stay on the sidelines in terms of having any real influence on the culture. We are just collecting anomalistic data. It does not impress believers or disbelievers one way or the other. If we look at the implications and get involved in the growing transpersonal psychology movement, functioning as a kind of "quality control" on what is possible, or impossible, parapsychology may eventually have a big impact. Now I say quality control because that is really important. We have a spiritual hunger in our times. Most people cannot go back to the old Judeo-Christian paradigms. Scientific materialism leaves you empty. We are starving to death so we eat spiritual junk food. Anything that says it offers something, millions of people will snap up and get some kind of effect and all sorts of weird consequences. But if we can develop something more appropriate to our times, using our psychological sophistication about what is healthful and what is pathological, using parapsychological



information, we will be ready to deal with the fact that it is not just an anomaly. Once one mind can contact another mind for example, the idea that we are not separate beings common in spiritual traditions may have a factual basis. So I want us to be aware of that dimension. I am not against keeping up the really rigorous scientific research. That has to be the base that we keep working from. If we keep shying away from the implications of this though, parapsychology is going to be an interesting way to divert ourselves from some of the horrors of modern life and will stay on the sidelines.

HARARY: Charley, we sometimes hear a point of view in psi research that we are the outsiders looking hungrily through the bakery windows of science. We are pressing our faces up against the glass saying "I wish I could eat some of that mainstream stuff," I think it is important to discuss the implications of what we are doing. One of the implications is that I do not think that we have established that psi abilities belong to a select group of people and that you have to be very unusual to do it. I think it is just the opposite. That is very important because if the abilities that we are studying are widespread, which I think they are, then we do not belong on the side lines and we do not belong even outside of mainstream psychology and physics. Maybe as a discipline within psychology or an area within physics, we need to integrate what we are doing with the mainstream. I am all for facing up to the implications that you are talking about, but some people are going to get the idea that you are pushing some sort of religious perspective. You are not pushing it but if they get that idea, they may get very paranoid and you may get groups of people forming, in which that religious perspective is a perceived threat which results in hostile behavior. If you go too far with that religious viewpoint, you alienate the mainstream that you want to attract. If we in the field perpetuate the idea that this is weird stuff that only concerns a few people, then we are asking for the kinds of portrayals that we have seen in the mass media. We are partially responsible for the way that we present this material and the way it is then presented. There are, for example, the psi research laboratories that you see in movies. Where did they get the idea that it is like that? From us? From putting people in gigantic soundproof rooms that do not turn out to be necessary anyway? So what could we do? What is the positive side of this? The positive side of it is first of all to recognize the problem and decide whether we want to be considered as part of some negative stereotype. I did not go into the whole news media matter in my talk, because I did not think there was time. There isn't time now, but I will say this. I was recently on a national program where I had to make a choice between doing what I thought I was

there for and objecting in a strenuous way to the completely misleading garbage that they put on before I got on the air. Which do you think I did? And there comes a time when you just forget that maybe you were there to sell something or we were talking about an electronic game. You have to take a stance. Somebody must say, listen, what you are presenting to the public is not the way it is. What you are presenting is not what I do. It is not who I am and I object. I object because there is something serious here and I object because you are telling normal people who have interesting and important experiences that they should stay away from such things and that they are crazy. Well nobody is going to tell me that I have to believe or live by their shallow misconceptions of what it means to have certain capabilities and experiences. And nobody is going to get by that when enough people who know what they are talking about object in the strongest terms.

HEINZE: This links both. At noon I had a discussion where I said the present scientific paradigms seem to be strictly materialistic and I was told it is not possible to add another dimension to a materialistic paradigm. I wish somebody would pick this up. Why are we stuck with these materialistic paradigms? Why can we not add other dimensions? We can leave it as a question.

ISAACS: It is not true. Talk to Saul-Paul Sirag. Many physical theories have many different dimensions.

HEINZE: I know he speaks of many dimensions, but how many people know about these dimensions? And are they generally accepted by the other hard sciences? That is my point.

