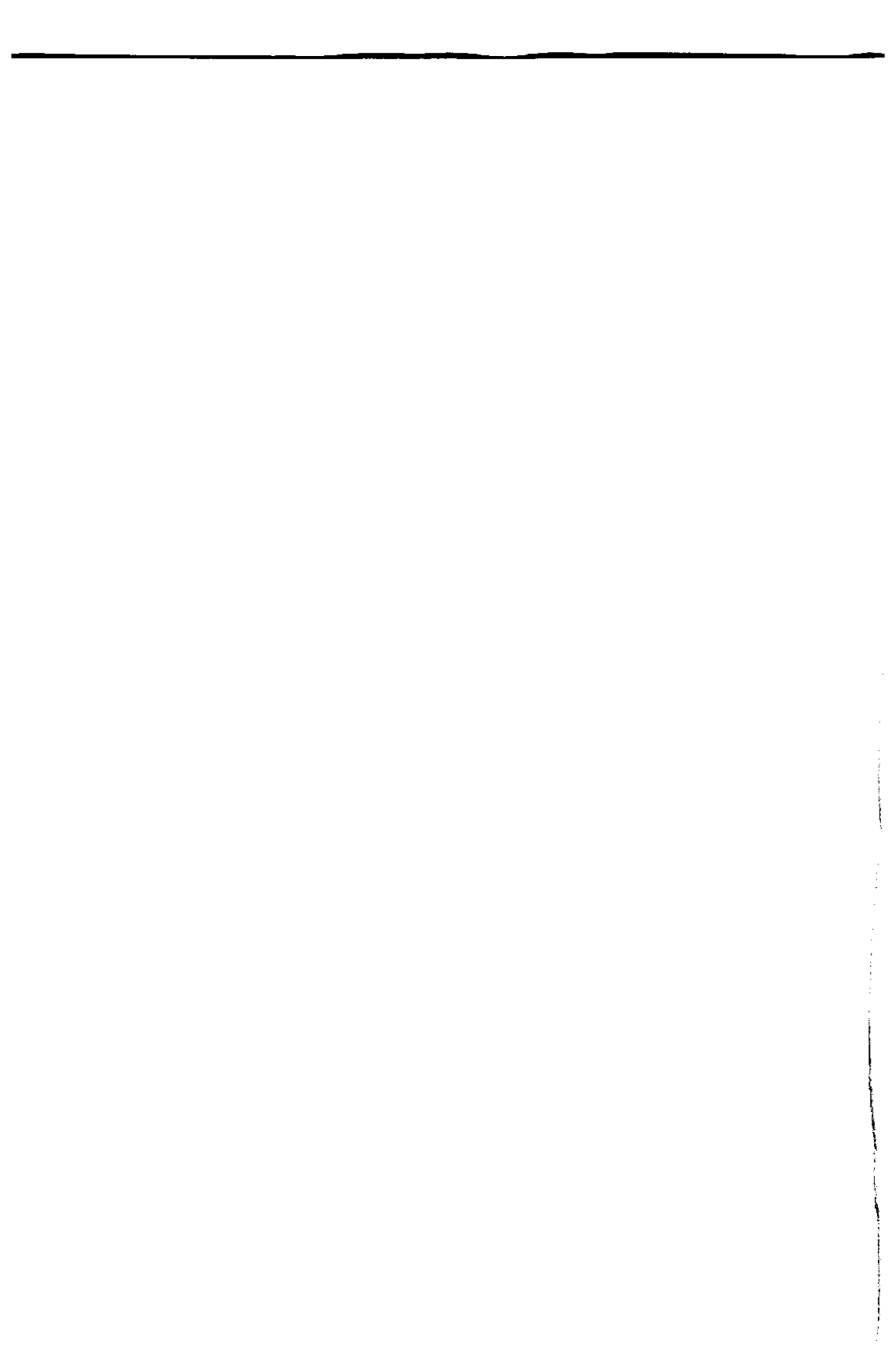


SPONTANEOUS PSI,
DEPTH PSYCHOLOGY AND
PARAPSYCHOLOGY

PROCEEDINGS OF AN INTERNATIONAL CONFERENCE

HELD IN BERKELEY, CALIFORNIA

OCTOBER 31-NOVEMBER 1, 1987



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Edited By
Betty Shapin and Lisette Coly

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INTRODUCTION

LISETTE COLY: I call to order this, the Parapsychology Foundation's 36th Annual International Conference. This conference is now in session. I am Lisette Coly and as Vice President of the Foundation I welcome you to this year's conference addressing the theme of Spontaneous Psi, Depth Psychology and Parapsychology.

The aims of the Parapsychology Foundation founded in 1951 by Eileen J. Garrett were and continue to be defined as furthering the study of parapsychology which in its widest application deals with the study of certain phenomena, experienced by man, that do not seem to fit the pattern of prevalent knowledge or that do not readily correspond to the laws of nature as viewed by present day scientific understanding. To this end the Foundation has involved itself in maintaining our publishing programs, grant program, scholarship awards, research library and conference series. We at the Foundation are very pleased to sponsor this particular conference here in Berkeley as we feel it will undoubtedly be an important addition to our long line of valuable conferences.

In an introduction to a book entitled *Beyond the Five Senses*, published in 1957, Eileen Garrett addressing the topic of spontaneous phenomena wrote, "Spontaneous phenomena will probably never be eliminated from the purview of any science, for the very simple reason the phenomena happen and require explanation. As a science, parapsychology is no exception to this condition of life and work. Spontaneous psychical phenomena reported must be continually investigated."

Before I introduce you to the Foundation's President, Eileen Coly, I want to share with you the pleasure that we at the Foundation feel that Mrs. Coly was included in the published volume, edited by Dr. Rosemarie Pilkington, *Men and Women of Parapsychology: Personal Reflections*. We feel that Mrs. Coly, despite the fact of starting her career in parapsychology beneath the rather imposing shadow cast by her mother Eileen Garrett, well deserves recognition in her own right for her contributions to the field in administering the works of this Foundation as our President since 1970.

Ladies and Gentlemen, may I present, Eileen Coly.



GREETINGS

EILEEN COLY: Good morning everyone. I am very happy to greet you all on behalf of the Parapsychology Foundation. As you are probably aware, we hold these conferences annually in varying locations and addressed to different topics. The Foundation last sponsored a conference in this area, *Education in Parapsychology*, in San Francisco in 1975. The intervening years have flown by and we welcome the opportunity to renew old acquaintances and to meet many of you who are certainly known to us, but we have never had the opportunity to encounter in person.

Our theme and the ensuing discussions are important for parapsychology. As Dr. Jan Ehrenwald, the noted psychiatrist, wrote in his book, *The ESP Experience*, "All the minutiae of laboratory investigations cannot do justice to the totality of man in his social and interpersonal aspects, to his relationship with his fellow man and the universe at large, to his world of value—artistic, religious, or otherwise—to his 'ultimate concerns' . . . Confining our attention to experimental subjects capable of piling up unusually high ESP or PK scores in the parapsychological laboratory would severely restrict our view of human potentiality." Without denigrating the necessity for scientific rigor in experimental parapsychology Ehrenwald goes on to state that "there is a world of nonsensory, transpersonal psychic reality which is difficult to break down into well-defined statistical variables, but which—perhaps for this very reason—is nevertheless possessed of marked psychological significance and a powerful emotional charge."

Leading us in exploration of our topic for the next two days is a long-time colleague and friend of the Foundation—Dr. Stanley Krippner. Stanley Krippner has presented many papers at Foundation conferences, including the one I just mentioned. He is well known in many fields—education, psychology and most certainly parapsychology. Dr. Krippner is presently the Director of the Center for Consciousness Studies at Saybrook Institute in San Francisco where he teaches and conducts his research. His list of writings, too numerous to mention

here, cover many subjects such as dream telepathy, creativity, folk healing and mind research in the USSR and Eastern Europe. With Stan's knowledge and experience in so many areas, we are indeed fortunate to have him as moderator of this conference.

As we are all anxious to proceed with the conference I will now ask Dr. Krippner to take over.

OPENING REMARKS

STANLEY KRIPPNER: Thank you very much. As some of you know the work at the Parapsychology Foundation is something which our field holds in very high regard and a number of years ago I dedicated Volume 3: *Advances in Parapsychological Research* to Eileen Coly, her mother Eileen Garrett and the Parapsychology Foundation in general. For some bizarre reason the publisher did not send me the galleys on that page and when the book came out it had not one, not two but three misspellings in that one sentence dedication. I think that is a record. So the current volume of *Advances in Parapsychological Research* Volume 5 has an errata page and that error has been put to rest. One of the great embarrassments in my professional career, but unfortunately not the only embarrassment.

Well, on behalf of the Parapsychology Foundation I would like to welcome you all to our conference on Spontaneous Psi, Depth Psychology and Parapsychology. Each of the papers to be presented during the next two days concerns itself with this provocative topic. Our host to the conference is the Parapsychology Foundation which was founded in 1951 to support scientific inquiry into anomalous human experience. The Foundation maintains an office in New York City where students, scholars and other interested persons can gather to utilize this remarkable library. The Foundation publishes the *Parapsychology Review*, a comprehensive publication that contains scholarly articles, book reviews and news reports that reflect the international scope of parapsychology. I often say to people if you can afford only one publication in the field get this one because it will give you a very good overview as well as some excellent in-depth articles. The Foundation publishes a series of monographs on various topics in the field as well as the yearly *Proceedings* of the International Conferences. Parapsychology research is indebted to the Foundation's grant program which has enabled investigators from various countries, as well as promising graduate students, to inaugurate experimentation and other forms of study into psi phenomena. Highly motivated students have been assisted by the Eileen J. Garrett scholarship, named after the remarkable woman who founded the Parapsychology Foundation. I personally have many fond memories of Eileen Garrett and often recall the wisdom, the dedication and her humor.

Eileen Garrett had a keen sense of discrimination that permitted the Foundation's efforts and finances to be allocated with care and precision and I have many recollections especially some of her advice to neophytes in the field. If she were alive today I can just imagine what she would say to some of the people who are jumping headlong into channeling phenomena, out-of-body experiences, other types of fascinating, unusual, bizarre and in some cases not completely safe experiments and experiences. And as I heard her say more than once, "My dear, until you have your feet on the ground don't try to go out of your body" or "Until you have become accustomed to inner space don't try to fly into outer space." That was the type of commonsense wisdom that she often gave. I am certainly pleased that the same intuition and intelligence is shared by her daughter, Eileen Coly, and her granddaughter, Lisette Coly, who carries out the Foundation's work and planned this conference. I am sure we will all enjoy our week-end together and benefit from each other's contributions. And also I think it is a tribute to the conference and to the speakers that many people in the audience are as equally qualified to give talks as the people on the panel. I think that you will find during the breaks and during the discussion that we have a great wealth of resources here at the conference, both on and off the panel. I am sure that this will be a very rich and rewarding experience for all of us.

SPONTANEOUS PSI AND EXPERIMENTAL PARAPSYCHOLOGY

JURGEN KEIL

“Research is never free of assumptions, whether they are explicitly stated or only implied. Either way, they strongly influence the investigator at every stage of his work. The scientist’s assumptions are like the imaginary features used to fill in unexplored territory on a map. But just as the explorer venturing into unknown territory checks his charts and corrects them to show the realities discovered, so also scientific explorers need to examine their assumptions and be alert to make changes as they may be required.”

(Pratt, p. 127)

This is the opening paragraph published in 1978. Gaither Pratt discussed “some assumptions relevant to research in parapsychology” and at some point speculated that all psi events may be spontaneous. This speculation provides an important background to this paper. Initially it may also be important to focus on certain hidden assumptions in connection with experimental laboratory based research, field work investigations and spontaneous cases.

In the hard sciences laboratory experiments have led to the most successful explanations of a large variety of events and relationships as well as to many applications on which we can rely with considerable confidence. Consequently it is not surprising when it is generally assumed that laboratory experiments are the most appropriate means by which progress in any scientific field may be achieved, particularly when it is also assumed that the best controls can be obtained in laboratories.

If it is kept in mind, though, that research is supposed to lead to explanations which in turn improve our conceptual framework and understanding and which may also provide us with opportunities for applications, it is not clear that our confidence in the superiority of laboratory work is always justified. Particularly when questions need to be answered which deal with complex behavior patterns of living organisms, laboratory research may be of little assistance if experimental

work can only be carried out in truncated sections. It is often assumed that in comparison with laboratory research, field investigations suffer from control limitations in general as well as from particular control problems due to improvisations. These assumptions must also be questioned.

No laboratory experiment provides absolute control over all variables that may have a bearing on the data to be extracted. Nevertheless, it is assumed that all relevant variables are sufficiently controlled for the results to be accepted with some confidence. Although some field work investigations can probably be controlled to a similar degree, it could still be argued that completely unexpected events may exert an uncontrolled influence in a field setting. But as long as this can be readily appreciated, such events are not really different from equipment failures in a laboratory. On the other hand, one difficulty which is often ignored in the laboratory is the question as to how far the experimentation really deals with the issues which gave rise to the research in the first place. In other words, in the laboratory it may be impossible to control factors which invalidate the findings. Finally, it is often assumed that in the field setting it may be more difficult to manipulate independent variables. However, after a thoughtful analysis of a particular situation it is often possible to introduce manipulations after all or at least to select different states of the independent variable from those that occur in the natural setting anyway.

It may be of interest to pursue some of these questions in a somewhat more orthodox area of science, namely ethology. The study of animal behavior, that is, the study of real life, species-specific behavior and of the evolution of behavior, provides good examples of successful field research. It is difficult to see how our present understanding of orientation, migration and courtship behavior of various species could have been achieved through laboratory experimentation alone. (Chauvin, 1975; Eibl-Eibesfeldt, 1970; McGill, 1965).

Pigeon homing research was at some stage thought to include a possible parapsychological component (Pratt, 1953). In the fifties two well-known parapsychologists, Gaither Pratt and Robert Thouless, carried out research in this field (1955). Robert Van de Castle should not be forgotten either; in his student years he sometimes participated as an assistant. Through careful field investigations, Pratt and Thouless as well as other ethologists who were not particularly interested in the possibility of a parapsychological component, made valuable contributions to this interesting branch of animal behavior (Pratt, Kramer & St. Paul, 1956; 1957; 1958; Pratt & Graue, 1959). The latest and, I understand, still not universally accepted explanation of the initial

directional orientation of released homing pigeons is also based on careful field investigations with good examples of controlled manipulations of independent variables. It is now assumed that the original orientation—shortly after the pigeons have been released at some considerable distance from their home loft—is based on a non-random, relatively static distribution of particles in the air. There is now considerable evidence that these particles themselves, or their distributions or some other aspects of them, vary in a systematic way over large areas of the earth's surface and that pigeons can detect these variations through a sense of smell and are consequently able to orientate themselves shortly after release. It is not assumed that pigeons can smell their home loft from substantial distances, but it seems they are able to smell the air in which they are released in such a way that they can judge in which direction they have to fly in order to reach the kind of air that agrees with that experienced in the general vicinity around their home loft. Manipulations to test this hypothesis included temporary elimination of olfactory sensations as well as replacing the natural air from one releasing position A with the air from another releasing position B some substantial distance away. This was achieved by maintaining the pigeons at A in containers with air from B and by reducing their sense of smell through a spray for something like 30 seconds just prior to release from A. Significant orientation towards the home loft occurred within this time frame, but in agreement with release from position B. (Wallraff, 1983; Benvenuti & Wallraff, 1985). I hope that parapsychologists who are interested in field work, but who are reluctant to be involved because of the negative assumptions outlined earlier, will gain some encouragement from this particular example as well as from other research conducted by ethologists.

I have discussed some assumed as well as real advantages and disadvantages of laboratory and fieldwork research without specifically referring to spontaneous cases. It is reasonable to suggest that spontaneous cases can be more readily accommodated in field research, but I shall also attempt to point out how laboratory experiments may perhaps cope more successfully with spontaneous psi events.

At this stage it may be appropriate to ask (1) are all psi events spontaneous and, irrespective of the answer to this first question, (2) are those psi events which we can presently only record as spontaneous phenomena, spontaneous *per se* or is the inability to produce them as an act of volition perhaps due to the conditions under which we attempt to obtain psi results? Obviously it is difficult to answer the first question with certainty. The fact that we ask it points to some doubt about the volitional control that human beings can exercise. As a strategy it would

be of considerable interest to contemplate a world in which only spontaneous psi events occur and to work out what are the consequences and how to incorporate them into our research designs.

When I refer to spontaneous cases I refer to psi events associated with a person or persons who experience these events over which they have no volitional control. It is generally assumed that additional psi events occur over which volitional control is possible. On account of the speculation that all psi events are spontaneous I may also call laboratory-based events spontaneous even though it is usually assumed that events generated in the laboratory are based on volition. I hope that in the following discussion it will not be too difficult to infer from the context which of the two categories is under consideration.

I agree with Stevenson (1987) that spontaneous cases need to be carefully investigated and in this discussion I am particularly interested in cases which still generate psi events and which may provide opportunities for direct investigations. As we know from RSPK cases (Roll & Pratt, 1971) spontaneous phenomena are not random events even when it is difficult to specify the exact conditions under which they occur. ESP card tests or micro-PK experiments are not usually considered to be investigations of spontaneous events; yet it would be possible to think of them as such and it would not be in disagreement with theoretical considerations derived from the observational theories (Millar, 1978) or from theories developed by Rex Stanford (1974, 1978). All we require are disposed systems, random event generators which have a bearing on the desired outcome as well as feedback opportunities and/or needs which are reduced or satisfied. All this can and may indeed occur without volition—whether consciously applied or not—having a bearing on the results. If laboratory experimentation which produced evidence for psi is really based on spontaneous events, then we can once more conclude that these events are not simply random, but follow certain regularities. If we accept that some regularities exist in connection with spontaneous psi phenomena, it should be possible to develop appropriate procedures and controls. That means that a working hypothesis which states that all psi events are spontaneous, does not suggest that we should abandon hope of ever controlling psi events to a desirable degree. It rather suggests that we adopt a different perspective which encourages such questions as (1) what are the regularities which can be discovered in spontaneous events and (2) what are the conditions under which human beings might experience psi events (over which they have no volitional control) more often? We may also find that a greater emphasis on field investigations is more appropriate.

In considering spontaneous cases we may be reluctant to take too much notice of them because, for each specific case, problems may be raised which do not allow a clear verdict as to whether all the events associated with that case could not have occurred without psi. I would suggest that if we are confident at all that we have evidence for psi from highly controlled, but rather artificial laboratory experiments, we must also expect that psi will operate in real life situations. Consequently, in at least some of the more doubtful cases, those that we would more often disregard, psi must also be involved. It is more difficult to know whether useful information can be extracted from a collection of cases which includes relatively weak ones as well as pseudocases. On the other hand the more severe the criteria are which we employ in order to obtain a case collection involving psi, the less representative of psi in real life situations is this collection going to be. Useful work with existing collections has been carried out by Sybo Schouten (1979a; 1979b; 1981) and perhaps some of his findings can be of help in obtaining samples which are more representative yet not unduly diluted by the inclusion of too many pseudo-psi events. Another consideration which should not be forgotten is that those spontaneous cases which include phenomena which can be measured and assessed in some way—that is, particularly PK phenomena—often display substantial strength. This is in stark contrast to most laboratory experimentation.

I became aware of the rather strange unrelatedness between the rate of apparent success in a PK experiment and the equivalent physical forces required to achieve success. Although to West (1983) this unrelatedness suggested further justifications for his skeptical views of parapsychology, my own experience was more positive. More than 30 years ago in my student years I worked in my capacity as a qualified fitter and turner for the head of the Physics Department of the University of Tasmania. We had constructed a micro-balance with a very thin quartz fiber of less than one-thousandth of a millimeter in diameter. In a controlled environment subjects were asked to influence the turning movements of this fiber, according to a random sequence, in such a way that it would turn more slowly during some trials and faster during others. The sequence of slow and fast target trials was determined through a random number distribution. With these laboratory experiments we obtained results which are statistically significant. The assumed PK involvement was not directly observable and it is not possible to point out particular trials with a definite PK component. Consequently the percentage of PK influenced trials cannot be clearly estimated.

The torque required to produce a change in the turning movement of the fiber could be fairly accurately calculated and, by further reducing the diameter of the fiber, we could accurately predict that if the same physical force acted upon the fiber, this would change the movements of the fiber substantially. However, the PK results which we apparently recorded, did not seem to be affected when the physical requirements were reduced. Under strict laboratory controls we had tried to reduce the required forces in order to obtain more substantial results. For this purpose we had reduced the order of magnitude by a factor of about 10, that is, one-tenth of the equivalent physical force would achieve the same measurable changes that we had obtained previously. Yet we continued to obtain similar significant, but relatively weak results. In a somewhat less controlled setting—however under conditions where controls were less critical because I had scaled up the micro-balance to something close to a macro-balance—I still obtained similar significant results when the equivalent physical force requirements were more than 100 times larger than in the micro-setting. Without going into the full details of the experimental setup, I must acknowledge that, although unlikely, it is not impossible that ESP rather than PK was involved. In that case the physical changes would not have been relevant. Nevertheless, my first introduction to psi indicated that parapsychological results do not readily conform to what we expect from changes in the physical setup.