STANFORD: I wanted to address myself to some of the same issues that Charley raised. I think that there is a real point and probably an important one in what he is saying. However there is a need for a certain kind of caution. Charley used the word implications. My understanding of the word implication is that it is very strong. That word is used in mathematics, in axiomatics, and so forth. I personally do not think that it is intellectually honest to talk about the spiritual implications of the meager results that we get in the laboratory. I personally make interpretations that go beyond the data. I think we all do. I think we all as human beings are bound to. Maybe it helps keep us alive scientifically and intellectually. I think that is very constructive. Neither am I suggesting that we shut up our mouths and not say anything about those kinds of feelings, speculations, strong intuitive feelings about where the data lead us. One example: I was invited to give a lecture at a mental hospital. They were interested in the PMIR model and I went there and gave a very standard scientific lecture on PMIR. Well, it turned out that one of the psychiatrists was a Sufi and afterward he

said "Well, I really enjoyed your lecture, Dr. Stanford. There is just one thing I would like to know. What do you think is really the meaning of this?" I felt vastly relieved and I could talk about what I thought was some of the meaning. But notice what he asked. What do you think is some of the meaning of this? That not only gave me permission to do it, but he did not say, "What do you think this proves?" All I am suggesting is that I agree that we perhaps do need to be more open, more frank in many contexts. We need to stop cowering in fear of what the critics are going to think. But we also need to be scrupulously intellectually honest when we talk about extrapolations from our data and be honest enough to state that this is the way I feel like interpreting the data. I think it makes sense. All I am saying is, "Let's not oversell it." Let's let people know that we think this may be pointing towards something larger, by all means, but we do not want to fall into a trap at the same time as we do that. I think we can speak with a lot more liberty and freedom when we freely speculate, but admit it as such, as informed speculation.

MORRIS: One of the themes that seems to be running through many of the comments—actually it ties in with points that Marilyn was making towards the end of her paper—is really the extent to which our endeavor involves various kinds of social constraints. In some cases it seems that many elements in society really want psi research to go a little slower, that they are not ready for certain of its potential consequences yet. On the other hand different elements appear to want psi research to go a little faster. They have quite a hunger for what is being done. One of the things that it will be very helpful for us to try to consider as realistically as possible is how well we can characterize the conflicting social constraints that we may be operating within and attempt to understand how to deal with such constraints. Marilyn's point was that often these could be seen as existing in a variety of different societies. If you feel that you have a social constraint, there are various strategies you can use. You can try to see if it is really the constraint that you think it is. Is it a constraint that you need to try to escape? Is it a constraint that you need to accommodate? Is it a constraint that you need to change? People have even argued that at some level social circumstances may be contributing to the modulation of results in psi studies. That will be hard to experimentally investigate. I wondered if Marilyn perhaps would want to comment further on some of the implications of her paper for the idea of social constraint within this context?

SCHLITZ: One of the things I was trying to articulate in my paper was that there has been an attempt to bridge the materialists' model

with a more spiritual type of framework, i.e., the idea of some collective consciousness or group mind as a means of rectifying the separation that is so formally articulated in this atomistic worldview that we operate from. I asked Rupert Sheldrake why he thought his particular theory had caught on with such popularity. Regardless of whether we put any stock in it, it has great street validity for lack of a better term. He said that people are really just desperate to connect with each other and that his model represents a means of bridging the gap between science and spirituality. He is attempting to use that sort of framework for the more spiritual dimensions of human awareness, both of each other and of themselves. I think it is very difficult to identify unless we want some kind of revolution in thought to overthrow the system. I think one of the most important things that we need to do is to identify how important these implicit assumptions are in shaping the way that we conceptualize the phenomena that we study. In many cases what happens is that we are operating from a mold. We keep forcing the phenomena of spontaneous cases into a framework that sees things with regularity and uniformity. Perhaps that is not the way it is. Perhaps what we are doing is simply modeling ourselves on the scientific framework, rather than accepting the phenomena as irregular.

ROGO: I wanted to address my comments specifically to Rex. Rex, you said in your paper that parapsychologists have not looked at the dynamics of faith as a variable in psychic functioning.

STANFORD: No, I did not say that. I said that our leading theories today do not encompass that.