Perhaps the results from the micro-balance as well as from the larger balance can be more readily understood if we consider them to be spontaneous events which only occurred intermittently and which, if necessary, could be strong enough to cope with the macro-balance. The frequency of the spontaneous occurrences could then be regarded as being relatively independent of the magnitude of the equivalent physical forces involved. The strength of the reaction of the micro-balance during a spontaneous occurrence might have been determined by the assumed need to succeed as experienced by the subject—probably below the level of awareness—or by the feedback which the subject obtained. For instance, if the subject who viewed the micro-balance through a telemicroscope did not perceive the reduced fiber as easier to influence—in fact, the subject could not see the thickness of the fiber itself, but only an indicator (which did not change) attached to the fiber—then there is no reason to expect that the subject's PK influence should increase when the diameter of the fiber was reduced. Similarly, when subjects were confronted with a much larger balance which could be viewed directly this may not have appeared as a more

difficult physical system, because in actual size it was about equivalent to the image of the micro-balance as seen through the microscope.

With the micro-balance I also experienced a dramatic increase in the strength of what apparently were more haphazard PK activities. However, most likely, this increase was based on psychological factors which are much more difficult to specify than the physical changes which we had introduced.

The significant results to which I referred earlier had been mainly obtained with a subject who was employed as a secretary and who was quite happy to be of assistance, but who was not inspired by and probably not even fully aware of the wider implications of these experiments. The changes which we recorded and which were presumably due to her PK, were relatively small for single trials, and within the range of variations which occurred during control trials without a subject. Nevertheless, during her participation as a subject these changes occurred fairly consistently in agreement with the target requirements over a sufficient number of trials. Consequently a significant difference between the slow and fast target trials could be demonstrated.

When a senior student participated as a subject the results were quite different. In one way they did not support our hypothesis that the micro-balance movements would change in agreement with the slow and fast target sequence. On the other hand, the subject achieved movements of the balance which I had never observed before and which could not be explained through any external factors. I had built this balance, I had adjusted it and I had tested and worked with it under a variety of conditions and I knew to what extent variations could occur due to control limitations. For instance, temperature variations had an effect on the balance and we had controlled this by encapsulating the balance in such a way that temperature variations could be kept within one-tenth of 1 degree centigrade. For several months I had observed variations which occurred for various known and unknown reasons and I knew the range within which these changes had occurred. During trials with the student subject, the observed movements substantially exceeded any of the previously observed variations. Although I did not use such descriptive terms at that time, it seems very likely that I had witnessed directly observable PK, yet what occurred was not sufficiently in agreement with the requirements of the experimental hypotheses to manifest itself as a statistically significant result. An experimenter, only concerned with the experimental hypotheses, could have ignored the dramatic movements of the micro-balance altogether.

I should add at this point that the student apparently thought of the

experiment as one that gave him an opportunity to demonstrate his will power and he became quite emotionally involved about it. This involvement seemed to be based on needs and expectations below the level of awareness and I doubt that direct instructions could have produced anything close to that psychological state which apparently had something to do with the dramatic PK results. In his final years, in a small department, the student may also have reacted to the interest in these experiments expressed by the head of the department. He also knew that the secretary had apparently been successful in changing the movements of the balance. In other words, the psychological interactions with other persons may also have played an important part.

If we assume that these psychological factors were largely responsible for the strong but haphazard PK effects, some suggestions can be made in order to take advantage of such PK occurrences. On the one hand we need to be prepared to investigate and if possible to record a larger range of variables which might indicate psi activities. On the other hand in general and on an individual basis we need to pay much more attention to psychological factors. Methodological purists (Timm, 1980; 1983; Hyman & Honorton, 1986) may be alarmed because the investigation of a larger number of variables increases the risk that a significant result for one may occur by chance and, consequently, that positive claims which are not really justified, could be encouraged. Although these risks exist they can be overcome in a satisfactory manner if either allowances are made for testing a number of hypotheses (where each one is regarded as a confirmation of the psi hypothesis, in which case an appropriately higher significance level must be demanded) or if only one hypothesis is selected (and confirmation of the psi hypothesis is limited to this one hypothesis) but additional hypotheses are tested in order to obtain better predictions for future investigations.

To pay proper attention to psychological factors which probably mainly operate below the level of awareness is a much more difficult task. Anthropological investigations should be useful and provide us with some insights. Reichbart's publication in 1978 was of considerable assistance, particularly when he pointed out that in many non-technological societies the occurrence of psi events was initially encouraged by various manipulations which, however, were not regarded and experienced as tricks by those who participated in these rituals.

The most significant practical contribution has, I believe, been made by Batchelder (1979; 1984) and I shall return to him somewhat later. In the meantime it seems appropriate to point out that the experimental results obtained with the micro-balance when the student participated as a subject perhaps fit better into the framework of a spontaneous

case study. I certainly do not wish to discourage laboratory research, but the micro-balance example suggests that it is unwise necessarily to exclude the possibility of a case study approach even when the initial investigations indicated a rather restricted laboratory experimentation. In appropriate circumstances and where it is suggested by the initial developments, I would also like to encourage the introduction of laboratory research as an extension of spontaneous case investigations or of field studies in general.

It may be of some interest to look at a second and, in a way, more typical example of spontaneous events. The case is more difficult to evaluate in overall terms, that is, whether any psi was involved at all, as well as with respect to particular aspects that have a bearing on our discussion. I prefer once again to consider events which I experienced myself because I can at least try to take into account a range of aspects including relatively intangible ones which cannot be readily extracted from published reports.

In January 1979, I was a member of a trekking party in Nepal (Keil, 1981) consisting of three Europeans and ten Nepalese including one English speaking guide. In Marpha our guide was bitten by a dog and, although the wound was only superficial, there was a real risk that he might have been infected by rabies. The owner of the dog was absent and according to medical advice in Jomoson the only way to find out for sure would have been to wait for ten days. If the dog had died, treatment was required in Pokhara not later than 14 days after the incident. Our guide who had only been promoted to this position recently, was anxious to continue as originally planned and after long discussions we were persuaded to walk as planned to the village of Chame. We expected to arrive there in nine or ten days. Chame had a post office with a transceiver and there was another one in Marpha. We intended to get in touch with Marpha and if necessary our guide could have walked ahead of us from Chame to reach Pokhara just in time.

A few days before we reached Chame we had started to wonder whether we had made the right decision. We were walking in a remote region which until 1978 had not been open to tourism at all. We had crossed a pass of nearly 18,000 feet. Chame and Marpha are separated by the Annapurna range with peaks above 2600 feet. At that time the communication equipment in Nepal was ancient and we wondered whether it would be possible to establish contact at all. We had also started to realize that virtually no other trekkers had come into this region. The pass was closed because of snow for several weeks only a few days after we had managed to go across it. The prospect of con-

tinuing the last section without our guide started to look decidedly more difficult. At that stage and including previous visits, I had been trekking in Nepal for something like seven weeks. After leaving the towns I had never met any Nepalese who could speak English. (I should briefly add here that with an enormous increase in tourism since 1979 the situation has now changed considerably.) It was, therefore, a considerable surprise to us when on the ninth day and about two hours from Chame a Nepalese stopped and talked to us in English. We had stopped for lunch and because it had started to snow we had stopped on the trail and we had not tried to find a rest spot some distance away from the trail as was our usual custom. As it turned out the Nepalese was from Marpha and was in fact the owner of the dog. He told us that she had been vaccinated against rabies, but was inclined to bite because she had pups nearby. Obviously this solved our problem, satisfied our conscious and perhaps unconscious needs and also provided feedback about the outcome of events which, perhaps with the help of psi, we had unconsciously initiated some time earlier. There were certainly a number of possibilities how psi might have operated in order to achieve the desired outcome, even though it is impossible to say whether, e.g., the timing of the lunch stop, the decision to stay on the trail for lunch or other potentially variable factors were involved.

As I indicated earlier there is no certainty that psi was involved at all. Beyond the factual details of this experience, which I tried to convey as briefly as possible, there were, however, also less tangible aspects which impressed me. The psychological distance between Marpha and Chame is certainly much more substantial than is suggested by the trekking distance. Marpha in the Kali Gandaki valley and Chame in the Marsyandi valley are separated by the Annapurna range. I doubt whether in 1979 one in 300 from either village had ever visited the other. The owner of the dog traveled on government business and had been in this region before, but he did not visit Chame more than once every three or four years. Whatever the events were which unconsciously with the help of psi we might have set in motion, it is quite certain that it did not occur to us at all that we might meet the owner of the dog.

If it is assumed that this case contained some degree of psi involvement, the question again arises how such an example might be of help in our research endeavors. The unconscious nature of the processes is perhaps the most outstanding feature of this case. It would be reasonable to suggest that concern about the problems as we saw them was an important ingredient, but we had no idea how the solutions could be achieved. If we had any wishful thoughts, they were more concerned

with establishing communications with Marpha and getting the news that the dog was alive and well. This suggests that within a complex system psi operates rather independently of our limited understanding of this system. That means, if we attempt to prescribe psi solutions to complex problems we may have less success than if we allow psi to find its own path, so to speak. To some extent this is recognized in laboratory research when subjects are asked to obtain so-called hits in micro-PK tasks rather than to influence particular sections of the set up on account of which the hits may occur. Nevertheless, from the laboratory based experimental point of view, this is often seen as regrettable—unfortunately it is not certain where psi might be effective in the system—rather than as a desirable procedure which is likely to be of assistance. But it is even questionable whether it is necessary and desirable to specify the experimental procedure as a psi task at all. The Klintman research (1983; 1984) which suggested that in certain reaction time experiments evidence for precognition may be found, is a recent example of an indirect psi investigation. Whether his results clearly established the involvement of psi is still open to questions. Some psychological aspects in the Klintman research were obviously less conducive to psi manifestations. If precognition changes the reaction times to certain stimuli, it is difficult to associate this with conscious or unconscious need fulfillment or satisfaction. It is also difficult to see how feedback could have played a major role.

Games of luck have sometimes been used in more or less indirect psi investigations. The competition between players may indeed increase the needs felt by some or all of the individuals, but the opposing needs of several participants probably do not produce the best basis for psi results. While it is impossible to suggest whether the assumed psi involvement in Nepal was due to one or more participants or whether a possible combined psi involvement may have been more effective than the sum of isolated single contributions, individuals in the Nepal group at least were in general agreement and expressed similar concerns and needs. The Nepal case included some further elements which we can perhaps recognize in other psi research areas. Before we stopped for lunch on our way to Chame it had started to snow. The snow created a fairly uniform perceptual field, muffled sounds and may have led to something like a ganzfeld situation. Most of the time we were walking. We were certainly not relaxing in comfortable chairs. However, the uniformity of the muscular movements may also have had a positive effect, perhaps facilitating group cohesion at an unconscious level. Similar activities can be detected in the Batchelder groups as well as in various rituals.

This may be an appropriate point to look briefly at an area of what is regarded as relatively successful psi research in the laboratory and to ask how far the success on account of the ganzfeld (Honorton, 1978; 1985), that is, on account of an altered state of consciousness, may also be associated with aspects of the procedure. It is likely that this experimental procedure can better accommodate and record spontaneous psi events which occur in a variety of ways and to some extent in unpredictable ways than those used in traditional ESP experiments. I am not suggesting that the ganzfeld environment is irrelevant. The ganzfeld may indeed help subjects to generate spontaneous psi events more frequently. Nevertheless, the relatively passive, free response procedure may also be important, because it can cope with a wider range of spontaneous psi events than, for instance, the procedures used in ESP experiments in which direct hits are recorded.

Remote viewing experiments (Puthoff & Targ, 1975; Targ & Puthoff, 1977) have also been presented as relatively successful procedures with which evidence for psi may be obtained. On account of some methodological questions the case for psi through remote viewing experiments is probably not as strong as through ganzfeld research (Edge, Morris, Palmer & Rush, 1986). Nevertheless, if it is assumed that fairly strong psi results may be obtained, the free response procedures—which again allow for the inclusion of a wide range of perhaps spontaneous events—may have something to do with this.

If the magnitude in terms of the equivalent physical forces of psi events is considered and if some of the above speculations about the spontaneous nature of psi are relevant, the Batchelder sitter groups can be recommended. Batchelder developed procedures with which potentially large scale and relatively frequent psi events can be generated and investigated. The sitter groups are in many ways a modern version of the earlier groups that met for seances. But there are also important differences. There is no suggestion that any external agency is responsible for whatever may happen and the participants are gradually encouraged to assume that they themselves can create various psi phenomena. Batchelder paid particular attention to two psychological ingredients which seem to assist in generating psi events. On the one hand his procedures help to reduce unconscious fears through a process which has some similarity with desensitization. The group setting reduces the personal responsibility of the individual and the meetings create an atmosphere somewhat removed from normal daily existence, which allows the participants to expect and to accept events which, under different circumstances, they would probably reject. A good deal more about this aspect of his procedures could be said (Corwin,

Tart, Isaacs, Ehrenwald & Auerbach, 1986). However, it is sufficient to point out that this ingredient of his psychological mix is well suited to gradually eliminate fear and rejection of spontaneous psi events and increasingly encourages such phenomena. It also caters for unconscious processes. His second ingredient involves procedures which, to some extent below the level of awareness, are likely to raise expectations and increase belief that extraordinary psi events may occur. This is achieved by providing a setting in which unconscious muscular activities are bound to occur and are likely to be co-ordinated initially by some and gradually by most or all members of the group. On account of these unconscious activities physical movements of tables or other objects may be achieved by normal means which are nevertheless surprising to the participants and increase further expectations. To date this seems to be one of the best ways of creating, partly at a level below awareness, something like the needs and expectations that seemed to have been involved in the two examples which I discussed earlier.

Batchelder himself has been decidedly cautious in his reporting and his work has only slowly made an impact on research in parapsychology. Partly this is probably due to the fact that such investigations can be easily misunderstood, ridiculed and distorted. I shall briefly return to this point somewhat later. It should also be acknowledged that not all the sitter groups obtained results with which the participants were satisfied. Among the apparently satisfactory ones only some can be regarded as psi events with a degree of confidence. Although the environment in which sitter groups operate can be controlled to some extent, it is not equivalent to a laboratory setting. Questions which arise are: At what point can we be sure that events are not just unconscious muscular activities? Given that events beyond this level occur, can they be accounted for by deliberate and/or other normal manipulations or is psi necessarily involved? The first question is likely to be evaluated differently by different observers and participants. As indicated earlier the mistaken assumption which most participants have, that unconscious muscular activities cannot be responsible for co-ordinated movements of objects, actually helps to build up expectations.

In my own assessment of these events, which I have observed in a number of sitter groups, I was initially inclined to be quite severe. I regarded all movements of objects which could be remotely based on unconscious muscular activities as outside the realm of psi. Nevertheless, for a period of time lasting for some months, one of the groups obtained results which I take seriously. When the participants gradually got bored with the events I found that not only those phenomena which I had regarded as psi events faded away, but also other movements which

previously had occurred apparently more easily (I had thought they were based entirely on unconscious muscular activities) became more and more difficult. On the basis of this experience I am now inclined to think that psi involvement may have been more extensive. The realization that psi was probably involved when the movements could perhaps still be accounted for by unconscious muscular activities is not really surprising and is in agreement with more general considerations which I have outlined at the beginning of this paper. That is, if psi occurs under extreme circumstances—in an artificial laboratory environment or in the “one in a million” spontaneous case—then at least to some extent we must expect psi to be also present when alternative explanations cannot be ruled out. Perhaps I even have now an indication of how far unconscious muscular activities are responsible for the movements of objects, because presumably only these activities are still continuing without much change.

For the record I will briefly mention one movement of a table which I observed under adequate illumination. I was situated at the end of a fairly long and narrow table (48 × 18 inches or 122 × 46 cm). One participant was standing at the opposite end and two were standing opposite each other near the middle of the long side of the table. All participants had their hands clearly visible on the table. If I had used considerable hand pressure I was the only one who could have raised the table end opposite to me. This was the end that lifted up about 40 cm. While it was in this tilted position I took my hands off the table on my side. The table remained in the same tilted position. This indicated objectively what subjectively I knew, that I had not pressed down my end of the table in order to raise the opposite one. I then extended my hands as far across the table as possible and pushed against the other end. From this position I also carefully observed the other three participants and I could not discover any explanation for the position of the table. I could see the other three participants sufficiently to rule out any simple trickery. Pushing against the other end I definitely experienced a resistance maintaining the table in the tilted position. After about five or six seconds the resistance suddenly seemed to disappear and consequently the table dropped back to a horizontal position. I referred to one particular event, because on this occasion alternative explanations were ruled out to a considerable degree. Many similar events had occurred, but because of my own position in the room in relation to others and because of additional participants, I could not observe all of the relevant variables with the same degree of clarity.

I have no doubt that Randi would claim that these phenomena were

due to deliberate or unconscious trickery and I would not be surprised if some parapsychologists had considerable doubts about any involvement of psi even if the sequence of events had been recorded by a video camera. After all, stage magicians perform tricks which can be recorded. However, we all know that a laboratory setting does not guarantee the absence of manipulations. If you have met a small group of people once a week for more than a year, this should also count for something as far as controls are concerned. I am not suggesting that people whom we know well and do not suspect of any wrongdoing should be regarded as being above suspicion. But observations over months provide some indications about involvement, motivation and, in this context, about dexterities and skills which might be consciously or unconsciously applied.

There are three further aspects which may have a bearing on the reception of such claims among parapsychologists. One is simply the magnitude of the alleged phenomena. When it is only intermittently possible to obtain statistical evidence for micro-PK in the laboratory by examining a large number of trials, any claim of such substantial happenings must appear to be somewhat suspect. However, it is precisely the order of magnitude and the opportunity to make direct observations which should encourage us to pursue this line of investigation. Any remaining doubts that a particular event was due to something else but psi, are not really different from the doubts which are involved in statistical evaluations of laboratory experiments, i.e., type I errors and/or experimenter effects which suggest relationships which perhaps do not exist. The second aspect is that large scale phenomena do not readily fit into the emerging theoretical frameworks to which I referred earlier. Von Lucadou and Kornwachs must be mentioned though, because their extension of the observational theories, which is based on a system theoretical approach, is less restrictive as far as large scale phenomena are concerned (Lucadou, 1983). Stanford's theoretical contributions (1978) were rightly applauded by Braud (1980). But in his evaluation he did not discuss the problem of large scale phenomena. Yet if intentional or unintentional manipulations can be ruled out with some confidence, some large scale directly observable phenomena probably provide the least distorted and contaminated indications about psi. I would suggest that such indications might be of considerable assistance in constructing or modifying theories. The third negative aspect is the parapsychologist's perception of how his research is perceived by his colleagues as well as by critics and skeptics who like to debunk this field. It is obvious that skeptics have a much better chance to distort and ridicule sitter group investigations as compared to micro-

PK or similar psi laboratory-based research. I do not suggest that such misgivings about the Batcheldor work are groundless or that they should be ignored, but there is some risk that through a process of rationalization we find arguments why laboratory work is preferable and perhaps superior, when our rationalizations are really motivated by a public relations concern. This concern is justified and in a certain place and at a certain time it may also justify the rejection of certain reasonable research procedures, as long as we realize why these rejections were made and as long as we do not elevate these public relations concerns to the status of superior research strategies for which there is no empirical basis (Keil, 1983; Mitchell, 1983).

For the record it may also be of interest to point out that in the development of the successful sitter group to which I just referred, at some stage progress was considerably slowed down. After some initial "success" probably entirely due to unconscious muscular movements, we had tried to generate much more difficult movements which, probably at an unconscious level, we still regarded as too difficult or impossible to achieve. When we tried to increase our movements by smaller more "believable" steps, progress was more clearly noticeable. Most of the time the group worked under adequate illumination. Once movements occurred it did not seem to be as important to maintain the same group structure as was suggested by Batcheldor. However, changes among the participants mainly occurred within a somewhat larger and compatible group of adults who had previously attended evening classes in parapsychology and who knew each other quite well. After the previously successful group had ceased obtaining movements which suggested a psi involvement, the addition of a new and still very enthusiastic participant from another recent evening class seemed to regenerate some aspects of the previous success. On the other hand, the introduction of a Philip type background story (Owen & Sparrow, 1976) did not seem to have such a positive regenerative effect. At the time when psi presumably was involved it was difficult to judge how far success depended on the presence of particular persons. The way unconscious muscular movements developed certainly suggests individual differences. It is quite likely that similar differences exist with respect to psi involvement, but this is more difficult to assess.

Returning to wider aspects of the Batcheldor approach, it seems to provide an opportunity to generate recurrent, large scale, directly observable spontaneous psi phenomena with relatively unselected people. Although the group setting and other aspects of the approach make controls somewhat more difficult than in the laboratory, once the scale of the events is sufficiently large, control opportunities are probably

comparable to more traditional experiments. Spontaneous events are not only encouraged to occur, they are also controlled to some extent in the way they manifest themselves. This is not so much achieved by individuals, but by what might be called the collective unconsciousness of the group. Although the sitter groups probably provide the best opportunity of generating large scale psi events, different groups are bound to have different problems which are not easily solved by one set of rules. Although events may occur for a period of weeks and months and even years, detailed investigations may be neglected when events on an even larger scale are expected, but do not develop. Whatever the psychological factors are which allow a group to generate psi events, at some stage these factors are likely to diminish over time to a point when psi events will no longer occur.