ROGO: I would point out though that that issue has been looked at, as a matter of fact; not in the parapsychological literature but, of all things, in the medical literature, where there are in fact three reported studies on the power of intercessory prayer. Now two of these studies were published in medical journals. The third was given as a paper to the American Heart Association. Two of them were single blind. One of them if I recall was double blind. One of these studies was investigating whether or not faith through prayer could affect the survival rate of children with terminal leukemia. The second was seeing whether intercessory prayer could materially affect the number and range of postoperative infections and other variables after heart surgery. The third study was extremely complicated and kind of loused up in the statistics so it is not very important to us today. However, both of those other studies showed rather robust findings. So I think that the whole area of faith, whether it be religious or faith in psi, has been looked at as a dynamic in a body of literature that, unfortunately, parapsychologists are not familiar with. The specific question that I have for you

is whether or not you would agree that something as basic as a sheep-goat experiment is fundamentally an experiment in the dynamics of human faith.

STANFORD: That is a very good question. I originally had intended to address it in my paper, but it had already grown like Topsy and I decided to cut its hair. But let me say first off that I think it is interesting that the experiments on faith were not done within the parapsychological community. But what I was really pointing at in my talk earlier is that we do not have within our theories, the basis of coming to grips with this. As far as the sheep-goat matter is concerned, the sheep-goat phenomenon was not originally conceptualized by Gertrude Schmeidler, its originator, as having anything at all to do with faith, but rather motivation. She was working within the framework of the so called new psychology, where they emphasize the effect of motivation upon perception. We do not know what the explanation of the sheep-goat effect is. That is one of the things I have pointed out repeatedly in the literature. We really do not know. But I was specifically discussing faith and PK here. I deliberately stayed away from the role of faith in relation to ESP, although that is a very interesting area that we do not have time to discuss. I would like to discuss it with you sometime, but I was specifically concerned with the PK angle. Just let me say this about sheep-goat. There is a little bit of sheep-goat work in the PK area that really has not panned out, as you probably know. That work was not guided by a construct or an explicit hypothesis related to faith and, as a consequence, it is very difficult to know what it deals with. You get somebody to make a global statement about whether they believe in PK or perhaps whether they believe it is possible to do it. But faith comes at the level of action. We are talking about what happens now, right now, when the event is supposed to occur. And those studies do not touch that at all. They nibble around the edges of the cookie, but they never really get in there. I think that that may be one of the reasons why they have not borne much fruit. The studies that are most relevant to faith, it seems to me, are the kind of studies that Bob Morris has done and some work about release of effort and studies like that, which suggest that when we do not have a high egocentric orientation or when we can visualize the end result confidently, we tend to get results. That is more germane to the construct of faith. Even that might be made more explicit.

UNKNOWN: Well what kind of experiment would you like to do if you had the time and the money?

STANFORD: Talk to me afterward and I will apply for a research grant. I do not want to take up time with that right now.

CARDENA: Concerning the issues that you raised about possible important factors that should be considered, I would like to raise the question of the role of physical activity. Most experiments try to get a result by just taking a few minutes to an hour at most. My comment concerns what we see in rituals. In a ritual, when you start dancing or running, at first you may be very nervous about whether you are going to be a good performer or not. After several hours of running or dancing you do not give a damn about that. I think that is one point that certainly ties in with emotional intensity and involvement. It also relates to physical bodily sensations that are very important, very strong, that draw one's attention. A similar mechanism might be involved in self-induced and self-sought pain. My second comment concerns what would you think about using Bayesian statistics for parapsychological data. They involve subjective probability decisions for various types of data in addition to those obtained through experimentation. Another matter relates to Dr. Neppe's and Dr. Palmer's earlier comments about hypnosis. I just came from a conference that presented recent research findings that hypnotizability is greater among people with traumatic stress and multiple personality disorder than among "normals". In contrast, "psychotic," and clinically obsessive people are less hypnotizable. I think that one of the possibilities that we may see is that psi is enhanced with hypnosis but not in all types of pathologies. I would imagine that an obsessive would really have many intrusive thoughts that would not give rise to the cognitive styles that Helen Palmer was talking about. Other types of disorders which subsume a different cognitive style and type of emotion might follow more closely Dr. Palmer's prescriptions. I think studying cognitive styles according to pathology is an area worth exploring. Dr. Morris, I just want to state a small note of warning concerning Jung's concept of the collective unconscious. I think we should very clearly distinguish that when he is talking about mother or father archetypes he is not talking really about images. Jung's notion of an archetype is that it is a predisposition for a perception or an interpretation, not an "image in the mind." We can translate this concept as a general mode of organizing experience. If we are going to do the experiments that you were suggesting, which I think are very interesting, we also have to find ways of assessing not specific answers, not specific reports, but how experience is organized; and not only experience, but even perhaps preconscious processes and sensory reactions that a person may not be conscious of.

NEPPE: I think you make a good point and this is one of the reasons why it is useful to get as much information as one can. One has to be careful, however, in categorizing diagnoses in relation to particular

kinds of potentiality towards psi as this is too simplistic. So, for example, a hypothesis to test would be that psychotics during phases when they are shifting to psychosis or shifting out of psychosis—may exhibit far more psi than they will exhibit while they are acutely psychotic or when they have gone back into remission. In other words, shifts of states of awareness and distortions of ego boundaries could well be very important. This introduces the framework of delineating the state of the patient when one uses some kind of multi-axial psychiatric diagnosis such as that listed by the APA, the DSM III-R. This is not generally done. Moreover, DSM III-R as a diagnostic classification tends to label heterogeneous phenomena into the same diagnostic systems. What one really needs to be able to say is this event was occurring at a time the person seemed to be escalating in psychotic features. This might be more meaningful and might be the greater kind of feel that one gets.

STANFORD: There are also several studies in the hypnosis literature suggesting that persons who have phobias tend to have elevated hypnotic susceptibility as well. By the way, I would not want any of this to be misconstrued. I do not think that people who are highly hypnotizable necessarily have split personalities, multiple personalities or problems like that. I think what you meant, if I understand it, is that among diagnostic groups those are the ones that stand out.

CARDENA: Yes, that is what I meant and, also, that there may be emotional and cognitive styles that we have not looked at.

MORRIS: I would agree with your point about the problems in doing some of those studies. We are only slowly starting to explore even the feasibility of doing them and the kinds of measures that we might want to take. The question that you have raised means that we may want to look at some rather complex ways that may really probe pretty deeply into emotional territory.

DON: Our laboratory has been engaged in brainwave analysis and event-related potential work for some five years now and we have reported some of these results at last year's Parapsychological Association Conference in Sonoma and this year's in Edinburgh. Basically, we are finding that there are physiological correlates of psi or psi-mediated behavior. We have seen both time domain effects and frequency domain effects. There are correlations of averaged wave forms from a subject doing a clairvoyant guessing task and there are the intercorrelations between the electrodes at the upper part of the scalp. We have found a mean intercorrelation of .89 for the correct guesses whereas with the incorrect guesses you have a mean correlation of  $-.02$ . We have since replicated this with another gifted subject. We have also found in the frequency domain that when you use a pattern recognition al-

gorithm like multiple discriminant analysis you can discriminate hits and misses, but again you have to use gifted subjects because you need a high scoring rate. We are up to 78% correct classification of psi hits and psi misses. Now the way you do this is you develop the models on one set of data and it is cross-validated on a completely independent set of data, so when I say 78% I mean this is cross-validation. It is not the developmental model itself. That is the sort of thing we have been doing. Parallel to this I have been very interested in a heuristic model which is based on feedback control theory. It is a hierarchical, cybernetic feedback-control model of perception and behavior. Marilyn mentioned this. This kind of cybernetic analysis, where you really deal with the feedback of the whole system into itself and how this controls both the behavior and perception, is important. One of the prime people who has done work on this is a fellow named William Powers in his book *Behavior: The Control of Perception*, published by Aldine in 1973. I find this model heuristically very rich. So many things that were said in the past two days just fit well into this from Jung on up and down. There is no way I could possibly give you any detail about this.