The sitter group to which I referred earlier had one experience which perhaps suggests that additional manipulations of the procedures may have beneficial effects. The group met on the day Australia won the America's Cup in 1983. I was not present during this meeting, but the participants agreed that the general enthusiasm in Australia which was felt about this yacht race noticeably increased the strength of the phenomena which the sitter group experienced. This was at a time when in my estimation psi events may well have occurred. Consequently this externally introduced enthusiasm and elation probably increased the strength of psi events. This in turn suggests the possibility of deliberately introducing experiences which create additional enthusiasm and elation. Obviously it would be rather difficult to find enough races or similar happenings with a desirable outcome which inspire the general public. Nevertheless, there are now many films available on video cassettes which generate quite powerful emotional states and psychological experiences for a fairly wide range of viewers. Such additional experiences may well be beneficial for sitter groups who have reached a stage when they can co-ordinate unconscious muscular activities and who are starting to generate psi events.

Suitable videos may also create experiences which, at least for a limited period of time, suggest strong needs and goal-directed desires which might be of help in laboratory research. Unfortunately, it is more difficult to suggest how such artificially induced needs can be incorporated into more traditional experimental designs. It might be possible to select a video which succeeds in involving most viewers quite strongly in, say, one person, but where the commercially produced film finishes with a relatively open ending. Based on discussion with viewers a variety of different statements about the continuing existence of the main character could be prepared as video or simply as audio

tapes. Under experimental conditions at the end of the video film a random event generator open to PK influences could be used to select one out of a number of the prepared additions. Under the impact of powerful emotional experiences induced by videos it may also be appropriate to record the changes which occur in a variety of labile targets situated in the vicinity of the subject, which may be affected by PK. These may not be the most appropriate ways to utilize artificially induced involvement, but considerations along these lines seem worthwhile to pursue.

Exploring the possibility that all psi events are spontaneous may encourage us to look for relatively non-volitional normal processes which in some way can be linked with paranormal ones. During the 50s and 60s creative processes were sometimes regarded as suitable human activities which might provide a useful linkage. To date such complex creative processes have not thrown much light on psi. Stanford's theoretical suggestions (1978) that relatively simple and, in a sense, primitive systems might be associated with psi activities are in some agreement with what participants experience in sitter groups. Unconscious non-volitional muscular activities as well as other more or less spontaneous activities may be worthy of more detailed attention in connection with psi investigations.

My emphasis on large scale phenomena which so far have mainly occurred in connection with spontaneous cases, but which, as the sitter groups indicate, may be generated repeatedly and under controlled conditions, is based on my assessment that an overemphasis on process research is likely to isolate parapsychologists from the rest of the scientific community. In the same publication from which I quoted at the beginning of this paper, Pratt came to a similar conclusion:

"In my judgment, the acceptance of parapsychology as a legitimate and urgent field of research will come about through new and more compelling evidence of the reality of psi phenomena. It will not be achieved through the slower policy of confining research to process alone, not even if that course should lead eventually to an explanatory theory that is satisfactory to those who are already working in the field" (1978, p. 133).

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DISCUSSION

HARARY: I have a couple of questions. First of all, I am a little confused about your definition of spontaneous psi events and how what is happening in the laboratory can be classified as spontaneous psi. The second question is this: in your paper you say that the ganzfeld situation helps to generate spontaneous psi perhaps or can at least cope with psi better than other procedures. You also seem to suggest that ganzfeld makes a stronger case for psi than the remote viewing or other experiments. That is a very broad suggestion, and I'm not convinced that it is on target.

KEEL: To start with the question of what is meant by spontaneous psi events, my additional restriction here was that I assume that in what I call a spontaneous psi event, the person associated with the event has no volitional control over it. Now I agree that in most laboratory experiments we assume that people have some control over psi. I am not saying that this is not perhaps the case, but I am saying that perhaps we should contemplate, for arguments sake or for our strategies, a situation where there is no volitional control even in the laboratory.

Now you might ask how do we get results in the laboratory at all if people have no volitional control? Well, this simply means that if you have people in the laboratory who wait long enough you may get spontaneous psi events and you may of course also create conditions where these events may more frequently and readily occur than under other circumstances. But even in the laboratory you cannot really say that at this particular trial you influence psi and at the next one you don't. I don't think that we can make that sort of claim about psi in the laboratory. Consequently I would think that, at least as an argument, it is reasonable to suggest that what we get in the laboratory are spontaneous happenings over which people have no volitional control. The next question was I think the ganzfeld one. Can you just rephrase this a little bit?

HARARY: I was fascinated when you said that the ganzfeld shows more evidence for psychic functioning than, say, remote viewing.

KEIL: Now I didn't really say this or, if I did say it I didn't quite mean it that way. The amount of criticism that is leveled against remote viewing is somewhat stronger. Not being involved in this field, I take it on the basis of the literature that the general evidence for the ganzfeld is somewhat stronger. It may very well be that if one accepts the remote viewing experiments as actual evidence of psi, perhaps the rate of psi occurrences is even higher. I cannot judge this.

HARARY: I find your question about volitional control really a key to the way we do research. If we feel that the participants in psi experiments are incapable of actually determining when they will exhibit psi functioning, then we do a certain kind of research. We try to create conditions which bring out psi functioning or make it at least happen spontaneously. If, however, we feel that people are capable of actually determining when they will express psi functioning, then we do a completely different kind of experiment.

KEIL: In the past we have assumed, perhaps too much, that people can determine when their psi is functioning and perhaps we have built our experiments a little bit too much around this. I would suggest as a thought exercise that we consider what would happen if we assume that there is no volitional control at all. Is it possible to assume that at least some of our laboratory experiments can still fit into this picture? If then there is not all that much left, is it perhaps worthwhile to pursue a little bit further what we can do experimentally if, in fact, volitional control to that degree is not possible?

HARARY: In my experience it definitely is possible to have dramatic volitional control and to determine exactly what you are going to do, and when, by working with the specific psychological skills involved in

psi functioning. A spontaneous event is not an abstract that we can't understand, but a definite set of psychological processes which are involved in deliberately deciding that you are going to express and experience what we're calling psi.

KEIL: In terms of your initial questions, did we come to an end or was there some other bit left?

HARARY: What determines an event? In my own opinion the psi event is determined by your experience of observing something which you consider unusual. Now whether something unusual has actually happened is another question. What could be happening is that you simply notice something happening and then you determine to call that a psi event because it seems unusual to you. Yet, it may not be at all unusual within the broader perspective of nature as a whole.

KEIL: I agree with that problem that we have. I think that in itself it could be presented as a complete paper, so I think it is best not to pursue it too far here unless someone wants to do it.

MORRIS: At the start of your paper you noted that in laboratory research maybe certain experimental work can only be carried out in truncated sections. Can you elaborate a little on your concept of the truncated section in experimental research?

KEIL: I mentioned in the paper an example from pigeon homing research. That was originally also of interest to parapsychologists. This is an example of the study of long complex behavior sequences. If this study had been pursued in very small units, as we tend to do in the laboratory, it would not have been meaningful research. In contrast to the hard sciences, where investigating small units usually has been successful, I think in the life sciences one has to admit that, at least in some cases, the piecemeal investigation of minor behaviors in psychology did not lead to the build up of meaningful theories. I am simply saying that, from our experience in the hard sciences, we should not necessarily assume that this is always the most successful approach. Nevertheless, in the life sciences it may at times also be a suitable approach.

MORRIS: Yes, I think that sounds very reasonable. I suspect that in both the hard and soft sciences truncated research strategies have more success. The more you study a simple closed system the more you eventually find yourself needing to examine it in context, thus invoking systems. When studying systems of considerable complexity such as ostensibly psychic events, that strategy no longer works.

STANFORD: I certainly concur with your inferences, Dr. Keil. There can be and often are what at least look like spontaneous psi events in the laboratory. Those are going to happen and the lab is not a place

that keeps them out. Any scientist who does not keep his eyes open for the unexpected, the unplanned in an experiment is losing what are historically some of the most important sources in scientific research—what we call serendipity. Some of the greatest discoveries have been based upon this. Would you agree with me that when we observe these events in the lab, even though the conditions are well controlled for the original purposes of the experiment, the events that we observe may be somewhat ambiguous precisely because we did not plan to observe those events ahead of time and did not have the conditions set up to resolve uncertainties about their nature? Would you agree that the spontaneous events that we observe in the lab must serve as a basis of an hypothesis about which we must do further research? I have got just one more remark. I think we already have a paradigm, a kind of methodological paradigm, that has been used a fair amount in the literature which bridges the concerns that you have and the more traditional interest. That is the PMIR research paradigm; not the theory itself, but the opportunity to let subjects manifest what are really, from their standpoint, spontaneous events in the laboratory, but under conditions where we plan to observe those things ahead of time. I just bring that up because you did not mention that there is already a paradigm which we bridge across the two concerns.

KEIL: I certainly agree that further investigation is possible. Certainly my suggestions here are in no way directed against a scientific approach, that is, against further test and verification. In a short paragraph which I did not read I also pointed out that if you test the large number of hypotheses where each one could be taken as indication of a psi phenomenon then there is the risk that one of these hypotheses may come up by chance. You may have to resolve this by either specifying in advance the one on which you relied or by demanding a higher significance level for all those that you test. You can simply try to ascertain that what you got in the first place can be repeated in a follow-up experiment. I certainly agree with that kind of verification approach.

HASTINGS: You mentioned the problem that investigators feel they cannot control variables in the field as they can in a laboratory experiment. But in your description one possible equivalent is the concept of intervention. Sometimes intervention can be tailored to address a particular variable, so while it is not quite the same thing there is some level of investigation of variables that can be carried out in that way.

KEIL: Perhaps I did not express it sufficiently clearly, but I certainly tried to make the point that in my mind the field setting provides equal opportunities, but they are quite often not seen by the traditional laboratory scientist as being equal.

TART: We have used the word "spontaneous" a lot and it is interesting that nobody defined it. I thought I might mention a few ways in which that word is used otherwise they are going to get mixed together during the conference and we will get a little confused not knowing which one is which. You may want to respond to these.

One use of "spontaneous" is to mean that the event is perfectly appropriate to the current situation. I don't think we have used it in that way yet. Another use of "spontaneous" is unpremeditated—there wasn't a long term plan beforehand, but something happened just on the spur of the moment. A third use of "spontaneous" which I think is going to come in frequently is that "spontaneous" means "unreliable." We just cannot *make* things happen because spontaneous things happen.

Now, there is going to be a lot of difference in how unreliable psi is in that sense. I would argue that we certainly do not have reliability where the probability of psi manifesting is one. Nobody, I think, would claim that someone under certain conditions could produce perfectly accurate psi 100% of the time, no matter what. Some people would certainly argue that the probability can get pretty high and so we can always shift it a bit, that is what psi experiments are about. You set up a situation in the laboratory where normally nothing happens but chance. People try to use psi and they are far from perfect, but you do begin to get some results. We have some degree of reliability.

Now underneath that issue of reliability, though, is a deeper question. I think that is the model we have of what psi abilities are. For example, sometimes in the parapsychological literature I have seen the word "spontaneous" used to bring out an underlying model that psi is somehow *inherently* unlawful, that it is never going to be really predictable and controlled. That is an interesting model, but if you use that model it means your research is ultimately doomed. Your research can be a kind of artistic appreciation of the complexity and non-understandability of the universe, but if you use that model it does really inhibit the kind of research you are going to do.

There is another model that says psi is lawful, but it clearly is not lawful in the sense of a few easily understood variables that we have under control. So to explain our lack of reliability we have the unconscious model of spontaneous psi, which says it is lawful, but there are psychologically unconscious factors involved. This unconscious dynamics model usually has the addendum that those factors are often "perverse." They are going to make something happen that you are not set up to measure. Look more closely at this model. Do you see the unconscious as just something that interferes with our attempts to

get rational understanding and control, so that the unconscious factor will always make psi perverse and keep results coming and going and being strange? Or do we have a model of possible growth, of getting into possibilities of altered states of consciousness, understanding your life? But do we have a model where the unconscious can be seen as *friendly* in a sense and ultimately much more able to produce reliable psi results? I would like to hear your comments on that. Just keep us sensitized to the issue of what's the model behind the spontaneous.

KEIL: I agree largely with what was said at the end, the unconscious problem which I equated with non-volition. But at the same time I think we should not assume too much reliability in the first place. I did suggest that psi events are not chaotic, are not entirely random and that lawful relationships can be found. But, as I think you indicated, these relationships are not as clearcut as we are normally accustomed to finding in the hard sciences or, for that matter, even in some of the life sciences. So my picture is not one of utter gloom. Nevertheless, it is one where, perhaps, the reality of the non-volitional aspects or the unconscious interference should be clearly kept in mind and perhaps explored a little bit more. It is not enough simply to assume that if you have a subject in the laboratory and tell him what to do and if what he is supposed to do is of a psychic nature, that he can do it. I think that is perhaps the other extreme from which I want to get away. I am not suggesting that the reality is one of complete lack of volitional control. But perhaps we should try to contemplate the lack of volitional control a little bit more in order to see whether by doing this we might come up with better research techniques.

MISILOVE: I enjoyed your presentation very much, particularly your emphasis on an experimental approach which combines rigorous measures of psi, such as the model that you presented, with a field study measurement at the same time. It seems to me that there are two different kinds of measurements of psi that we try to make or two different types of hypotheses about psi. One kind refers to hypotheses relating to the actual measurement. Is it detectable? What kind of a system can be used to detect psi? What magnitude of psi is detected with that system and what are the time/space constraints of that system? Those types of hypotheses seem to me to be most ideally suited to the conventional experimental approach. Then we have process-oriented hypotheses about psi, the psychological variables, and in my view they are inevitably always contaminated by the experimenter effect. In order to get at the underlying mechanisms, as Dr. Harary pointed out, there do seem to be psychological principles. Yet they always seem to be, in my experience of looking at the field, unique to the particular exper-

imenters involved. This kind of a multi-method approach offers perhaps our only possibility of getting at that. My final comment is that some of the ideal studies that I have seen in this area are those of Patric Giesler, with his multi-method research in Brazil, where he took random number generators into a field setting. There is also some of the work that Julian Isaacs has done, training PK, where he had anthropology researchers observing that training system. Could you comment on these notions?

KEIL: I have talked to Patric Giesler for quite a time and I certainly appreciate his approach. Of course, it is not often possible for ordinary parapsychologists, whoever they might be, to do that kind of field research. Perhaps for that reason I did not particularly address myself to it.

HARARY: I was very interested in what Charley Tart said about psi being lawful. I published a paper called "Psi as Nature" years ago involving the observer's relationship to apparent randomness and whether psi is lawful or whether we are dealing with completely capricious phenomena. I think we are dealing with something lawful here, otherwise it is not worth studying, as Charley pointed out. Even in your study 30 years ago you were comparing the influence of observable behavior, of something you could look at with a random sequence. What is the relationship between the random sequence itself and the behavior of that device? We cannot be sure that the effects were not coming out of an underlying structure in the randomness. What we see as an unusual effect may, in fact, be something in the inherent properties of the events themselves and not something that we ourselves are influencing. Just one response to Dr. Mishlove. I appreciate what he said, but I think that there are psychological variables that are unique to the experimenters involved at a particular time. But there are also some that must be continuous, wouldn't you agree, across psi functioning in general? Otherwise we will never get anywhere. We will be looking at completely different situations every time we do an experiment.

KEIL: Well, I certainly agree with that. I also refer to the Batchelder groups. With a similar technique, relatively independent groups in various countries and places get similar results. I certainly agree that there is some lawfulness behind it. Coming back to the randomness of the events, it seems to me the general question in any PK experiment is whether what you get really has anything to do with the definition of psi, or with the random event generator? I suppose the only answer to that is to run the machine by itself when no one tries to influence it and then to compare these dry runs with those that a subject tried to

influence. If the subject gets something that we do not expect from the machine, we suggest on the basis of such comparisons that the subject had something to do with it, but we cannot claim a causal relationship in absolute terms. I think we always settled with this kind of difficulty, but, if the relationship is strong enough, after a while we feel confident enough to say that something statistically significant is happening. Now, I think, when it came to the haphazard movements of the micro-balance it was interesting. Then of course you can only judge this by knowing something about the physical set-up and about its behavior over a long period of time, by checking earthquakes and that sort of thing. They even had this thing built on a concrete block, so the building itself could not influence the results. It was quite nicely controlled and on that basis I had a degree of subjective confidence that something was happening. But at the same time you cannot have absolute certainty. Something might have been externally happening which coincided by chance with the presence of the students, but it seems to be too much of a coincidence to reject. But to that extent I think that we are always talking in terms of the probabilities involved and not the certainties.

CLINICAL ISSUES IN THE PARAPSYCHOLOGY LABORATORY

JULIAN ISAACS

1. Introduction

I must first disclaim any pretensions to expertise in the area of clinical psychology. I was originally a philosopher who, bloodhound-like, followed his nose on the trail of two questions, the first being the mind/body problem, the second being whether psi phenomena are Kuhnian anomalies and herald a revolutionary development in our worldview. Following my nose led me to parapsychology, where I became an experimentalist, because I thought, and still believe, that no one has seriously addressed the problem of developing an adequate methodology for investigating the physics of psi, which I see as being accessible through the laboratory-based study on non-statistical PK effects, "Directly Detectable PK" (DDPK) (Isaacs, 1986; Hubbard et al., 1987). This led me to PK training, in which endeavor I have specialized for more than a decade.

Recently, my experiences in PK training have increasingly convinced me that the problem of obtaining "big psi," certainly of the PK variety, has an important clinical dimension. This has forced me to start assessing the existing psychotherapeutic tools which are potentially available to be pressed into the service of PK training. I would not pretend to have made more than a very limited initial foray into the clinical field as yet, and all my ensuing thoughts should be viewed as preliminary ruminations regarding possible new directions for exploration, reflecting an early phase of my thinking in this area. What is already clear at this stage, I think, is that clinical considerations are unavoidable in the quest for superior psi performance. I shall in section 4 review some of the phenomena we have observed which seem to suggest that clinical techniques may be relevant to PK training.

A more general underlying thesis I advocate is that the division made by parapsychologists between, on the one hand, the study of spontaneous psi, where clinical, depth psychological and anthropological ap-

proaches are more or less accepted and, on the other hand, experimental studies, which generally ignore clinical aspects, is arbitrary and artificial. This division is unnecessarily restrictive and ignores some salient facts, because psi performance seems to be affected by emotional factors (Palmer, 1978) as well as cognitive and other factors, so that a clinical dimension exists in all psi, whether occurring in the laboratory or in the field.

To underscore this point that the division between "real life" psi and laboratory psi is arbitrary, I would remind the reader that parapsychology laboratories are "real life" entities too, where "real life" parapsychological studies are performed, in the context of their own nexus of "real life" emotionally toned interpersonal interactions, including those between subject and experimenter and between the experimental personnel. The realization that parapsychology laboratories are subject to the emotional vicissitudes of real life should make us all more acceptant of the possible contribution which clinical approaches could make to experimental parapsychology. Now, lest the reader automatically assume that I am advocating Freudian psychoanalysis sessions in the laboratory, I should hasten to make it clear that I am not, and that the approach I am advocating is rather eclectic and tentative.

What I am advocating is, firstly, the greater use of qualitative data collection techniques. Here, clinical techniques are included, but qualitative data collection paradigms developed from other areas of inquiry are also relevant. Parapsychologists tend to be obsessed by quantitative methods, to the exclusion of qualitative ones, and this represents the waste of a potentially powerful range of data collection techniques, the use of which could also lead to the enrichment of the quantitative ones, as I argue below.

Secondly, I am advocating a careful and discriminating examination of the various clinical psychotherapeutic techniques of observation, diagnosis and therapy, including especially those of behavior therapy, which seems to have a rather good record of outcome success (Kazdin & Wilson, 1978). The adoption of techniques of data collection and therapy developed in the clinical arena might aid parapsychology in understanding salient psychological dynamics and may also make more potent our stock of psi-facilitating treatments. These are the goals of my approach here.

Since my own area of experimental specialization is DDPK training, I shall illustrate some of my themes directly from my own work, but to have point, the issues I discuss from this area must have general applicability to other experimental paradigms and psi tasks. I hope that the generalization of my group's findings, suitably modified, may be

fruitful stimuli to other parapsychological experimentalists. From my experience in other areas of psi, discussions with colleagues and reading of the literature, I would argue that similar issues to those arising in DDPK training crop up virtually universally in experimental parapsychology. I briefly review this evidence in section 5.

PK training is a relatively new concept in parapsychology, and is unlikely to be widely accepted until either some other group than my own performs formal studies to prove its reality and effectiveness, or else its use becomes adopted for purely pragmatic reasons by groups who aim to study DDPK. As yet, no one has attempted to replicate my initial studies of DDPK training (Isaacs, 1983, 1984b). However, as I have argued at length elsewhere (Isaacs, 1986), if we are to investigate the physics of PK, DDPK tasks are likely to be essential research tools, and training of DDPK ability seems, in my own experience, *prima facie*, to be effective (Isaacs, 1983, 1984b).

A recent collaborative proof-oriented experiment (Hubbard et al., 1987) to demonstrate the existence of the Piezo-PK effect was performed at John F. Kennedy University (JFKU) and SRI International. Although at this time of writing (September 1987) the results are not yet known, the study clearly demonstrates that very high quality proof-of-principle investigations can be performed using DDPK effects as the target phenomena. The task of the JFKU-based research team was to select and train Piezo-PK agents to be run under the independent control of SRI personnel, using SRI-designed and built Piezo-PK instrumentation. The JFKU-based section of this collaborative project was termed the "Remote Action Project." The SRI-based experimentation is of major importance in illustrating the very high degree of evidentiality that it is possible to achieve in well designed DDPK proof-of-principle experiments. The brief psychological case histories I cite in section 4 are derived from the training phase of the Remote Action Project. In passing, I would like to make it clear that the themes, opinions and viewpoints I present in this paper are my own, and that nothing I say here should in any way be taken as representing the opinion of SRI or its parapsychological researchers regarding any of these matters.

Two major tasks would seem to be fundamental to the further development of DDPK training methodology. The first is to identify, describe and, as far as possible, measure the psychological phenomenology and underlying psychological factors associated with PK training. The second, using the knowledge gained in the first step, is to attempt to improve the DDPK training procedures. Clinical approaches can be fruitful in both tasks—the delineation of psychological factors—and attempted optimization of training procedures. In both domains

the most efficient strategy necessarily involves multidisciplinary convergent approaches, employing clinical, experimental, quantitative and qualitative methods, because no single methodology shows a sufficient combination of comprehensiveness and precision.

The use of quantitative psychometric measures, whether derived behaviorally or by self-report, obviously has an important role to play in the exploration of the psychology of PK performance and training. Quantitative measures have been the workhorse of psychological factors research in parapsychology and nothing stated here should be construed to deny or belittle such techniques. They will continue to play an essential and central role in this field and show obvious potential for development and refinement as our understanding of psychological factors grows. However, I want to start my consideration of the possible role of clinical approaches in PK training and experimental parapsychology generally by briefly making a case for qualitative data collection methods. My motives in doing so are to try to point to the important potential role that qualitative data collection could have in broadening the scope of psychological data collection in experimental studies, in alerting experimenters to unsuspected psychological factors and in identifying clinical phenomena arising in the laboratory context.

2. A Role for Qualitative Data Collection in the Laboratory

By qualitative data collection, I mean essentially the collection of information which results in a product having the form of non-numerical written descriptions. The data can be collected by several means, including, but not limited to, interview, participant observation and the self-reports of experimental participants. Various techniques for eliciting behaviors which are subject to observation and qualitative analysis, such as hypnosis or projective tests of various sorts, may also be employed. There are many varieties of qualitative data collection and analysis. Some are explicitly psychological in origin, such as those used in behavior therapy (Gambrill, 1977), social psychology (Maccoby & Maccoby, 1954) clinical psychology (Matarazzo, 1965) and phenomenological psychology (Colaizzi, 1978; Polkinghorne, in press). Others were developed by cultural anthropologists (Spradley, 1980). Anthropological techniques of participant-observation and interview have been pioneered by parapsychologists who have anthropological backgrounds (Giesler, 1984, 1985; Winkelmann, 1981) and they seem to have much potential.

First, perhaps it would be useful to examine some usually ignored prejudices which seem to infect experimentalists. Experimental para-

psychologists at present seem to show little interest in qualitative data collection. To a great extent this may be because of their lack of training in these techniques. However, I suspect that many parapsychologists probably regard qualitative data collection and analysis as somewhat of a sham—a poor substitute for the concrete “exactness” of quantitative data collection, which appears to provide a reassuring sense of objectivity relating to hypothesis testing in terms of P values and measures of distribution, etc. Their training has led them to value quantitative outcomes above any other form of data collection, because of their clear relation to hypothesis testing.

But the crucial point to grasp is that quantitative and qualitative data collection are complementary, not competitive, because both can gather data which the other technique is unable to deal with. It is not a case of “either-or”: appropriate domains exist for both methods, although these domains can overlap. Qualitative data collection techniques can yield data concerning participants’ and experimenters’ constructs: for example, their attitudes concerning participation in experimentation, towards the psi task, and experimental personnel, their values, world-views, social relationships, conflicts, problems, subjective experience and psi facilitation strategies. Quantitative data collection methods often cannot adequately address the complexity of these high level, global domains. In most current studies, this information is usually ignored.

The present almost exclusive concentration on psychometrically gathered data has the effect of putting blinkers on researchers whereby they tend to conceive of psychological factors only in terms of those measurable by already-existing psychometric tools. The traditional parapsychological quantitative experimental paradigm excludes the systematic gathering of qualitative data. The experimenter therefore often remains wholly unaware of possibly crucial psychological determinants, which, because they are not trapped by the psychometrics selected for use in the study, escape attention. This is especially true if the relevant factor is not one chosen by the experimenter to be the focus of their investigation in the initial design of the study. But irrelevance to the principal hypothesis under test certainly does not prevent any given psychological dynamic from dominating the results. Indeed, this type of factor may be responsible for some of the mystifying elusiveness and apparent inconsistency of psi. Just this point establishes a very strong case for supplementary qualitative data collection, a case which deserves being spelled out in some detail at this point.

Qualitative data collection enables a very broad range of psychological and social factors to be investigated concurrently. Quantitative psychometric measures carry with them the danger of over-analysis,

significant correlations being generated by chance if large numbers of factors are sampled. Qualitative data collection cannot produce exactly this error, although the cognate errors of the seeming identification of, in fact, chimerical or noncausally determinative psychological factors is obviously possible. However, a strong point in favor of the qualitative approach is that, for what it is worth, the parapsychological informants—the experimental participants—can themselves rank or otherwise indicate to the investigator the relative importance which they ascribe to each of a large number of psychological factors. Although, obviously, the opinion of the participants could never be a sufficient criterion for the identification of major psychological factors, they may thus supply at least some kind of indication of which factors would *prima facie* be worth evaluating as causally salient. Whereas if no psychometrically measured factor or combination of factors accounted for very much of the variance in the quantitative data from a study which employed only quantitative measures, the experimenter is left uninformed.

The anthropological field study approach, as described below, would potentially enable the experimenter to identify major psychological dynamics common to the responses of his experimental subjects even if these dynamics had not been foreseen during the period of initial hypothesis formation and experimental design prior to initiation of the study. The use of qualitative data collection and analysis would enable the experimenter to become aware of and examine such psychological factors in spite of these dynamics being unexpected and not trapped by the psychometric tools used. The results of such additional data collection may therefore be of considerable heuristic value, since psychological factors initially identified through qualitative data collection may later be measurable using existing or specially developed quantitative psychometric tools. In this way, relevant, but unanticipated psychological factors can be trapped by the qualitative “fishing net,” which is literally open-ended. One of the most important roles of qualitative data collection could thus be to alert experimenters to factors which their conventional psychometrics missed, but for which new psychometric tools could be developed.

I next want to point out a paradox in experimentalists' attitudes and behavior towards qualitative data. Frequently, the experimenters who are publicly committed to exclusively quantitative data collection do, even so, perform an unacknowledged type of informal qualitative data collection and analysis, in the form of formulating and exchanging the “lore” of parapsychology in behind-the-scenes discussion at parapsychological conferences. My point here is that the techniques of quali-

tative data collection developed deliberately, whether, for example, as a methodology for anthropological field observation and analysis, or for clinical purposes, are likely to be much more rigorous and disciplined than are the very informal and undisciplined observations of individual parapsychologists which give rise to the "lore," the looseness of which, incidentally, may be responsible in large part for the negative attitudes of experimenters towards qualitative data.

To support this claim, consider that it is probably not yet appreciated within the ranks of parapsychological experimentalists that, for example, although ethnographic field observation methods (Spradley, 1980) do not employ experimental controls, the hypothetico-deductive method is nevertheless utilized. Hypotheses are formulated as the data are collected and subjected to analysis. Further data are then collected to test hypotheses deriving from the first level of analysis. The method is cyclical and may involve several cycles of data collection, analysis and hypothesis development, followed by renewed data gathering. This method does not just employ passive observation on one pass. It is an active reiterative probing of the field situation. The targeting of data collection responds to and tracks regularities and questions exposed by successive analyses of the data recovered from interview and observation. Attempts are made to try to identify not just the surface phenomenology, but also the causal determinants of the situation under investigation, even if these are hidden and not necessarily obvious at first glance. Given a choice between the current "method" of informal parapsychological "lore" and the ethnographic method, why not adopt the more rigorous technique, since it has already been developed by other workers with similar interests to our own parapsychological concerns?

It is also worth considering whether parapsychologists' views of qualitative methodologies might also be skewed because of certain intellectual preconceptions held by some experimentalists. There are several polarities in this area which should be distinguished in order to clarify our discussion. I have alluded to the quantitative-qualitative distinction, but many experimentalists seem automatically to equate this pair of polar opposites with three others. These are the laboratory-field, experimental-observational and testable-non-testable distinctions. Yet it is simplistic to equate these polarities, because they are clearly distinguishable and studies fulfilling every permutation of these categories could be performed. As our own ethnographic study of PK training demonstrates (Faithorn et al., 1987), qualitative studies of quantitative laboratory experiments are possible, just as are quantitative field studies and the testing of hypotheses by qualitative means, as occurs in some

ethnographic studies. The gathering of qualitative data does not commit the experimenter to working in a field setting, nor to working with untestable hypotheses, even if the validation of such hypotheses is not performed using quantitative criteria.

I shall now turn to some clinical issues which have emerged in our recent DDPK training investigations. The use of qualitative data collection in this research has sensitized us to the existence of clinical dimensions in DDPK training. Our attempts to counter inhibitory factors, rather than just passively note them, has led to an increasing realization that the psychotherapeutic disciplines may have already developed techniques for facilitating positive mood and attitude changes, reduction of inter- and intra-psychic conflict, and the facilitation of psychological adjustment and psychological growth which may be of direct relevance to the quest for very superior psi performance. It seems that perhaps many parapsychologically valuable psychotherapeutic techniques may have been developed which could be of great application in facilitating psi, but because of the compartmentalization of knowledge and specialization in parapsychology, this psychological technology is unavailable until its application has been pioneered and demonstrated to the parapsychological community.

3. (i) The Clinical Phenomenology of PK Training

PK training inevitably introduces clinical issues because many of the apparent inhibitors of PK performance in the training situation seem to be emotional factors which might respond to psychotherapeutic approaches. Here I must make the cautionary statement that the following description and analysis of psychological factors in DDPK training are based on the qualitative data collection of myself and my co-workers and have not yet been tested using quantitative techniques. The quantitative confirmation of our conclusions based on qualitative data collection is in an early stage, partly because of the problems of insensitivity and lack of power created for psychometrics by small subject numbers, and partly from a desire to achieve some qualitative understanding of this phenomenology before attempting to measure it using psychometric tools.

Six primary factors having clinical implications seem to emerge from the qualitative analysis as possibly influencing PK performance, although other types of factors also appear to influence performance which are not so clearly clinical in type. The basis for these hypotheses are the observations made of participants undergoing Piezo-PK training at JFKU in 1986 and 1987.

3. (ii) *Performance Anxiety*

The first factor is one which I hypothesize to be the primary reason why psi performances are not easily obtainable. If psi were to be as easily demonstrable before critical witnesses as are, say, athletic skills, parapsychology would be in a very different position now from where it is. This factor is, in my view, one of the principal reasons why parapsychology has remained rejected for so long, because high level psi performances are not available "on demand" for skeptical witnesses to view. This factor, performance anxiety, is familiar to sports psychologists, sex therapists and behavioral therapists. In the PK training context it seems clear from observations of trainees that they are subject to performance anxiety, triggered easily if the trainee construes the performance situation as being a test of his or her PK ability.

It seems very strange that parapsychologists have not mounted a major investigation of the role of performance anxiety in inhibiting psi performances under test conditions—say, where an effect is being demonstrated within a proof-of-principle study, or a demonstration of psi is given to a critic or distinguished witness. If performance anxiety is indeed a major factor inhibiting psi in these types of situations, surely it behooves us as parapsychologists to investigate this factor and find ways to counter its inhibitory effect, so as to improve the replicability of psi under "demonstration" conditions. This seems especially true of DDPK and macro-PK abilities which seem to be, perhaps, more easily inhibitable than other psi capacities.

But here, the news may be encouraging because Behavioral Therapy techniques for the reduction of anxiety and performance anxiety have been proven to be rather effective in non-parapsychological contexts (Kazdin & Wilson, 1978). It would not in principle be difficult to utilize similar techniques in an attempt to reduce performance anxiety in PK agents, as is discussed immediately below.

3. (iii) *The Relationship between Belief and Performance Anxiety*

Batchelder (1984) and Stanford (1977) have both referred to the role of belief in intentional PK performance and Batchelder makes belief a central factor in his theory of PK induction. Belief seems likely to play several roles. One is to provide, as Batchelder states, suggestions which may cue PK effects (Isaacs, 1984a). The beliefs in question obviously fall into several distinguishable categories, for example, a general belief in PK, or a belief that PK is possible under the circumstances of the study in which the participant is involved, or the very situation-

specific belief that PK is just about to occur, generated by an apparently responsive PK target system. It appears that it is this specific belief which is associated with PK success in our investigations, which would be consistent with Batcheldor's hypothesizing of expectation as an effective eliciting agent for PK.

But another way in which expectant belief may function as a PK facilitator is by reducing performance anxiety. If success is perceived as being within the immediate reach of the PK agent, this seems likely to act as an anxiety reducing factor. Clearly, this hypothesis is potentially testable within suitably designed studies. This factor would provide one mechanism to explain why artifactual signals of PK success appear to act as releasers for real PK to occur, Batcheldor's "artifact induction hypothesis" (Isaacs, 1981, 1984a).

Much of the behavioral therapy approach to control of performance anxiety consists of equipping the client to replace his or her lack of confidence, feelings of defeat and incompetence towards the task with coping strategies of various kinds, central to which is relaxation and the interior recital of statements expressing confidence and competence. The locus of such a strategy is clearly to effect changes in the beliefs of the individual, which ties in neatly to the previous considerations regarding the role of beliefs and performance anxiety. Such strategies appear to be successful in training clients to cope with various non-paranormal demands (Gambrill, 1977) and it seems a fruitful hypothesis that PK performance, too, might be made less easily inhibited by performance anxiety if these procedures were adopted. Given the notorious frequency of disappearance of macro-PK performance under rigorous test conditions it seems only commonsensical at least to check whether clinical techniques for the treatment of performance anxiety might enhance DDPK performance, since test conditions are clearly more likely to induce performance anxiety than are informal conditions.

3. (iv) Negative Emotional Effects of Life Events

Stress resulting from negative impacts in trainees' lives appears to be highly inhibitory of PK performance. The inhibitory effects of negative life events appear to be mediated by their effects on the trainees' mood and general morale. This feature of the DDPK performance of trainees at JFKU has been very pronounced. Any emotionally significant loss or conflict, such as the loss of a loved one, loss of security, a financial loss, interpersonal conflict, or any persistent problem which impacts trainees' morale can seemingly be responsible for inhibiting trainees' DDPK output. This would appear to be potentially a clinical

issue, since the loss of trainee morale from these sources might be reduced by psychotherapy. Total immunity from negative impacts created by events in trainees' lives would be possible, presumably, for an enlightened Buddhist master, but the extent and duration of the emotional effects of traumatic or problematical life events may perhaps be reduced by psychotherapeutic means and, in the longer term, by the psychological growth of the trainee whereby he or she becomes less negatively reactive to life events.

In the DDPK training process, the first 30 minutes of each 90 minute training session is used, when necessary, as a preparatory period during which the trainee attempts, by various processes, to resolve problems brought into the session from his or her life, and/or to redirect his or her attention away from them. The overall purpose of the preparatory periods is to (1) reinforce belief in the trainee's DDPK ability, (2) create a positive mood change in trainee and trainer, and to enable each to free themselves from the negative emotional tone created by unpleasant life events and (3), to orient the trainee towards his or her DDPK induction strategy and the DDPK task.

It seems likely that this process would be made more efficient by the addition of appropriate psychotherapeutic techniques. It was often found that the preparatory period was not sufficiently powerful in freeing trainees (and trainers!) from the distress caused by negatively impactful life events. Three major problems seemed to reduce the effectiveness of the preparatory periods in producing positive mood shifts. The first was that preparatory periods were not long enough, but making the preparatory period an hour long would have demanded that training sessions be two and a half hours long, a difficult requirement to satisfy. The second was that the trainee and trainer often could not readily acknowledge distress. Often the true nature of the distress would only emerge in conversation towards the end of the (consequently not very PK-productive) training session. The third was that if it was the trainer/experimenter who was in distress, there was sometimes role conflict for the trainer between the role of "powerful" experimenter and the need to disclose distressing material. Non-disclosure would frequently prevent the experimenter from being able to accomplish positive mood changes. Since the DDPK results seemed to reflect the state of both trainer and trainee, if either of the two were in a distressed state, results suffered. The use of the preparatory period has suggested the hypothesis that part of the effectiveness of psi-facilitating strategies (visualization exercises, meditation routines, etc.) may be that in addition to orienting the individual towards the task and inducing a psi-facilitating state of consciousness, the attention of the

individual is directed powerfully away from thoughts and feelings having negative components, so that positive mood change is achieved.

Some DDPK trainees are individuals who seem to possess the potential for good DDPK performance as indicated by their ostensible DDPK performances in screenings for DDPK agents and by their profiles on the psi experience questionnaires (PEQ) but the manner in which they lead their lives effectively prevents them from realizing that potential. It is a recognized clinical syndrome that some individuals compulsively load themselves with tasks which overwhelm them, or compose schedules which leave them overwhelmed (Oberndorf, 1951; Maclowitz, 1980). One of the case studies described below in section 4.(ii) details an example of this phenomenon. Frequently it can take some probing to enable an experimental participant to acknowledge that he or she is indeed suffering from overwork or being overwhelmed, although the objective record of his or her activities clearly warrants this conclusion. The reasons why individuals lead chaotic or excessively busy lives seem to have a clinical dimension.

Another syndrome which has also been noted within Piezo-PK trainees is that some individuals who have strong spiritual and psychic values pay scant regard to maintaining an adequate income. The effects of low income are often stressful for the individual and inhibitory to his or her psi performance. This phenomenon seems to have both clinical and cultural aspects, since our culture tends to put spiritual/psychic values and material values into opposition. Some psychically inclined individuals tend to identify with the opposition of these values by rejecting the material world to the point that they are seemingly unprepared to cope adequately with basic issues of survival.

There is a further implication of the way in which the individual's level of integration and maturity affects his or her psi, and this applies especially to parapsychologists. As a group, parapsychologists tend to be academics who have been enculturated to value highly their intellectual ability. The obverse of this is that frequently these highly intelligent intellectuals do not value their "irrational" emotional sides, and refuse to acknowledge the importance of their own emotions, even though their profession is professedly psychological. Intellectuals seem frequently not to learn effective means of emotional self-management. This can lead to a lopsided development of such individuals where they may grow to be intellectual giants whilst remaining emotionally immature. In turn, this may lead to difficulties in interpersonal relations and being prone to extreme emotional reactions to negative life events.

In the Piezo-PK training context the experimenter's state seems to strongly affect the outcome of DDPK training sessions, and impacts on

the morale of the experimenter, caused by life events and, by incidents associated with the experiment as a whole, can affect results. Perhaps this experience is not unique and, if so, the implications for parapsychologists as a group are considerable. The notion that psychotherapy for experimenters and their pursuit of psychological growth might improve the yield of psi in experimental studies might seem surprising, but there is good evidence for experimenter effects (Kennedy & Tad-
donio, 1976; White, 1977). If the logic of the foregoing remarks regarding the connection between characterological growth and reactions to problematical life events does indeed hold, the implication is clearly that less anxious or neurotic experimenters might produce better psi results. There are indications that psychotherapy sessions which presumably created positive mood change in participants in Schmeidler's study (Hudesman & Schmeidler, 1971), reviewed in section 5, enhanced ESP performance, so it certainly seems reasonable to hypothesize that perhaps psychotherapy for experimenters might augment their psi effects in a favorable way.

3. (v) The Trainee-Trainer Relationship

The third important factor is the trainee's relationship with his or her experimenter/trainer. The trainee/trainer partnership seems similar to the athlete/coach relationship, which has been noted to be of crucial importance for the performance of coached athletes (Sternberg Horn, 1986; Chelladural, 1986). Trainee and trainer must develop closeness, trust and faith in each other. They must be able to relate without excessive conflict. As one of the case studies below will show, drastic reduction in the trainee's PK output is likely to occur if a serious conflict develops between the trainee and trainer. But more subtle dynamics can also have a serious impact on the training process. The trainer/trainee pair cannot always solve these problems by themselves and clinical assistance might play a useful role in resolving these situations.