For the report we presented at the 1987 PA Convention we did a meditation study. The subject identified three major altered states of consciousness which he felt were associated with his psi functioning. In a separate experiment he was doing card guessing. He had three conditions, which he called conditions one, two and three, which were three major altered states. A participant observation study with him mapped very well onto the Jungian writings about the psychological aspects of alchemy: the negredo of alchemy and the melanosis and the leucosis. You know the white light and you know the phenomenological descriptions of it. One could consider the three condition model one rendering of a class of hierarchical models of conscious experience. In this more general representation it may be fruitful to consider the property of the feedback control hierarchy. One property of these is a necessity of ascending the hierarchy to a sufficiently high level in order to control specific perceptions and behaviors. Another property is that behavior and perception are parts of the same unitive feedback-control process. In fact, behavior is the control of perception. I refer you to Powers' 1973 work. While the existence of such hierarchies has been suggested by Powers for the organization of the central nervous system, the application of such a model to altered states and behaviors possible in such states is a conceptual extension. In such a model, the concept of altered states is mapped onto the upper regions of the hierarchy of control levels, which the two studies reported here have suggested have unique brainwave properties and that has come out of



the brainwave laboratory. The spectrum of altered states does seem to have unique brain wave properties, frequency and time domain. Historically, consciousness has been seen as entering such models at the highest control level—see Grene's review article in *The American Scientist*, the latest issue (pp 504–510, 1987). The present studies suggest that the continuity between the internal and external domains is more developed at the higher levels and that the categories of space, time and causality which are properties of low-order control systems are superseded by more global properties at these higher levels. And I think our data suggests that there are indeed physiological correlates of these different levels. I think the whole trick is in how to shift levels.

WINKELMAN: I would like to make a brief comment and then address a question to the panel as a whole. My comment wants to tie together some of the ideas provoked by Dr. Isaac's paper yesterday and Dr. Stanford's paper this afternoon. I understood Dr. Isaac's to suggest that somehow spontaneous psi in the laboratory and spontaneous psi in everyday life were more or less the same. I think that is not an accurate perception, especially since our laboratory studies are really not based upon the way psi is used in everyday life. We can think of psi as having a biological basis. Therefore longterm adaptation to what people use psi for has very different kinds of characteristics than the way people might try to be required to use psi in an arbitrarily constructed laboratory setting which people have only had to adapt to for about 50 years. So I think that if you look at the difference between information rates in Zener card studies and information rates in remote viewing you could see a dramatic difference in the amount of information. We can see that remote viewing studies more directly reflect how people use psi in everyday life. In Dr. Stanford's talk he was suggesting that perhaps laboratory research and experimental studies were the same thing. I think we have to recognize that one can do experimental studies that do not require that we take people into the laboratory. I think that this is an important point particularly if we want to try to take advantage of what might be archetypal forms that underlie psi manifestation. So my general question to the panelists is what would it take to get parapsychologists to reorient their studies from bringing subjects into the laboratory to taking their experimental design and experimental ideas out and applying them to the way people use psi in everyday life and in everyday applications of purported psi?

ISAACS: First of all I want to express my appreciation for the work that you have done in this area, which I have been tracking down recently because of my interest in the use of anthropological methods in psi. I agree with your point. One of the problems that we face is just

the issue of the credibility of research conducted outside the laboratory. This is virtually a social prejudice at some level amongst parapsychologists. Where it hits my own research is that I would have to have an apparatus that other parapsychologists were confident could be towed around the country in a car and set up in all sorts of other settings and which would not increase its artifact rate over its laboratory artifact rate and I would have to be able to demonstrate that. So that is one fairly tight requirement which I think that the infra-red equipment will be able to meet and exactly for the reasons that you pointed out so cogently. I am very interested in doing that. I do not think that I made the kind of equation which you cited me as making between spontaneous psi and psi in the laboratory, nevertheless, one can obtain spontaneous psi in the laboratory deliberately or incidentally. I think that this is a complex topic which we do not really have time to discuss properly here. I am certainly in favor of going to people in their field setting. In my first longitudinal study of PK training that I did in England I did in fact go to the people's houses and test them there. I find that it is difficult to get parapsychologists to accept data which is gathered in the subject's own territory because of a natural concern about artifact and fraud. It is a methodological problem which we have to battle through because I did find that I got better results on people's own turf.