The ability to act sensitively and effectively in the training role is presumably partly due to learned social behavior and partly due to personality factors. Not every experimenter is suited to such a role. We have some preliminary indications that the trainers' personalities affect the trainee's choice of trainer. The trainer's and trainee's ability to accept their partner and successfully relate to them also influences the outcome, so that in a research team, some trainee/trainer pairs might be expected to be less successful than other combinations. Clearly, in the long run, if the capacity to function effectively in dyadic rela-

tionships is partly a function of the individual's emotional maturity and integration, this has a clinical significance.

3. (vi) *Motivation*

The fourth factor is the trainee's level of motivation. Some trainees have appeared to be willing to participate in experimentation, but are very weakly motivated (Isaacs, 1984b). Typically, this type of trainee has not shown a good training performance. Strong motivation seems to be important for good performance in the PK training setting. Evidence for similar motivational effects on randomly acting PK target systems, such as dice and the REG, has been noted within the parapsychological literature (Stanford, 1977).

Both intrinsic motivation, where the trainee values PK performance and training experience for what it is rather than for what it may bring, and extrinsic motivation, where the PK performance is viewed as subserving some other purpose, appear to be effective. Many of the PK trainees in our studies have shown a strong interest in the process of self-discovery associated with their PK training, whereas others have seemingly trained their PK ability primarily as a form of service in order to fulfil some more external mission. The ideology of the group as a whole is to view the establishment of DDPK and its real-life applications as part of a mission to orient Western mankind towards a more spiritual viewpoint which, it is hoped, will rescue the human race from nuclear annihilation. The gaining of psi's acceptance is seen as a step towards the establishment of the reality of the transpersonal realm.

Participants and experimenters can thus be viewed as having hierarchical sets of goals, with the day-to-day concrete achievements in PK perceived as serving more far-reaching goals. The importance of explicit and careful goal-setting has been acknowledged in behavioral therapy (Gambrill, 1977) and by sports psychologists (Gould, 1986) who use eclectic mixtures of behavioral therapy and other psychotherapeutic techniques. We are in process of incorporating explicit techniques of goal setting more fully into our PK training methodology.

3. (vii) *Emotional Resistance to PK*

The fourth factor, emotional resistance to PK, has been identified by Batcheldor as an inhibitor of PK (Batcheldor, 1984). Batcheldor's conceptualization of resistance is that unconscious fear is aroused by the threat of an individual's potential exposure to PK. In order to avoid this fear, and without the fear ever becoming conscious, the PK

is either paranormally inhibited from occurring, or else the individual will behave overtly in such a way as to stop the PK events from occurring, without being aware of the motivation behind his or her behavior. This factor is different from all of the others reviewed so far, in that it is a true depth psychological factor, because of the presumed unconscious nature of the fear and the unconscious motivation of the resistant behavior.

In the sitter group context, in which the concept was developed, a typical example of resistant behavior during the occurrence of ostensible PK events would be that an individual would act so as to disrupt the occurrence of further PK, by, for example, directing the attention of the group away from the PK aspects of the sitting by asking irrelevant questions which would distract the group.

Tart (1986) has discussed the fear of psi in parapsychologists and psychics. Certainly, the DDPK situation, where a quiescent PK target system provides unequivocal feedback of the occurrence of PK, is likely to maximize resistance, if the would-be PK agent is subject to inhibition from this source. But resistance is presumably lessened in our trainee group by our careful selection for PK training of individuals who report rather high levels of spontaneous and/or intentional psi functioning. This group may be much more acceptant of DDPK than a lay group would be.

However, there are certain mysterious failures of PK training which it might be tempting to ascribe to resistance; an example of this type of case is given in 4.(v). But this is a highly problematical hypothesis. The problem is that firstly, no general experimental verification of the reality of resistance to PK as an inhibitory factor has yet been performed. This, of course, assumes that at least some aspects of resistance can be operationalized, which seems arguably possible. However, unless some form of well validated psychometric or behavioral test of resistance had been administered to a PK trainee, it is impossible to know whether it is correct to invoke resistance as an explanatory factor in any individual case. Nor, given the hypothesized unconscious nature of resistance, can the avowals of the trainee be given any kind of privileged status. These kinds of problems tend to infect all explanations based on depth-psychological dynamics.

4. (i) Some Piezo-PK Training Case Studies: Introduction

The selections offered below originate from case studies conducted during the PK training phase of the 1987 collaborative proof-of-principle Piezo-PK study performed jointly with SRI. These case studies

illustrate some of the problems encountered in Piezo-PK training. The research team's contribution was to find, select and train PK agents at John F. Kennedy University in preparation for their being run under independent control at SRI.

Selection of candidate PK trainees was accomplished by three methods. One was by participation in a PK screening operation (Isaacs, 1981), where they were administered an informal test of psychokinetic metal-bending and a brief informal trial on a strain-gauge based strain-sensitive device. The second was by their demonstrating a promising initial PK ability in a laboratory trial, using the Piezo-PK detection system. The third was through personal contact. All potential trainees also completed the Psi Experiences Questionnaire (PEQ), a psi-related inventory specifically developed for selection of possible PK agents. The PEQ comprises 30 questions regarding rates of occurrence of (1) spontaneous and intentional psi experiences, especially those which could be PK in type, (2) general belief in PK and specific belief in the informant's own PK ability, (3) experience of the practice of mental disciplines, (4) spiritual orientation and (5) previous experience of participation in behavioral research.

Trainees completed some 25 90-minute Piezo-PK training sessions at JFKU prior to being run at SRI. It should be noted that the piezo sensors utilized as PK targets were located inside an electrically isolated, electromagnetically shielded enclosure. The enclosure was placed in a separate room from that occupied by the trainee, signals being brought to the computerized feedback and recording instrumentation in the participants' room by means of optical fibers. An equipment description of the Piezo-PK detection system and protocol is given in Hubbard et al. (1987). The PK trainees with the best Piezo-PK performance were selected to perform at SRI, so that only 6 out of 10 trainees were finally chosen to participate in the SRI proof-of-principle sessions (Hubbard et al., 1987).

4. (ii) Negative Impacts from Life Events

Mrs. J is a homemaker and professional psychic in her late thirties. She reports becoming seriously interested in psi some eight years ago and has self-developed her ESP and psychometry skills since then. Her profile on the PEQ suggested possible PK ability, and she claimed to be able to paranormally bend metal. She started Piezo-PK training quite promisingly, but soon after starting began to report problems of friction with her family related to her scheduling time for participation in the experimentation.

Over a period of several weeks of twice-weekly Piezo-PK training sessions it became clear that Mrs. J filled her schedule with such a high density of activities that she was permanently overloaded. This seemed to be the origin of the friction with her family. Since she claimed to be very highly motivated towards PK training, it was tactfully pointed out to her by her trainer/experimenter, E1, that if she was to reach her PK potential, she needed to slow down the frenetic pace of her life by reducing her scheduled commitments. However, she continued to lead such a busy life that she frequently arrived at her Piezo-PK training sessions in a state of fatigue. Her performance sharply declined, especially after a skiing accident which left her in almost continuous pain for two weeks.

The effect of her situation was to lead E1 to the conclusion that, because of her lifestyle, she would never reach her potential performance. E1 decided that E1's own negative expectations regarding Mrs. J's PK performance might be limiting Mrs. J's PK. Since Mrs. J was very keen to continue training, it was decided that another trainer/experimenter, E2, should take over her training on a provisional basis. In the first few Piezo-PK training sessions with E2, Mrs. J's PK performance markedly improved. However, a new and severe set of problems in Mrs. J's life then emerged, since the family had decided to relocate away from the US mainland, and she was largely responsible for selling the family's house in California and organizing the situation concerning the family's property on the island they were moving to. Again, Mrs. J's PK performance declined and she was not selected for participation in the proof-of-principle study conducted at SRI.

This case suggests the negative impact which an individual's lifestyle can have on his or her DDPK training performance. It also perhaps suggests how a change of experimenter, from one who had no faith in her PK ability to one who was neutral, may have been responsible for the sudden improvement in her performance.

4. (iii) *Trainee / Trainer Conflict*

Mrs. P is a divorced homemaker who also showed a promising profile on the PEQ. She was first assigned to E2 and showed an inconsistent Piezo-PK performance. In her very first session, she produced two very large magnitude effects. She reported that she had been very challenged in the first session and had been determined to prove that she could perform the PK task. She described herself as having been in "survival" mode, where it was going to either be herself or "it" (the Piezo-PK instrumentation) which would emerge victorious from the confronta-

tion. She then proceeded to produce no identifiable PK effects in 19 subsequent training sessions. At that point, it was decided that she would be transferred to E1, both because of E2's by now negative expectations of her and also because some frictions had developed between herself and E2.

Mrs. P's PK performance improved dramatically and fairly consistently in the first six sessions with E1, and she appeared to be a good candidate to be selected to participate in the SRI sessions. However, she and E1 had an intense conflict in the seventh and following sessions. Her PK scores immediately tumbled in the first conflicted session and never subsequently recovered. This case seems to illustrate two points. The first has been noted in the first case, that transferring a trainee from an experimenter having negative expectations to one who was neutral or positive, seems to improve DDPK performance. The second is that marked discord between trainer and trainee can seemingly be responsible for reducing a PK trainee's PK effectively to zero.

4. (iv) *Performance Anxiety*

The third case hints at the inhibitory role of performance anxiety. Miss X started her Piezo-PK training late in the experimentation. She had previously been chosen by one of the trainees as her "confidant." "Confidants," in the context of the Remote Action Project, are individuals chosen by trainees to be helpers in their PK training process. Duties of the confidant include: consistently showing an interest in the trainee's PK training progress, assisting the trainee in finding solutions to difficulties in his or her training, rewarding him or her for good performance, encouraging him or her, providing an independent viewpoint from outside the experiment, and providing an extra communication channel between the trainee and the experimental team.

Miss X accompanied her trainee to a session one day, and requested a short trial period on the Piezo-PK instrumentation. To the trainer's surprise she then proceeded to produce a definite and moderately large effect. She completed a PEQ, with a promising profile. She was recruited as a trainee and her performance in training was sufficiently good for her to be selected to be run at SRI. There, she produced an effect in her second session. She reported that she greatly enjoyed her sessions at SRI and seemed to regard her PK sessions there as lighthearted fun.

However, between her second and third sessions at SRI she overheard a conversation between myself (the principal investigator) and another member of the research team, who accompanied her to SRI for her

third and fourth sessions. In this conversation, the importance of her contribution to the tally of PK events recorded at SRI became fully apparent to her, for the first time. There is no way of proving that her subsequent failure to produce further effects at SRI was due to the change in attitude caused by her hearing the conversation. However, she certainly reported a change in attitude and seemed to take her participation in the study much more seriously from then on. The moral seems to be: don't induce performance anxiety in experimental participants by communicating to them the importance of the results they obtain.

4. (v) *A Counseling Success*

Mrs. Z is a professional in her mid-forties. She showed a very high psi profile in the PEQ and did well in her early training. During the middle phase of her training, she suffered emotional upsets resulting from conflicts in her relationship with her live-in "significant other." During this period she several times attended training sessions in some distress as a result of events in her relationship, and produced comparatively poor PK performances, compared to her norm, in these sessions. She was referred to an intern in the JFKU Transpersonal Counseling program who had volunteered as the professional counselor for the Remote Action Project. The counseling sessions held with the couple were effective in allowing them to resolve their conflicts. Mrs. Z's PK training performance then continued to improve and she was one of the most successful PK agents at SRI.

5. *Clinical Issues in Other Areas of Parapsychology*

Several psychological factors which have potential clinical implication have been noted in the parapsychological literature. In general, the studies involved have investigated the relationship between particular psychological variables and psi performance, usually ESP. Unfortunately, less research relating psychological factors to PK performance has been reported. Frequently, no attempt was made to manipulate these variables, but clinical approaches to the manipulation of many of these factors so as to attempt to enhance psi performance would be possible in principle. In the case of deep-seated personality variables, it seems likely that only long-term psychotherapy, if anything, would effect significant change. However, perhaps some neurotic conditions might be amenable to medium-term psychotherapy, particularly if the condition was appropriately treated by behavioral therapy, which is no

longer limited to the treatment of monosymptomatic conditions (Rachman & Wilson, 1980). However, other factors, particularly mood, may be accessible to modification through relatively brief situation-specific psychotherapeutic intervention.

The psi-related psychological factors include mood (Carpenter, 1977), anxiety level (Kanthamani & Rao, 1973; Nicol & Humphrey, 1953; Ballard, 1977; Palmer, 1978), relationship with and attitudes towards the ESP test administrator (Anderson & Gregory, 1959), neuroticism (Kanthamani, 1968; Palmer, 1978), openness (L. W. Braud, 1976, 1977), expansiveness (Palmer, 1977; Smith & Humphrey, 1946) and motivation (Schmeidler, 1974). An extensive review of this work is not possible here, but a few examples will illustrate my point.

The fairly robust relationship between extraversion and positive ESP scoring which has been frequently noted (Palmer, 1977) may disguise a fairly strong inverse relationship between neuroticism and ESP scoring which might be responsible for the reported results. Most extraversion scales, such as the Minnesota Multiphasic Personality Profile (Jackson & Messick, 1962) and Guilford scales (Guilford, 1959), show a high negative intercorrelation between extraversion and measures of social adjustment. Kanthamani (1968) reported a correlation of 0.63 among her subjects between the neuroticism and extraversion factors of Cattell's High School Personality Questionnaire. When neuroticism was partialled out of the relation between extraversion and ESP, this relationship became non-significant. Partialing out extraversion had little effect on the neuroticism-ESP relationship. Only in Eysenck's scales are extraversion and neuroticism fairly orthogonal, but these scales have not been consistent predictors of ESP performance.

Several studies have indicated effects of mood upon ESP scoring (see e.g., Carpenter, 1977; Palmer, 1978, for reviews of this work). Since moods are complex and can be categorized into many components by factorial analysis (Nowlis, 1965) and there is evidence (Schmeidler & Craig, 1972) that the relationship between psi performance and mood may be situation specific and may interact with personality, work to date must be viewed cautiously. However, a general trend can be discerned, whereby happier mood is associated with ESP hitting and unhappier mood is associated with ESP missing (Carpenter, 1977).

In a longitudinal study of clock-card forced-choice ESP by Fisk and West (1956) which of all the reported ESP/mood studies most resembles the DDPK training situation (because of the repeated testing situation—all subjects in the Fisk and West study completed at least 96 trials, working on a daily basis), significantly positive scoring was associated with ESP sessions where the subjects' moods were given the

highest rating as "pleasurable." These results are obviously compatible with the findings from Piezo-PK training reviewed above, where the effects of negative impacts in DDPK trainees' lives were taken to be mediated largely by their effects on mood. An implication of this is that the deliberate manipulation of mood may be effective in increasing ESP performance. Clinical techniques may have relevance in this domain, if deficits in mood are caused by psychological factors which are open to amelioration by psychotherapeutic means.

Somewhat surprisingly, only two experimental studies of the effects of psychotherapy on psi performance have been reported (Hudesman & Schmeidler, 1971, 1976) using respectively, a group of three student psychotherapy clients and a single psychoanalytic patient. The second study includes a description of attempts to perform four other studies in the same topic area which were defeated by practical problems. In the two fully reported studies, psychotherapy was not deliberately directed to factors which were believed to affect ESP performance. In the first study, the therapy sessions were rated for therapeutic progress by the psychotherapist. The sessions were divided into four groups according to therapy rating and, although the best quartile was not significantly different from the second best quartile in terms of ESP scoring, using an ANOVA measure, the ESP scoring of the best quartile was significantly better than the two poorest quartiles ($P = .02$ and $P = .05$). For two of the patients, ESP scores were exceptionally good in one session each. While blind to the ESP scores, the therapist identified these sessions as those where the two patients showed the greatest progress. Since measures of mood were not taken, the mechanism of this effect cannot be inferred with certainty.

In the second study (Hudesman & Schmeidler, 1976), a single client in psychoanalytically oriented therapy was administered an ESP test and a mood checklist both before and after 24 therapy sessions. It was found that the client's changes in mood correlated positively with ESP success ($R = .84$, $P = .06$) and the variance of his ESP scores was significantly below chance after the therapy sessions ($P < .002$) and was also significantly lower than the variance before the sessions ($P < .05$). ESP success and ESP variance were not correlated. The results were interpreted as showing changes in ESP scoring as a result of the mobilization of the client's ego defenses.

The experimenter effect has been noted as having a powerful influence on psi scores (White, 1976, 1977; Kennedy & Taddonio, 1976). Since experimenter effects appear to be unavoidable in parapsychology, optimizing those aspects of experimenter performance which are subject to change would seem to be a worthwhile objective. Since some

components of the experimenter effect seem to be mediated by the experimenter's style of social behavior (Schmeidler & Maher, 1981; Honorton, Ramsey & Cabibbo, 1975), it could be argued that psychotherapeutic treatment of experimenters who experienced difficulty in eliciting psi from their experimental participants might be effective in promoting better psi performance. Equally, clinical intervention into the participant/experimenter relationship might also be worth trying in some cases.

6. A Cautionary Note Regarding Psychotherapies

Depth psychologies such as Freudian psychoanalysis are only a small subset of a diverse collection of psychotherapies. There is no single "psychotherapy," but a rather varied assortment of techniques and theoretical constructions showing wide variations in approach. The evaluation of the effectiveness of the various "talking" psychotherapies is made difficult by the fact that virtually no methodologically satisfactory outcome studies have been published (Rachman & Wilson, 1980). The comparative outcome studies which have been published tend to show that all psychotherapies (except behavioral therapies) produce similar remission rates and that it is not clear that their remission rates differ significantly from the spontaneous remission rate in most cases. This sobering thought must be born in mind when considering clinical approaches to psi enhancement. However, the psychotherapies are historically very recent developments and the absence of adequate outcome studies will presumably be remedied in time. Certainly behavior therapy appears to produce outcomes which are better than the "talking" psychotherapies and better than the spontaneous remission rate (Kazdin & Wilson, 1978), and may well be the approach of choice in psi enhancement. Ironically, the use of therapeutic techniques in parapsychological studies may represent a well-controlled domain for testing the efficacy of such techniques in facilitating well-defined behaviors!

7. Conclusions

It has been argued that despite the contrary mind-set of most experimentalists, the laboratory represents as much of an arena for "real-life," with its share of real-life dramas and psychological stresses, as anywhere else. As such, acknowledgement of the psychological and social dynamics of the parapsychology laboratory and their impacts on the experimenters and experimental participants cannot be avoided. Observations from longitudinal training of Piezo-PK have suggested

very strongly that a number of psychological factors which can inhibit PK performance have clinical dimensions. This is to say that these factors appear to relate to the emotional life of the trainees and experimenters in PK training studies and may be alterable by psychotherapeutic means. Disregard of, and the ensuing lack of control over, these factors may be partly responsible for the unpredictability and variability of psi.

Measurement of these factors could be performed in a convergent fashion, using conventional psychometrics, behavioral and (sometimes) physiological indices, projective tests, clinical interview techniques and the methods of anthropological ethnography. The use of qualitative methods for psychological data has been advocated as being complementary to quantitative methods.

In addition to the collection of data relating to clinically relevant psychological factors, the convergent use of psychotherapeutic and other techniques for modifying mood, state anxiety, attitudes and beliefs in attempts to improve the psi performance of the individual would seem worth trying. A brief review was conducted of psychological factors having clinical dimensions which have already been noted in the parapsychological literature. These include mood, state anxiety, expansiveness, motivation and neuroticism. If these factors have an impact on psi performance, which the available evidence suggests they do, the deliberate manipulation of such factors by psychotherapeutic means may prove effective in improving psi performance across a range of tasks. Techniques deriving from behavioral therapy (Gambrill, 1977) and sports psychology may also be of use in this domain (Straub, 1980; Williams, 1986). Those components of the experimenter effect which may be due to social style, mood, state anxiety and expansiveness might be modifiable by therapeutic means, which could also be seen to include a social learning component.

In the present era of the contraction of parapsychology, the exploration of the application of psychotherapy to psi performance may seem to be a luxury. However, at least some of the problems of parapsychology are caused by psi's elusiveness, so that any means whereby psi performance could be improved and made more reliable are potentially valuable. It was suggested that particular attention to the role of performance anxiety in inhibiting psi performance under "demonstration" conditions might prove of value in permitting the development of methods based on behavior therapy for alleviating performance anxiety. The long term benefits of making psi performances more robust to observation by skeptical or critical witnesses are obvious. Outcome studies of the non-depth psychological therapies seem at

present to be deficient, and to not demonstrate a marked differential between treatment and no treatment, excepting some of the behavior therapies.

The application of psychotherapies to psi enhancement should therefore be approached with caution, but parapsychology is in a good position to provide methodologically sound validation of the positive effects of specific therapeutic procedures on psi performance. The only study directly relevant to this hypothesis (Hudesman & Schmeidler, 1971) clearly showed an association between therapy sessions where progress was reported and ESP scoring. It remains for adventurous parapsychologists to explore the application of psychotherapy to the enhancement of psi performance.

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DISCUSSION

STANFORD: I certainly agree with you that personal and interpersonal factors, phenomena, consequences of interaction, interpersonal interaction and so forth need to be considered, but I want to point out that there is a sore need that they be considered in other areas than just parapsychology. The reason some psychological researchers act this way is because it is the way they have been trained in graduate school and undergraduate school. People are treated like parts of a machine that we put together like tinker toys. We get what we want through manipulation, but you can still be very rigorous. You can be objective. You can keep things constant across experimental conditions, not getting sloppy, but still consider the needs of the individual. In fact, I would maintain that many experimentalists engage in spurious experimental control in the sense that things do inadvertently vary across conditions because investigators may be totally unaware of the way

subjects are reacting. When I teach my graduate social psychology course I emphasize as part of the segment on the social psychology experiment, that the matter of communication, rapport between subject and experimenter, must be established beforehand so that you can bring people to a common starting point for your study so they have a common understanding of what you are trying to do together. So I don't think it stops with parapsychology. Those who are experimentally inclined sometimes fail to take heed of where the individual is when you begin your experiment. This is simply a source of error variance in the studies that reduces the chance of any statistical significance at all. And yet this kind of thing is too much ignored in human psychology experimentation. We recognize it in rat experiments when we let the animals fully explore the maze before we ever start the study so that they are familiar with it, but in human work, subjects walk in and press the button, all the stimuli come on the screen, and so forth. Now you did wake me up, Julian. I would like to suggest that there is a potentially very important phenomenon that we need to take into consideration in several respects in parapsychology. It comes out in social psychology. This is the self-handicapping phenomenon. First, I am a little bothered that you may be taking it too seriously in terms of the way you literally state it. I know you don't really think this way, but in an enthusiastic way you are stating the fact that people will tell you about their horrible day at work, for example, but it is more likely to occur after they have failed the test.

ISAACS: Yes, that is what we found.

STANFORD: There is a lot of research outside of parapsychology that shows that same thing. This is not a unique characteristic of parapsychological subjects. The very same phenomenon could tell us something that is extremely important, because self-handicapping is a circumstance in which an individual is in a situation where he or she is not sure of the source of his or her success, how closely it depends upon their own efforts. This has actually been studied outside of parapsychology and it is the paradigm in parapsychology. I mean that people typically do not know exactly how to control their psi performances. They do not know how the crucial events depend on their efforts. What has been shown in the literature outside of parapsychology is that under those circumstances, given their "druthers," given what they really like, people will often tend to select a handicap. Work under a difficult circumstance. Work on an impossibly difficult task. Why? Because if you fail there is no threat to self-esteem or to others' views of your ability. What I would suggest is that you might allow people an opportunity for self-handicapping. Let them know that this is a little beyond ex-

pectation. You do not put limits on what they might be able to do, but there are different ways to do it. We can talk about some of this at other times. But nonetheless it has been shown in work outside of parapsychology that sometimes when people are allowed to help self-handicap in certain ways they actually put more effort into it than otherwise. In terms of psychological measurements of what is going on in the experiment, we need to consider the distinction of obtrusive and unobtrusive measures. Unobtrusive measures are coming into play more and more outside of parapsychology. For instance, when tape-recording utterances during a session and doing content analysis where subjects are not focused upon it, you don't ask them questions about what is going on or they become self-conscious. Rather you look at what goes on and analyze it in a way that does not make them self-conscious and therefore alter their internal space.

ISAACS: Thank you! That is a good point. We were involved in longitudinal studies with the same individuals over a period of time and therefore what we sowed in terms of interpersonal relationships, we reaped. The kinds of relationships we generated were made very clear to us because we observed, week after week, the effects of what was going on there. I agree with you about the self-handicapping phenomenon. There is a problem which we face, especially in the context of Batcheldor's theory, as Jürgen would be aware. Batcheldor's theory says the participant must believe that PK is happening and that success is possible. One can try to build the subject's confidence up and say "yes, you can do it, yes, you can do it," but that may be too threatening because it may seem to permit no acceptable excuse for failure. This is a complex situation where we have to take that into account. One of the factors that I wanted to comment on and did not have time for in my paper was that maybe one of the releases for performance anxiety is the belief that the events are already occurring. And this may be how the Batcheldor approach works rather than or maybe in addition to suggestion. In other words, Batcheldor has always said "belief acts as a suggestion which makes the unconscious mind create PK." Maybe what is happening is that when the participants perceive the system is responding to them (and we had trouble in creating this perception because we did not make our systems at SRI look labile enough) at the point where they see the system going their way they then don't have to try anymore. They can afford to sit back and become more passive and less anxious about their performance. So I think that these are some of the complex factors which interact with the issue of self-handicapping, although I certainly take your point.

SCHLITZ: I think that our emphasis on experimental work in para-

psychology perhaps was a little over-stated in your observation that qualitative methods have their greatest impact in terms of providing experimental stimulation or ideas for hypotheses to be tested. In fact I think one of the beauties of qualitative methodologies is that they provide a means of mapping consciousness, both implicit and explicit, of psi experiences, whether that be objectively validated or not. I think also that it provides a means of getting at some of the social and cultural factors that lead to doing this kind of research and having these kinds of experiences in the first place. The second thing I would like to say is that I think we need to be careful about making generalizations based on some of these phenomenological insights that you gain through your qualitative analysis. One of the things that I think qualitative methods provide is a sensitivity to idiosyncrasies amongst people. In my own work I have been doing interviews with successful psi experimenters like William Braud, Helmut Schmidt, Charles Honorton. You find that the phenomenological detail that goes into their accounts of what makes a successful experiment is very different from one experimenter to the other. The issue of stress, in particular, came up because someone like Braud finds that it is absolutely necessary to preclude any kind of stress from the situation. Somebody like Honorton, on the other hand, just reported to me on an experiment he had done with Malcolm Bessent where he ended up with highly significant results in his experiments under circumstances where he was absolutely sure that he was not going to get any results at all. These expectations and the subjective qualitative detail is not always definitive of any nature of psi *per se*.

ISAACS: I hope that I prefaced my talk with the qualification that these were informal observations and therefore not necessarily generalizable. I certainly agree with your point.

SCHLITZ: Another thing about the qualitative method is that it helps us to identify our own biases and presuppositions. One of the things that comes through both in the comments earlier and in your presentation is that we are really emphasizing generalization, uniformities and law-like relationships about psi. It may be that we are forcing psi through a theoretical or methodological filter that has nothing to do with the actual properties of the phenomena themselves.

ISAACS: I think that what we are looking for are generalizations, but I do not expect to get instant generalizations that hold true for simple factors or simple sets of factors. If we had some very complex mathematical description of the factors affecting an experiment, we might find that elements of that factor set would generalize. But what we are doing now is much more primitive, less precise and less complex.

Therefore it would be unrealistic to expect currently known psychological factors to be simply generalizable. Subject populations differ and there are lots of other factors which are currently not trapped by the quantitative methods that we use. This is one of my big beefs about quantitative methods. What cannot be done is to produce a quantitative constrained description with enough complexity to get something which will be generalizable, especially if most factors as they seem to be now are rather weak. If you have a single really strong factor, maybe that might be more generalizable, but what I expect to find is a whole complex of weaker factors which together determine the outcome. It is messy and it is difficult and it is going to take a lot of time to do it because psi seems to be a phenomenon which is determined by very highly complex determinants and therefore we can not generalize simply.

NEPPE: Julian, I must say you have stimulated and disappointed me. You have stimulated me because I was thinking that the kind of environment that you have created with your enormous enthusiasm may be just the right kind of environment that you need for that special experiment that you were referring to beforehand that you wanted to do. But you have disappointed me because we agree and because of this we will have difficulty debating a certain issue! A lot of what you have said today I am going to talk about tomorrow from the point of view of trying to quantitate qualitative analysis. I think that what you emphasized from the point of view of psychological variables is something that is very often ignored in parapsychology. When I try and speak to non-parapsychologists about parapsychology they at times look askance implying what kind of science is this, a pseudo-science that people seem to be interested in? I have tried to explain to them that in fact parapsychology ought to be a prerequisite course in any form of psychological endeavor and possibly any form of scientific endeavor. It has formulated the essence of trying to eliminate areas for alternative experimental error. Yet with that formulation of essence, certain aspects have at times been ignored. These are the psychological factors; I think that you are emphasizing a lot of this today. You mentioned that at times subjects will state afterwards that they did not feel so good today or something had upset them beforehand and that is why they could not succeed. How often do experimenters really record that kind of result? It is something which we notice a lot in psychiatry. In fact I call it the "by-the-way syndrome." At the end of the interview, as the patient is going out the door, the patient says, "by the way, Doctor, you know I am having a problem with my husband." It is this that is the essence of what the patient has really wanted to talk about.

ISAACS: I wish I could develop a technique which would enable people to divulge that "by-the-way factor" right at the beginning of their PK session.

NEPPE: But then it is not a "by-the-way factor." If after the "by-the-way factor" you then did another session with the subject it would be very interesting to look at the results.

ISAACS: We thought of lengthening the sessions, but we were already at an hour and a half and if we were going to lengthen it up to two hours or so it would become impossibly cumbersome.

NEPPE: Well, maybe you ought to shorten the sessions to 25 minutes, wait for the "by-the-way factor" and then have another 25 minute session.

ISAACS: That is a helpful proposal, thank you.

MORRIS: One important area is the idea of coding the quantitatively rich aspects of our procedures more. I think that one of the most valuable things that we can and need to learn is a better way of expressing these aspects so that they will be registered in experimental literature more effectively. On more than one occasion I have had portions of my own papers truncated by editors for space reasons that would have contained that kind of material. Secondly, you noted performance anxiety as one factor that you regarded as very important. I think it is a fairly major factor, but it also is likely, perhaps, to be best understood in terms of what lies behind it. There are a couple of other factors that you have implicitly acknowledged, but have not commented on much, that might illustrate this. One that is being discussed in some psychological research over in Britain is the resistance to being learned about. I think this is very important especially as far as experimenters are concerned. They always had their own role perceived as the one that does the learning about rather than the one being learned about. There is a sort of one-sided power-sharing dynamic that oftentimes can go on there. Secondly, there is the phenomenon, drawn a lot from sports psychology, of the fear of success. The fear of success as discussed in the growing literature on it can sometimes be based on concerns that are very realistic. Some people fear success because it means they will have to be on the road and away from their families. They just do not want to do it any more. Other kinds of fear of success can have somewhat deeper, perhaps more psychoanalytically related roots. As they grow up one of their parents may conclude that there is only room for one expert in this family and that is yours truly, the parent himself, and anyone else should not even consider it. So they still have that baggage with them. Exploring what lies behind many of these surface concepts such as performance anxiety, the reluctance to being learned

about and fear of success will really take some digging. I think it is eminently worthwhile.

HARARY: I think it is perhaps most important to look at the fear of success on the part of the experimenters. I once wrote a paper called "Fear of Success in Psi Research." It is not the participants that I am worried about, it is the people doing the experiment. For example, you had a massive "row" with one of your experimental participants when she was doing well. I would not view that as being a spontaneous random event. I think that it probably has something to do with your personal experience of watching this person perform. You could probably give me all sorts of reasons for what was going on, but I think that there is an emotional resistance not only on the part of the designated participant, but more often on the part of the others involved in the experiment. It has certainly been my experience in the psi field, that when you really start to do something serious the people around you start to fear the perceived relative loss of their own power. They are afraid that you are taking it away from them because you are doing the very thing that is supposedly being studied. So in the field we have seen a kind of dichotomy. If you are the person being studied, you could not possibly know what is going on. So we can keep our power that way because I will study you. If you also know what is going on, if you also have a brain in your head and you are also showing some kind of actual psi functioning, then you are really a threat and you are apt to get into some really transparent arguments with some very insecure fellow researchers. If you understand the frame of reference of the participant, then the experimental situation should relate to that. If you require a subject to look calmly at an image on the computer, or whatever it is, then by definition you have structured your experiment to ask for a certain state of mind. It is not then at all fair to say that that state of mind is responsible and necessary for the functioning in general. Many people have made that mistake throughout the history of psi research.

ISAACS: You are quite right. In fact, we did it in the sense that, in some cases, when we had participants who encountered really hot emotional issues we found that they got signals while they were talking about the hot issues, rather like a poltergeist event. We would do the processing of the hot issues as the way of inducing PK. We used different types of induction strategies for different types of participant. This could be developed further. I agree with you that experimenters are resistant to psi. Remember that wonderful comment by D. J. West perhaps the most resistant psi investigator of all time. This is Professor Donald J. West who is ex-president of the British Society for Psychical

Research. He wrote that he spent years as the experimental officer of the British SPR chasing around after psi, but strangely whenever he found it he did not stay. He went off on the chase again. I also remember one of my early subjects who was producing colossal amounts of PK in training sessions six and seven, but in the two days before session eight she got drunk twice, had no sleep and therefore emerged in a totally wrecked state for her eighth training session and we got no PK whatsoever. I think that that was probably a symptom of resistance in response to our fear of "too much PK" happening in session eight. The row with the subject was over an issue which is very germane and interesting to American parapsychological research. I will tell you the inside scoop on that row. The subject said that she had a concern that our research might be used for military purposes. At the time I was considering applying to the Army for a grant to study PK, not for military purposes, but for doing pure research in PK. But it was to a military authority. When she threatened my ability to go to an agency for a grant I freaked and it was not resistance to psi. It was a reaction to the threat of having no money. I think that was the actual issue rather than resistance to her PK.

PSYCHIC UNITY: A MEETING GROUND FOR PARAPSYCHOLOGY AND ANTHROPOLOGY

MARILYN J. SCHLITZ

Professor E talks excitedly, taking this opportunity to speculate on a topic of great interest and importance for the field of archaeology. This wiry, good natured archaeologist, soundly grounded in a rigid academic background, begins the exposition. "The issue is diffusion versus independent invention," he explains. Indeed a central issue in anthropological discourse, Dr. E is referring to a long-term debate over the cause of parallel cultural traits in regions of the world that have had no known contact. For example, how is it that there are many overlapping cultural traits between archaeological sites in both Mesoamerica and China, cultural artifacts such as complex calendars with identical names for many of the years? One obvious explanation, Dr. E carefully notes, is cultural contact and various elaborate schemes have been constructed to explore this hypothesis. Still, there is no clear evidence to show that there was any opportunity for the diffusion of cultural information via direct or indirect contact between the two cultural groups. Perhaps then it was independent invention, a concept that is poorly understood, but which remains highly intriguing in the anthropological literature.

From another domain of scholarship, folklore, we find more examples of cultural parallels that lack any clear causal explanation and which have stimulated the curiosity of many social scientists over the years. Vladimir Propp (1928), for example, provided a detailed structural analysis of a Russian folklore genre referred to as "wondertales." He observed a consistent pattern in the function of characters in the progression of the narrative and identified identical sequences of functions. Later studies of American Indian folktales by Allan Dundes (1964) and African tales by Denise Paulme (1963), identified the same structural characteristics, despite vast distances and apparent spatial isolation of the three cultural groups.

The texture of these examples is reminiscent of parapsychological reports. Take, for example, a remote viewing experiment in which a

young woman sits in a quiet room and describes her impressions of a distant friend's physical surroundings. Her description is structurally analyzed by comparing it with the physical characteristics of her friend's location. After many trials, the descriptions are found to correctly match the locations, despite the fact that there was no form of conventional information transfer operating. A cultural parallel has occurred within a laboratory setting. The use of statistics allows us to conclude that the results are beyond those expected by chance—a factor that is more difficult to ascertain in the spontaneous cases previously mentioned.

Various explanations have been put forth to identify the causes of cultural parallels such as those of the Mesoamerican/Chinese calendars, the Russian/Native American Indian/African wondertales, or remote viewing experiments. These include cultural ecology approaches, which give environment a determining role in shaping culture, the sociology of group approaches, epitomized in Durkheim's collective consciousness, a concept which is developed within the framework of group activities, and psychic unity approaches, which explore common features of human consciousness that transcend physical boundaries. This third group of perspectives is explored in detail here as it reflects a particular genre of theory, running across the disciplines of anthropology, folklore, parapsychology and psychology.

I am not arguing that cultural parallels such as the wondertale can be accounted for by parapsychological explanations, or *vice versa*. Such an approach would work against the interpretative framework that will be developed here. Rather than entering into a search for one causal explanation, I will entertain a sense of aesthetics, probing the textual relationship that exists between accounts and interpretations of cultural parallels and psychic unity. In so doing, the mode of presentation engages in a process of cross-disciplinary juxtaposition. Through such an analytical and stylistic dialectic, one finds a reading of individual texts married to a synthesis of discourse. The perspective adopted here is epistemologically relative, each theory or text being treated as an interpretation and not as a dogmatic truth. Despite methodological and theoretical differences underlying various conceptualizations of the psychic unity problematic, the common thread is a principal of constraints; common calendars, folktales and remote viewing experiences are the result of restrictions which operate upon thought, providing limits to human psychological and sociocultural variability. Pertinent to this observation is a discussion of the utility inherent in a search for law-like causal explanations in the exploration of human consciousness.

Schools of Thought

Unilinear Evolution. To explore the concept of cultural parallels as evidence of shared mental processes, our analysis of the anthropological literature begins with the school of unilinear evolution. Representative of this cadre were Edward Tylor (1958), Lewis Henry Morgan (1877), George Lawrence Gomme (1892) and Andrew Lang (1901), scholars who traced the stages of human development as though it were a linear progression. These "armchair" anthropologists argued that culture (singular) evolves through a series of stages, ranging from savagery at the nadir to civilization at the zenith. Central to studies of culture for the evolutionists was the Comparative method, employed to support the theory that sociocultural systems observable in the present bear varying degrees of resemblance to extinct cultures (Bee, 1974). By selecting out elements of the cultural repertoire, such as games, riddles and magical practices (Tylor, 1958), that exist in both "savage" and "civilized" groups, evolutionists "proved" that certain phenomena, originating under a set of causal conditions, continue or "survive" even when the original conditions no longer exist.

Within the school of unilinear evolution, analytical emphasis was placed on similarities rather than differences between various cultural groups. To account for common traits found in various parts of the world, the evolutionists developed the concept of "psychic unity." It was reasoned that because all men have the same origins, their mode of thinking must be similar; as such, independent invention explained the occurrence of common traits in varying parts of the world. As noted by Lang (1893), in his discussion of widespread similarities in myths, for example: "Similar conditions of mind produce similar practices, apart from identity of race, or borrowing of ideas and manners" (p. 22).

Historical Particularism. The cultural evolutionists came under great fire from scholars such as Franz Boas, both for their philosophy as well as for their method. The school of historical particularism emerged, its proponents arguing that many cultures exist and that their unique developments are based on unique historical circumstances. Under special scrutiny was the evolutionists' use of the Comparative method to "prove" their claim of "psychic unity." Boas argued that the evolutionists manipulated cultural artifacts, pulling them out of their unique cultural contexts in order to support the unilinear evolution schema. Arguing that anthropology needed a more rigorous methodology, Boas focused on the transmission of cultural traits as a result

of diffusion over a limited geographical area. While he rejected the occult undertones of "psychic unity," however, Boas did not rule out certain universal patterns of human psychology to explain cultural parallels. Rather, he employed the concept of "limited possibilities" (Erasmus, 1950), in which similar logical, natural, or physical limitations operate on the development of traits and customs.

Boas (1959) equated the problem of cultural parallels with the independent development of homologous forms in genetics, arguing that cultural parallels are in fact more probable. In his own words: ". . . It may be admitted that it is exceedingly difficult to give absolutely indisputable proof of the independent origin of analogous cultural data. Nevertheless, the distribution of isolated customs in regions far apart admits of the argument that they were transmitted from tribe to tribe and lost in intervening territory . . . There are individual cases of inventions or ideas in lands far apart that cannot be proved to be historically connected" (p. 252-53).

Reflecting on the sphere of psi research, we find ourselves on analogous ground regarding the independent invention/diffusion argument. Investigations making a claim for the paranormal argue that information transfer between one individual and another is possible without sensory interactions. While a variety of criticisms have been leveled against this interpretation (see Child, 1987; Kurtz, 1985), the most frequently sounded argument is that of sensory cueing, whereby the explanation for matches between a remote viewer's description and the target site, for example, is attributed to some form of direct or indirect contact. Like the independent invention/diffusion controversy, however, this view fails to account for many careful observations that rule out conventional information transfer.

Psychoanalysis. While the preceding overview reveals a glimmer of interest in the cognitive dimensions of psychic unity, we find only passing interest in any conceptualization of human consciousness. With the development of psychoanalysis, we find the issue of cultural parallels moving into the realm of depth psychology. Originating with Sigmund Freud (1939, 1961) and developed by scholars such as Ernest Jones (1965), this view argued that cultural phenomena, such as given folklore genre, represent manifestations of unconscious drives and wishes, shared by all people. Such psychic commonalities, which limit man's variability, explain the cross-cultural recurrence of dramatic narratives such as the Oedipal myth.

Developing what almost reads as myth itself, Freud (1939, 1961) argued for a historical core upon which to build the collective basis of neuroticism, of which the Oedipal myth was seen as a collective pro-

jection. Very simply stated man, according to Freud's historical interpretation, originally lived in small hordes, each under the domination of a strong male. All females were the leader's property; the sons were driven out of the horde by the jealous father figure who would not compete for the affections of his wives. The sons formed small communities on the outskirts of their father's domain. Eventually they joined forces and killed the father, a man whom they resented, yet also admired. Their admiration led to guilt for what they had done. Rituals were established to pay homage to the deceased father figure and social sanctions were instated against incest. Consciously, the ego was unable to cope with the guilt, which led to its repression at the level of the id.