SCHLITZ: I think that there are two difficulties in trying to transfer the experimental approach into the field setting. One of the problems in the literature that exists so far is that the types of procedures that have been employed are incredibly insensitive to the claims that are really being made by the indigenous practitioners. I think this is true of all of it, from Van de Castle's work to Giesler's work to even your own work. By imposing a forced choice paradigm or even a PK RNG paradigm on these people we really are missing a lot of what they claim. Now you could say, for example, let's design things around divination practices. Giesler has tried this. The second problem is the handicap that we are working under his work in Brazil. When he tried to do remote viewing with different people the particular procedure we have for evaluating this work was completely foreign to these people. For example, when we sit down in the laboratory setting you give your participant a pencil and a paper and you tell him or her to draw your images. These people just cannot even fathom doing something like that. So instead you switch to drawing things in sand. Well, it was just so limited that the sensitivity of the measurement missed any kind of data that he might have collected of the indications of psi. I think we certainly need to move into a field setting and look at the possible

mechanisms by which healing, for example, happens in an indigenous setting. But I think we are facing many handicaps in doing that.

HASTINGS: What is needed is to find some parapsychologist who is interested and passionately wants to do such work and then find some funding agency that will give him or her money to do it. That would probably be enough impetus for others to pick it up. I am very interested in testing an indigenous population with Larry LeShan's new model that he developed in his book *From Newton to ESP* which I think may be a very productive one. The population I am hoping to study is in the school where I teach, The Institute of Transpersonal Psychology in Menlo Park, California. The students are interested in these areas, and are in residence for two years. They make a very fine population in a setting that is familiar to them but which is academic enough so that we can design some careful studies. That is a field study that has some quasi-experimental aspects that might work.

STANFORD: Well I certainly concur with the remarks that have been made so far by both of our panelists here. What I would like to suggest is that even if we were to go out into the field and try to tailor our techniques of testing to the people out there, we might confront an additional problem. This is that in a naturalistic setting what we call psi events have a certain meaning context. They are subserving certain needs, societally and individually relevant needs. It might also be a special kind of irony if we dress up our procedures in something that matches the culture. That may be good in principle. But if you do that without somehow or other striving to give the same kind of social meaning to your experiment that those folks out there have when they do the divination or whatever they do, you could really be missing the most vital ingredient. For instance, if a shaman or a diviner is doing something, it is always relevant to subserving the needs of the people. If we could somehow or other find a way to do research whereby we let the societally approved meaning of these events be reflected in what we are doing as well as the techniques we use, I think we would be very far ahead. But again we are talking about something that takes an awful lot of planning and lot's of money.

MORRIS: The problem that you raise is I think, one that is shared by much of psychology in general. Certainly in Britain now there is a quite active concern within the psychological community about the problem of the ecological validity, as they phrase it, of their results. So part of our own endeavor really must be to try to work with other groups, even from within the social sciences community, to develop more effective methodologies for minimizing the need for people to have to physically come to a laboratory setting at all. Some of this is

going to involve the use of electronic remote linkages with people in their places of leisure, their workplaces, their homes and so on. Some of our work deals with interactions between people and computers. We are now beginning a set of studies on people learning to use computers in a very real remote site. We are trying to test some of our concepts of smart noise within a context that is, ironically enough, totally natural to them even though it is ideal from the so-called laboratory view.

NEPPE: I think one can do very adequate research outside the lab situation. It is always worthwhile bearing in mind that in parapsychology the actual apparatus that we are using is the subject and all the lab settings that we have are the trimmings around it.

HARARY: I do not think it is necessary to separate the laboratory and the field. Sometimes they are the same place. In the out-of-body experience research that we did at Duke, the key part of that research was the relationship between me and my cat and that was a real relationship. I lived at the laboratory. The community of people who were involved in those experiments was a very real community and I am still connected with those people. We were studying something that we were all tremendously interested in personally. That is why those experiments led to good results. We did not separate the laboratory from real life. We just made sure that we were collecting real data. So it is possible to do both. It is possible to bring your controlled experiment into the field. It is also possible to bring the field into the laboratory. It is not easy, but it is possible.