A common memory image of this shared historical event, according to Freud, has been stored in the collective unconscious "memory-traces" of all people, projected in the form of a common myth. Central to his conceptualization of a collective consciousness, Freud (1939) described these "memory traces" in the following way: ". . . there exists an inheritance of memory traces of what our forefathers experienced, quite independently of direct communication and of the influence of education by example. When I speak of an old tradition still alive in a people, of the formation of a national character, it is such an inherited tradition, and not one carried on by word of mouth, that I have in mind . . . If we accept the continued existence of such memory traces in our archaic inheritance, then we have bridged the gap between individual and mass psychology and can treat peoples as we do the individual neurotic" (pp. 127-128).

Freud's influence can be clearly read in the parapsychological literature, both in terms of psi's apparently unconscious nature, as well as in the conceptualization of collective memories. Tyrell, for example, postulated a two-stage process in the acquisition of psi information. At the first stage, information is retrieved by the unconscious mind, although Tyrell does not spell out the mechanism by which this occurs. The acquired knowledge is then brought into consciousness with the assistance of "mediating vehicles" such as imagery and dreams. J. B. Rhine, too, argued for an unconscious interpretation of the psi process, noting that subjects are typically unable to distinguish psi information from chance guesses in the forced-choice paradigm. Considering the free-response program, an interest in unconscious dimensions inherent in the acquisition of psi information was a catalyst for the development of the altered states approaches to psi, including the Maimonides dream studies and the successful ganzfeld technique.

On another level the formulation of memory traces, though in a somewhat different guise, can also be traced in the parapsychological

literature. Roll (1966), for example, proposed that localized impersonal memory traces of mental and physical events are contained in objects. The memory system of an observer can then interact with the quasi-physical memory trace, accounting for cases of psychometry; normal memory, according to this view, may be thought of in terms of brain psychometry. Still, in terms of a concept of cultural parallels, Roll's formulation falls short, for it predicts that a subject would have little success on an ESP task if the target were not in close proximity.

The formulation of "memory traces" is inherent in Carl Jung's development of the "collective unconscious." Jung (1959) noted that: ". . . I have chosen the term collective because this part of the unconscious is not individual but universal; in contrast to the personal psyche, it has contents and modes of behaviour that are more or less the same everywhere and in all individuals. It is, in other words, identical in all men and thus constitutes a common psychic substrate of a supra-personal nature which is present in every one of us" (p. 4).

Jung discussed myth as a collective representation of archetypes, mosaics of energy and dynamic forces within the collective unconscious, that are revealed to us through fantasies, dreams, works of art and myths. These expressions of imagery provide a means of acting out unconscious dramas; because all men have the same unconscious images, Jung expected the co-occurrence of common myth themes and structures among various cultural groups at different points in history. Like Freud, he also postulated that individuals retain memories of the entire history of humankind.

The concept of a collective consciousness has been considered by many researchers hoping to explain reports of extrasensory perception. Stokes (1987) reviews a number of nonlocal theories, those which "postulate the existence of a group mind as a real entity, and thus abolish the absolute boundary between separate, isolated individual minds" (p. 156). William James, for example, formulated the notion of a "cosmic consciousness," a forum for the merging of individual minds during mystical experiences. Price (1939, 1940) argued that the occurrence of telepathy between minds ruled out any construction of a plurality of minds. He framed his interpretation by suggesting that biologically meaningless information in normal waking states is repressed. This psychological mechanism, it was argued, could be relaxed during unconscious states such as dreaming or trance possession. For Tyrell (1953), the human personality is made up of a hierarchy of selves. At the level of the unconscious, "the midlevel centres possess in some degree both the qualities of selfhood and of otherness from self" (p. 119). Collaboration between the midlevel components of sep-

arate minds is considered to be an explanation for telepathy. Carington (1949) articulated a worldview in which the universe is composed of atomistic mental events (cognita), related by the laws of association, a formulation which he felt could account for telepathy. Individual minds, according to this view, are nothing more than clusters of highly associated cognita. An associative link is established between two ideas, A and B, if the agent happens to be thinking of cognita A at the same time that he is exposed to cognitum B. A percipient should be aware of an agent's experience if she thinks of A, which will call up the association B. The more connecting ideas shared by the agent and the percipient, the more likely a transfer of telepathic information. Stokes concludes his review of the collective mind theories of psi by noting that: "Obviously, if telepathy exists, human mind can no longer be thought of as entirely separate objects and one person's conscious mind may be thought of as part of the unconscious mind of another person" (p. 163).

The now popular conceptualization of morphogenetic fields articulated by Rupert Sheldrake (1981) is of relevance at this point, for it provides a model of nonlocal collective memory that has been used to account for cultural parallels that emerge in the form of both myth and psi. In a paper addressed to the Society for Psychical Research in 1982, Sheldrake articulated the situation in the following manner: "Most people take it for granted that memories are somehow stored inside the brain. The idea that experiences leave traces or imprints in brain tissue has a long ancestry. Aristotle expressed this idea in terms of the analogy of the impressions left by seals in wax. From time to time the analogies have been updated, the latest being provided by the optical technique of holography.

"In spite of the fact that there is very little evidence for the existence of memory traces, and in spite of the philosophical difficulties raised by any mechanistic theory of memory, the trace theory is rarely questioned. The main reason seems to be the lack of a plausible alternative. If memories are not stored inside the brain, then how do they persist?"

Essentially, Sheldrake argues that form, development and behavior of living organisms are shaped and maintained by specific fields as yet unrecognized by any science. These morphic fields are molded by the form and behavior of past organisms of the same species through direct connections across both space and time. Learning of a new skill, for example, is easier for others over time, due to the increasing formation of the nonlocal field.

Various experimental tests of Sheldrake's recent theory have been undertaken in the last several years, and it is at this point that we are

taken into the realm of folklore. In one study (Kernan, 1983), Shelldrake commissioned a Japanese poet to give him three very similar rhymes: a real Japanese nursery rhyme, a poem of his own, and a gibberish rhyme. People in America were asked to read the rhymes and to see which was easiest to memorize. The results showed that the real rhyme was the easiest and the nonsense rhyme the hardest, results expected by Shelldrake's theory. Further tests (Shelldrake, 1986), also confirming the theory of morphic resonance, involved the learning of Hebrew words taken from the Bible; half of the words were common and half were rare. Each of the words was also rearranged into meaningless anagrams. Students were shown one word at a time and asked to write its meaning in English, also estimating their confidence in the word's meaning. While their guesses for all words were wrong, their confidence ratings for the real words were higher than for the scrambled words and twice as strong for the common words as for the rare words.

Of course, there are limitations to Shelldrake's approach. For one, not all empirical tests carried out by the British scholar have provided unequivocal support for the morphic resonance hypothesis. Further, it has been argued that Shelldrake's results are not an indication of any nonlocal field, so much as they are suggestive of the fact that some words or rhymes are more readily learnable than others, hence their initial popularity (Blackmore, 1985). While this argument has bearing on Shelldrake's interpretation, it does not take us away from the notion of some form of psychic unity.

Returning to Jung in this exploration of psychic unity and cultural parallels, we find that he was influenced by the work of Austrian biologist, Paul Kammerer, who began early in the 20th Century to collect examples of unexplained clusterings of events, which he termed seriality. This he defined as "a lawful recurrence, or clustering, in time and space whereby individual members of the sequence—as far as can be ascertained by careful analysis—are not connected by the same active source." Such acausal patterns, according to Kammerer, are analogous to an underlying harmony of nature.

Jung introduced the idea of meaning into the pattern suggested by Kammerer, formulating his concept of synchronicity. He recounts many examples of meaningful coincidence, the most famous perhaps being the case of the golden scarab: "A young woman I was treating had, at a critical moment, a dream in which she was given a golden scarab. While she was telling me this dream I sat with my back to the closed window. Suddenly, I heard a noise behind me, like a gentle tapping. I turned round and saw a flying insect knocking against the windowpane from outside. I opened the window and caught the creature in the air

as it flew in. It was the nearest analogy to a golden scarab that one finds in our latitudes, a scarabaeid beetle, the common rose-chaffer (*Cetonia aurata*) which contrary to its usual habits, had evidently felt an urge to get into a dark room at this particular moment" (p. 22). Once the synchronicity had occurred, the patient reportedly moved rapidly through her analysis.

The concept of synchronicity, used to account for cultural parallels such as myth and symbol, has also been employed to aid in an interpretation of psi phenomena. In reviewing Jung's book, *Coincidence and Fate* for the *Journal of Parapsychology*, Frederick Knowles (1953) articulates the attraction: "This work suggests that the spontaneous phenomena heretofore studied by parapsychologists may be only a fraction of a very much larger field of coincidence phenomena awaiting exploration and experimental demonstration. The other phenomena may be more common than those which parapsychology has covered so far."

Conceptually, psi experiments may be mapped on to the synchronicity formulation with relative ease. Put simply, they are designed to operationalize meaningful coincidences within a laboratory setting, under conditions that can be evaluated to rule out the probability of chance explanations. Aesthetically represented, what we are seeking is a highly unlikely though objectively meaningful overlap of two complex systems in some measurable degree of harmony. Jung himself used the concept of synchronicity to account for psi results, including large-scale displays of macro-PK, an interpretation which was expanded upon by Hans Bender (1977) in his address to the Parapsychology Foundation.

While the synchronicity interpretation has been embraced to account for cultural parallels, it has also been attacked on several fronts. Heading up the empirical phalanx are psychology of probability scholars, who have shown clearly that people are notoriously bad at estimating the likelihood of an event (Tversky and Kahneman, 1974). On an operational front, various writers have questioned the acausal assumptions that are explicit in Jung's formulation. Braude (1980), for example, argues that "There may still be some way of formulating a theory of meaningful coincidences. But so long as we must explain why the events occurred nonfortuitously, our explanations will be causal explanations" (p. 28). In seeking to understand the dynamics of cultural parallels, Jung, like his genre cohort, was implicitly guided by a quest for law-like relationships in his study of human consciousness.

Structuralism. French structuralism, originating in the work of Claude Levi-Strauss, provides yet another approach to the cultural parallels and psychic unity problematic. As was the case for both Freud and

Jung, myths reflect a hidden logic which is not conscious in the minds of cultural actors, but which can be decoded by an outside analyst. The meaningful and unifying structures of mythology surface, according to the French scholar, through the analysis of myths in the same way that unconscious thought emerges into consciousness through psychoanalysis. His goal was to transform fairy tales into science by discovering structural laws of myth. Where Freud sought to analyze dreams in order to reconstruct individual history, the structural approach addressed the reconstruction of cultural history (Kurzweil, 1980). Myths, according to Levi-Strauss (1967), reflect an intellectual process by which deep-rooted contradictions within a given system of cultural values or norms are transformed, via cultural codes, into more tractable forms that allow contradictions to be encompassed and/or problems resolved (Kronenfeld & Decker, 1979).

Such transformations, which are common to all people, are representative of psychic unity. In stating that "it is in the last resort immaterial whether in this book the thought processes of the South American Indian take shape through the medium of my thought, or whether mine take place through the medium of theirs" (p. 13), Levi-Strauss is arguing that many codes can lie behind any one message and that any code which one human mind can find in a message is there for any other human mind to find. Georges and Dundes (1963) expand on this point when they argue for the universality of folklore genres and their structural-formal features. Any cultural modifications of myth, legend, tale, riddles, proverbs and songs are variations on basic structures that are rooted permanently in human thought, expression and imagination (Ben-Amos, 1976). Likewise, Kurt Ranke (1967) suggested that there are fundamental human needs to which the primary forms of folklore are responses. Because they are psychological rather than social or cultural, Ranke sees folklore genre as universal forms of human expression.

The structural approach is both atemporal and ahistorical. Identification of common cultural codes involves a context-free analysis, in which the intrinsic intelligibility of structures is independent of "all sorts of extraneous elements." The concept of codes, which use familiar sensory data, including natural elements, heavenly bodies, etc., is used to suggest that symbolic cultural products must be decoded to reveal deeper psychic meanings. They are put together based on implicit rules, whereby additional meaning is placed on them, corresponding to the way words acquire additional meaning from their place in an utterance (Honigman, 1976).

To analyze the meaning of myths, one must consider them as prod-

ucts of relationships, not as isolated units. To achieve this goal, Levi-Strauss broke each myth down into short sentences in order to catalog them; functional meanings could be produced from these short sentences only when combined with other such units into bundles.

To best comprehend this, we may consider a linguistic distinction made by Levi-Strauss, this being the dichotomy between synchrony and diachrony. Here we are concerned with *langue* (the language system) and not *parole* (individual speech). Despite conventional use of the term, diachronic is not related to time; rather, it considers changes within a system. An analogy with a chess game was drawn to illustrate this point by Saussure (1959), a structural linguist whose work had a major influence on Levi-Strauss. He described the history of a given language as represented by the game—a synchronic state of the language is represented by a given configuration of the board. Diachrony represents successive changes in the state of the board.

Utilizing this framework, we see that relations of bundles may appear diachronically at remote intervals, but when organized together, they may also be considered as synchronic. To understand the way in which bundles of relationships are linked together to encompass a cultural problem is distinct from any focal concern with the sequential ordering of myths. In fact, meaning can be read between myths of the same type from different cultures and from different historical time periods.

Like Freud, Levi-Strauss argued that the universality of mental processes is illustrated in the Oedipus myth. While different versions of the myth exist, spanning several thousand years, Levi-Strauss analyzed them as one system which provides insights into the nature of human resolution to contradictions between life and death, nature and culture. Bundles of relationships were balanced across the various versions in a fashion resembling that of a musical score to be read as a series of constituent units. A horizontal reading of the units would serve, according to Levi-Strauss's method, to structure the telling of the myth; the myth's meaning would be revealed in the vertical columns. In the Oedipus myth, a common feature in the first column was the "overrating of blood relationships"; an inversion of this, namely the underrating of blood relationships, was represented in the second column. The third column refers to monsters, and the fourth reveals a common meaning for the names in the myth, namely: "difficulties in walking straight and standing upright" (Levi-Strauss, 1963). The fourth column helped to explain the first column, revealing a concern with man's self creation as opposed to the origin of man born from man and woman. A three-dimensional chart was proposed to organize the two dimensional charts so that it would be read diagonally. If all myths could be

so charted, Levi-Strauss argued that a structural law would emerge that would provide orderly analysis from existing chaos (Kurzweil, 1980).

Levi-Strauss's work has been highly stimulating in the anthropological literature, providing a framework for addressing the issue of cultural parallels. To the best of my knowledge, however, there have been no attempts within the parapsychological literature to explore the deep structures that have been articulated by Levi-Strauss. Several areas for potential analysis include the early cross-correspondences as well as contemporary free-response protocols. Like dreams and myths, such materials would provide a doorway into the unconscious processes of individuals who have been separated across time and space.

An Interpretive Forum for the Cultural Parallels Discourse

In this paper, I have focused on the problematic of cultural parallels and psychic unity as it has developed across several academic disciplines. In so doing, the various formulations will now be considered as a whole in an attempt to make sense of the parts. Here we are engaged in a process of reading interpretations into the various views which have been articulated in the scholarly literature. Beyond this, the texts are seen within the context of a larger referential frame; a critical analysis which considers political and economic factors that have tacitly influenced the making of the text, as well as the field of social practices and relationships, will be embraced. The aim of interpretation is not simply more interpretation; rather, it addresses fundamental problems of human existence—aesthetic, practical and theoretical (Rabinow and Sullivan, 1979). The psychic unity/cultural parallels problematic provides us with an especially useful forum for interpretative discourse, because the subject matter has not been amenable to any clear form of empirical certainty.

Inherent in conceptualizations of psychic unity is an emphasis on human affinity rather than diversity and complexity (Clifford, 1985). Common to each of the preceding formulations is a principle of constraints; common calendars, folktales and remote viewing experiences are the result of restrictions which operate upon thought, providing limits on human psychological and sociocultural variability. Each subtext or interpretation can be seen in light of stratigraphic conceptualizations, in which humans are a composite of biological, psychological, social and cultural factors (Geertz, 1973). People are analyzed as though they were made up of layers which can be peeled off one by one, each complete and irreducible in itself and each distinct from the successive

layer. Beneath the layer of cultural influence one finds functional and structural regularities of social organization. Further down is the psychological layer and below that the biological foundations that link human life.

Such an approach epitomizes a search for general laws to account for psychic unity and cultural parallels, identifying uniformities which are predictable in nature and which can tie the pieces of the human puzzle together. Each view aims to identify truth in the course of analysis, although such an approach, while popular in academic literature, has its limitations. French philosopher Michael Foucault, for example, has argued for the relative and socially constructed nature of truth. Every society, according to Foucault, has its regime of truth, the types of discourse which it accepts and makes function as true, the instances and mechanisms which allow one to distinguish true from false statements, the means of sanctioning each, the procedures and techniques which in the acquisition of truth are accorded value and the status of those from whom one accepts that which is true.

In our own society, truth is related to that which has recognizable structure and order and which can be explored within the framework of scientific rules and expectations. Politically speaking, the value attached to the identification of order in nature can be seen as an expression of attempts to assure the perception of order in society. Social control can be maintained as long as the hegemony can sustain the illusion that such a construct pervades all of life. The very language and style of presentation in scholarly discourse are subject to control based on cultural values and norms. In an effort to address the psychic unity problematic, scholarly texts have sought to identify law-like relationships, despite the spontaneous and seemingly uncontrolled occurrence of cultural parallels. While a search for truth has led the various scholars to formulations such as psychic unity, limited possibilities, collective memory, hierarchy of selves, deep structures, etc., it has been a search that is guided, indeed shaped, by implicit cultural guidelines. In structuring the cultural parallels problematic within the framework of constraints, each text has imposed an order on spontaneous phenomena that reflects a hegemonic construction of society. The articulation of truth is based on constraints at the level of scientific discourse.

The point of this discussion is not to argue the right or wrong of the psychic unity problematic, or of any specific interpretation. Nor is it an argument against the utility of scientific discourse. Rather, an interpretative dialectic offers a framework for critique of the preceding conceptualizations—making explicit, though by no means complete,

the social and political factors that shape scholarly discourse, no matter what its subject matter. While we are never free of social constraints, we can at least be clear about their role in shaping our conceptualizations of scientific truth. In the spirit of Nietzsche's existentialism, we must break the tablets before we are free to understand the broader spheres of reality.

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DISCUSSION

NEPPE: I enjoyed that paper. I thought it was very interesting, very worthwhile. You commented about the Sheldrake theory and about nursery rhymes and biblical elements. Even positive results in those circumstances is a reasonably good proof of Sheldrake theory. I have always found this a rather remarkable misconception. The idea of using aspects of Hebrew does not prove the Sheldrake theory. It may be that words have not become common language because they are not linguistically appropriate. These may be less easily acquired than words which are in common language. We do not know how those words have come into language. I do not think that nonsense syllables are equally learnable. Just to put into perspective the reason why I am making this point: it is actually as one of the *New Science* award winners for ideas of testing the Sheldrake research. I am firmly convinced that the only real test of the Sheldrake hypothesis is the one that I put

forward which relates to a rather complex idea pertaining to lignocaine-induced kindling and this has never been tested mainly because it is going to require a great deal of money, something of the order of \$100,000. Until that is done there is probably no available test that has been presented which will test this hypothesis. I am not sure if mine will test it either, because it has inherent within it a link of physiology and pathology. The Sheldrake hypothesis is based on physiological phenomena and it might not extend towards a pathological model. So if it does test it would be very nice. If it does not, it doesn't disprove the hypothesis.

I mention this at length not necessarily because of the Sheldrake hypothesis, but because these points are inherent within the framework of everything you are saying. As I see it, one of the problems of scientific methodology in this whole area has been an attempt to find certain facts, link them to other facts and either call these things causal or acausal. For example, when we look at biological models we find, very commonly, the Gaussian distribution curve. This reflects the limits within which biological and psychological phenomena occur. Nowhere in any of these theories pertaining to synchronicity, and to acausal or causal realities of any sort, does one find any kind of limit. It is expected that these will occur under all circumstances. And this to me is unbelievable. It is like saying light will occur when there is darkness, because there are laws pertaining to light, but that there are no limits to it. I can not accept this. I think that one needs to have some kind of physiological or biological distribution, testing almost at a dose response kind of level.

SCHLITZ: I think the paper addresses your criticism of Sheldrake's theory. I think there are other examples of experimental tests designed to look at his theory. They are probably not subject to the criticism you are raising. There is crystal formation, for example, or reaction time, things that do not involve psychological kinds of interpretations.

NEPPE: The problem with crystal formation is that one has implicit hypotheses based on what should and should not be occurring. At this point in time we are assuming that certain things should not be occurring by chance and yet they are occurring. Possibly there are other laws relating to why these are occurring.

ISAACS: I had two problems with the evidence for the Sheldrake hypothesis. One was that it looked to me as if there was a decline effect with repeated testing, which to me is highly suggestive of placebo or psi effect. Essentially what we are doing is driving the experiment with the experimenter's psi. It seems to me that the problem with Sheldrake's whole position is that if we have independent evidence for

the existence of psi, why do we need morphogenetic fields? You could explain most of the morphogenetic field experiments on the basis of psi. And yet he is trying to explain psi on the basis of morphogenetic fields. It seems to me highly questionable as to which cart comes before which horse. Secondly, the data simply look as if there is an experimenter effect which fades out when the experimenter gets bored with the experiment. That is highly suspicious, because he is talking about what should be stable effects which build up accumulatively over time. That is not what I see in the data that I am familiar with.

SCHLITZ: Well, Rupert should be here to defend himself. My position is not to argue the right or wrong of his interpretations.

HARARY: Just two quick questions. You talked about psi's apparently unconscious nature and about this being the justification for the altered states approach to psi, which helps you get at this unconscious information. I think that, in light of the remote viewing work, if we are dealing with unconscious information we are dealing with it in a completely different way that suggests that you can actually deliberately access that unconscious information and make it conscious. So it is not a totally unconscious process. The other question I wanted to get at has to do with Freud and the idea of the Oedipal myth. Is it a myth? When you try and determine why this idea seems to pop up here and there, you find that it is possible that some other phenomenon is operating, for example, seduction theory. Maybe there really was a lot of incest in Freud's time. Maybe sons and mothers were getting together and maybe little girls were being seduced by their fathers. Maybe that was going on and Freud chose to interpret his patients' discussion of this as a psychologically symbolic situation when in fact it was real. Perhaps it was really going on and they were telling Freud about their own real life events. If we try to link together a lot of different things and then say "there that explains it," Sheldrake included, I am not sure that it really does explain it and that we have not totally missed the point.

SCHLITZ: As to your first question, I think that you are right about the idea that there is more to the psi process than the unconscious. Clearly that is true. One of the things that has pervaded my experimental history has been a message that was posted at the Institute for Parapsychology when I worked there some years ago. Basically it was that we can spend all the time we want designing carefully constructed experiments, we can employ the most sophisticated statistical techniques that we want to use, and we can recruit the most gifted participants both in terms of experimenters and subjects, but we must not forget that what we are doing in this experimental design is setting the stage

for a miracle to happen. Whether or not one can argue for the conscious basis of psi, there is still a tremendous amount of what goes on in the laboratory that appears to fit this sort of unconscious scenario. In many cases people are having psi experiences without recognizing that that is psi information versus any other form of information that is coming through. In terms of the Oedipal myth there would probably be a lot of controversy about your interpretation of the historical base of it. There is a tremendously long historical precedent for the Oedipal myth in many different cultural groups that do not have the same set of cultural values that we have here. So the question is why does this sort of taboo pop up cross culturally and historically and can this simply be explained by the incidence of a taboo in Western society? I think this myth is richly cross cultural.

HARARY: Isn't it likely that if it pops up so often in human experience there is really something going on there and it is not just people making up stories and passing on myths? Incidentally, seduction theory is far from my interpretation of Freud. Actually, the theory has received wide attention in the professional literature.

SCHLITZ: But my point is that the inhibitions that Western society places on that kind of conjunction, as it were, is a bias of our Western framework. It is not necessarily shared by societies all over the world or through history. I accept that there could be an historical basis to it.

HARARY: We would have to see if the Oedipal myth comes up in societies that do not have incest taboos in order to respond to that. Do you, by the way, personally believe that encouraging psi effects to manifest in the laboratory is like chasing butterflies in the dark?

SCHLITZ: Yes, I think it is a fair metaphor.

HARARY: So in other words it is unconscious?

SCHLITZ: I don't know that I would say that chasing butterflies in the dark means it is unconscious, but I think that when we set the stage for this magical event to happen, we cannot be sure it is going to happen.

HARARY: But why do you think it is magical and a miracle? That is what I do not understand. It seems like such an extreme and grandiose point of view.

SCHLITZ: I understand your position because I am familiar with your writings on this topic, but I think that any time I have done an experiment, any time anyone I know has done an experiment, there is this sense of apprehension that it may not yield results. This is especially true when you are working with something like the free response ganzfeld type of technique, which takes a tremendous amount of time. You could spend a year working on an experiment which will have absolutely

no payoff in terms of the statistical outcome. We simply do not know whether we are going to get it or not.

HARARY: But is that the will of the gods or is that explainable according to mainstream psychology?

SCHLITZ: To collapse that to psychological variables, "Well, you weren't motivated enough, you weren't charged up enough" or whatever, I think misses the richness and the idiosyncrasies of psi phenomena themselves.

HARARY: But are there capricious gods determining whether given experiments will work or are there in fact tangible psychological processes at work at the core of the phenomena?

SCHLITZ: In a given situation it may be that there was a telepathic link, one group to the next group, so that the person is able to access this information somehow. It could be (and this would not be a psi hypothesis) that given the limited range of possibilities in an environment people solve problems in the same way. I think that that would be what a conservative kind of person would suggest as an explanation. It is also possible that you could employ some kind of psychokinetic explanation, in that one person is influencing another person's behavior to replicate their own. I think that all of those are possible.

ISAACS: It seems to me that your paper, looked at from a very bottom line perspective is saying that either it is psychic unity which involves physiological and psychological parallelism because of similar structures in situations, or else that it is saying that we can perhaps explain the phenomena by psi. Yet at the same time your paper did not say maybe we could explain it by psi. It seemed to put all of these factors in and say that there is no way of actually experimentally testing any of this, so let's just stir it all up together and produce a hermeneutics-style view of it, with lovely long sentences and complex grammar and then we think we understand what is going on. So what does it give us at the end?

SCHLITZ: I was waiting for that question. I think that what I was embracing was a playfulness. I think juxtaposing different types of perspectives, can create in us a new framework for seeing our own work. It can suspend those traditional ruts that we find ourselves in. I think that that is one value of comparing what we are doing with other academic disciplines, other areas that sort of fit, but do not directly fit. The reason I made my qualification about not explaining these cultural parallels from a psi definition is because I think we are going to get ourselves into trouble by doing that. Rather I would really hope that we can just keep this sort of interpretive framework, use it playfully and hope that it will help us to have more insight into the spontaneous

nature of how psi events occur. What I am not offering here is a guide-book on how to go into the laboratory and induce cultural parallels. Here are some potential examples of spontaneous cases that have been explored for the last 100 years in the anthropological, psychological, folklore literatures, but which have not been considered in terms of their relationship to psi. It may be that this kind of interpretive reading of the different texts can be stimulating for reformulating our perspective. In terms of your sort of discomfort with the hermeneutics, you are certainly not alone.

STANFORD: Marilyn was just explaining why she did not attempt to bring in a psi explanation of some of these parallels that she has been discussing. The matter has been alluded to by a number of panelists. However, I would suggest that there is a much more fundamental and probably important reason for not doing that. I just do not understand how you can explain something by using something for which we have no scientifically demonstrated explanation. Once we get that and test it and demonstrate that we have something there, then it seems to me that we can talk about explaining another body of findings that we have not been traditionally concerned with in parapsychology. Until we reach that point we had better stay at home and prove our theories before we try to explain anything with what is essentially a negatively defined construct at this stage.

SCHLITZ: I agree with that. In terms of Julian's point about his frustration with the hermeneutics, I think that what happens in a hermeneutic perspective is that we have what in anthropology is called the crisis of representation. You cannot trust that any of the information you are getting is an accurate representation of what reality is and so by maintaining the sense of interpretation rather than explanation we are keeping ourselves open. We are also potentially subjecting ourselves to nihilism, in that we do not have an explanation and none of it fits within an explanation. I would hope that there must be something in between. We can maintain our convictions in our theory-laden research, but we must recognize that there are all of these other possible explanations for similar kinds of phenomena. I strongly agree with your point about not explaining an unknown with another unknown.

NEPPE: Just a short final comment in relation to the Sheldrake theory and then I will ask my question. The short final comment is one Julian raised, the issue of ESP and PK as an explanation. This is why in fact my lignocaine-induced kindling hypothesis is the only one that I think is feasible. I deliberately went into almost a psi proof kind of experiment. Everything else can be more easily explained by psi.

KRIPPNER: Can you just give us the outline of that experiment?

NEPPE: Basically, the kindling phenomenon is a rather complex physiological one whereby stimulating a particular area of the brain in a subthreshold way does not evoke responses, but over a period of numerous stimulations (particularly using lower animal models such as rats) one gets a gradation of seizure responses. The idea here would be to see whether or not one could induce kindling using a relatively naive kind of chemical substance which has been demonstrated to induce kindling in individual rats across different geographic environments. I considered whether or not one can increase the potentiality in terms of inducing this. I went into a great deal of detail about why this is apparently ESP and PK proof. I am not criticizing the Sheldrake theory. I think it has a lot of potential within certain limits. This clarifies my own perspective.

I want to talk now about a different issue. I have not heard the term "systems theory" brought up here. It seems to me that what we are really talking about is at what level does one talk about these phenomena. Does one talk at a biological/psychological, familial/social/cultural psi kind of level? I coined the term biopsychofamiliosociocultural approach. It probably has left out the psi. The point about it is that the Oedipal myth, might well be just a myth. I am not sure if there is such a thing as an Oedipus complex in the first place, whether it was not a fabrication of Freud and his age. One fits that within the framework of psychology and then one tries to fit it within the framework of culture. Within the area of apparent psi I had the same dilemma with my work on olfactory hallucinations. Apparent subjective paranormal experiments had far more olfactory hallucinations of a very peculiar kind than a normal control group. Does one interpret this as saying there is a certain psychological variable? Does one say this might be genuine psi? Does one say that this is cultural? It seems to me that a lot of what one is talking about here depends on a particular conceptual framework.

THE ELEMENT OF SPONTANEITY IN PRECOGNITION, TELEPATHY, AND CHANNELING

RUTH-INGE HEINZE

Introduction

When we talk about spontaneous psi events, we refer to experiences which apparently occur "unplanned." For scientific validation, however, repeatability in a laboratory is a prerequisite. Why is it so difficult to reproduce psi experiences in a laboratory setting? The answer seems to be that we do not know all the conditions necessary for getting significant results.

Psi experiences are of a very personal nature. We are not surprised when, in real life situations, psi experiences are also not always reproducible, because we know that situations, conditions, constellations are constantly changing. The only constant element is change, i.e., movement, which does not say anything about direction, strength and other qualities of the movement.

There is value in collecting individual experiences so that we can look for similarities, purpose and function, and especially the pattern of the underlying dynamics. In brief, we can study, for example, at what critical point in an individual's life spontaneous psi events occur and how these experiences affect the individual's life. But to accumulate valid comparative data, we would need a rather large number of spontaneous psi experiences. And even if we could get hold of such a large number of comparable experiences, we still would have to determine whether they were "true" psi experiences and, most important, whether they were spontaneous at all. Furthermore, when we are interested in inner dimensions and mechanisms and want to know, for example, what might have triggered such psi experiences, we are already questioning their spontaneity.

Knowing how extremely difficult it is to retrieve information about inner dimensions and mechanisms from other individuals, we also have to consider what is communicable and what is not and to what degree

objectivity is possible. We truly need Alexander's sword to cut through this complex "Gordian knot."

To short-circuit these considerations, I, therefore, suggest working what I call "from the inside out," and offer myself as the test object. While trying to discern some elements of psi experiences and questioning their spontaneity, I will be able to switch back and forth, from the object observed to the observer, and stay at least true to myself.

I will report precognitive, telepathic and channeling experiences, first presenting a description of an event as it occurred and then commenting on it. I will then attempt to prove that spontaneity in psi experiences is an artifact which is an outgrowth of the incomplete information we have on the nature of psi. What is called "spontaneity" seems to be more or less an unexpected access to what is called "universal knowledge." This knowledge has, so far, escaped intellectualization. The knowledge, however, is available all the time. We only have to learn how to access it. But so far, we have imposed limitations on ourselves and, with our cerebrations, have excluded valuable aspects which make psi experiences work.

Field Report

Let me begin with the report of an event which occurred on the borderline between precognition and telepathy:

It was Christmas Eve and I had refused all invitations. Christmas appeared to me to be the most joyful but also the most intimate event in the Christian calendar. I found it should be celebrated only with the next of kin. At that time, I was an actress at a theater near the border to Poland and performances were scheduled during the holidays. Therefore, I could not be with my parents. So I planned to use the first free hours in months for relaxation and meditation.

Not that I meant to hide my loneliness; on the contrary, undisturbed by everyday activities and obligations, I wanted to take inventory of myself and experience again that peace of mind which is so necessary to being productive and creative.

I was not avoiding the religious issue either. Though I had been raised Lutheran, my faith was not, and still is not, based on any dogma. I believe in the "Divine" or "Cosmic Energy," whatever name people may have for it. Many religions celebrate during the time of the winter solstice either the birth of a child in whom people set their hope or a festival of light which overcomes anxiety and darkness.

So I lit a candle and turned on the radio. One station was broadcasting Bruch's violin concerto. This music had a purifying effect on me and

seemed to fit well for the occasion. I do not remember all the stages of transformation I went through, but I remember very clearly that Bruch's music became the vehicle for a journey which carried me to different levels of consciousness.

The next thing I remember is that I awoke at dawn, still feeling weightless, peaceful and in harmony with the world around me. I realized that something had happened and that I had to write it down, not to lose the content of my experience when the world around me would demand my attention again.

There had been a large house with many rooms, a house where people stay overnight, a caravansary or a shelter where pilgrims rest. I was wandering through endless floors, trying to look into the rooms right and left, but all the doors were closed. Somebody came, and I don't know if I actually saw a human shape or if I only heard a voice. I was told that I could not stay because there was no room for me. "Not yet," so said the voice. Why wasn't I supposed to be in this house into which I found myself drawn by an unknown caller. Someone responded to my questions and tried to help me. I was given a basket. It was one which could be used to collect fruit. Something was moving inside the basket. It was a red cat, purring and waiting to be caressed. Was she to be my guide? As soon as I had touched this cat, I was suddenly in a huge garden, though I cannot remember that I had moved or left the house at all.

In the garden, which was on a slope, bordering a lake or a river, people were walking up and down, talking to each other with soft voices. It sounded like the murmur of a spring or, yes, like the purring of the cat. The men and women, and there were also some children, did not wear ordinary clothes but gowns of a greyish-blue color I had not seen before. Under the sun, whose light was blinding, all colors in the garden faded away.

A man left the crowd and came towards me through the bright haze. He was an uncle of mine, the older brother of my mother, a man whom I liked and admired very much. While he was talking, I suddenly realized that all the people in the garden were dead. I recognized some dead friends, relatives and neighbors. And I knew, at the same moment, that my uncle and I were the only living beings in the garden. It seemed to be strange, but there was nothing unnatural about it. I pressed my thumbnail against my left wrist to test if I was dreaming and I felt the pain.

When I asked my uncle what was going on, he led me to a building in the middle of the garden. It was a mausoleum. We entered and I saw two sarcophagi. A neighbor who had played with me when I had

been a child was resting in one of them, and my uncle told me that he was going to lie down in the other. I demanded to know why. He who had talked to me so freely continued to move his lips, but I could not hear him anymore. It was like being under water, where you can see, but where all the noises are blunted. Taking great efforts to understand him and to make myself understood, I awoke.

I wrote down what I remembered and put the report into an envelope which I sealed and gave to another actor, telling him to always carry it in his pocket and to open it only when I said so.

Soon my work, performances and rehearsals, asked for my full attention. Six weeks later, when we were having lunch at the theater's cafeteria, the mail was distributed. There was a letter from my parents. My actor friend asked me why I was so quiet. I told him to open the sealed envelope and to read the report, then I gave him the letter I just had received.

My parents notified me that the neighbor who, in my dream/vision, had been resting in one sarcophagus had died at the same hour I had seen him and that my uncle, with whom I had talked, had been rushed to a hospital and had died three weeks later.

I had heard neither from the neighbor nor from my uncle for over a year and had not even thought of them before they appeared in my dream-vision. I suppose the dying neighbor and my uncle who unexpectedly took ill were thinking of me and I had responded to their thoughts. I selected this event as an example for vibratory resonances.

Jean Millay observed "relationships between focus of attention and specific electromagnetic frequencies" (1987). Marsha Adams investigated the "possible influence of the geophysical environment on human health and behavior" (1987). Elizabeth Rauscher talked about "principles of geologic frequencies in the extreme low frequency (ELF) region of the electromagnetic spectrum and their possible relationships to Tesla's wireless energy transmission concepts" (1987), and Cheri Quincy and Joel Alter discussed "sonic resonance and its interactions with the dynamics of cerebral spinal fluid in relation to focus of attention" (1987). Further research is needed along these lines.

The imagery in the dream/vision also deserves some discussion. There had not been any cat in my life and in the house at the time of the experience. I also could not locate the source for the purring sound which I connected with the cat and the people talking in the garden. When we, however, expand on the image of a cat, cats are said to have nine lives, so recognizing a cat seems to be reaffirming of life, life after death. And as the cat had been red, red is also the color of fire and the symbol of life. Red is, furthermore, the color of blood, the life-

sustaining fluid. And cats have been the guardians of mysteries in several cultures. Furthermore, although I never saw anything like that garden before, I suspect that the painting, "The Island of Death," by Arnold Boecklin influenced my imagery. When we are grasping for explanations and attempt to decipher psi messages, we consult our memory bank, looking first for a match in shape and content before we create a new image.

Another spontaneous psi event, which happened one year earlier, lends itself as example for a more specific case of precognition. I saw the best friend of a colleague die in an accident which occurred three days after I "saw" it. The ceiling of a cinema in Berlin collapsed and crushed the friend whom I never had met nor could I possibly know that the ceiling of a Berlin cinema would collapse. I did not talk about the vision to anyone, but was prepared to console the colleague when he mentioned the accident to me.

Experiences like this cannot be willed. The images appear like reflections on the surface of a mountain lake when the water is calm. In other words, the receptacle has to be clear of impurities and completely open. The intellectual functions of the brain have to be stilled. The receiver is expectant, but without any preconceptions. Any judgment has to be delayed. Limitations on time and space are not allowed to appear, so that, whether going backward or forward or staying in time, the individual attention can hook into the dynamic, cyclic energy. When all conditions are right, the contact is made when "the time is right." So-called "spontaneous" events occur only when the meaning, the content of the message has reached a certain degree of urgency and the unprepared receiver's attention has to be drawn to a specific issue. Still, a decision has to be made whether to impart precognitive knowledge or not.

As a child, I had, accidentally, made the first contact. It cannot be determined whether I just stumbled into the experience or received a "call." This is a question I never felt the inclination to pursue. Others before me have reacted the same way. The Pali Canon, for example, tells us that the historical Buddha always pointed to the uselessness of such pursuits. He suggested investigating the individual situation at the present moment, drawing conclusion out of what is, not what was or will be. Conditions have changed drastically since the beginning of "materialization" and continue to change. It is humanly impossible to discern all the factors which contributed to the development, but we can recognize the dynamics of the present moment.

Let me report the first psi event I remember:

When I was of pre-school age, we would go to the Baltic Sea in

summer. One day, I found myself, standing at the beach, alone. The sea touched the sky and I naturally began to breathe with the waves. I entered the rhythm of the waves. There was a sudden channeling of energy—the sun, the wind, and the sea appeared to belong to one huge breathing organism and I was part of it. There was no “I” anymore, “I” had merged with the sun, the wind and the sea. A door opened. All colors combined to being brilliant light. All sensory perceptions dissolved in the fiery light. The pulsating energy was going right through me.

Retrospectively, this was the first time that I got a glimpse of what shamans and ecstasics experience when they offer themselves to be the channels through which energy can flow. Later they learn to tap the “energy” and use it when needed. The need is the reason to call on the energy.

My parents found me standing transfixed at the beach and thought I had a heat stroke. They kept me in bed, in the dark; this gave me time to reintegrate and to return to my family. Thereafter, it was easier to establish contact with the brilliant light/energy/knowledge, at sunset, during a thunderstorm or during a starlit night.

As a child I did not know what to do with it. There was no one with whom I could talk about it. People would think I was crazy. However, every time I have similar experiences I remember that first event which became a measuring rod for me whether later experiences were genuine or just fictions of my mind. I only have to recall the depth and completeness of the first experience.

My relationships to my family were complex. There was no meeting of expectations. My mother did not know what to do with me and I could not figure her out. She meant well and I tried to please her, but we were worlds apart. However, it turned out that we could read each other's thoughts. For an outsider it was strange. There would be long periods of silence and, all of a sudden, she would say something, followed by another period of silence. We were conversing silently. We could never hide anything from each other. Despite great differences in character, our resonating mechanisms were naturally attuned.

I suspect that this faculty was inherited. The father of my mother had been a healer at a West Prussian village during the last century. (He died over 20 years before I was born.) I learned about his activities from the villagers when I went to West Prussia 45 years after his death. The clan on my mother's side evidently shared a specific morphogenic field (Sheldrake, 1981). My mother and I even could talk “long distance.” Shortly after the war, I went to work in a town in an agricultural area, a couple of hundred miles away from Berlin, because we were

starving in a four-million city like Berlin. One evening I heard the voice of my mother. There was a strong wind blowing, but I do not know whether it was an actual wind. It was dark and I could not see whether the branches of the trees in front of my window were moving; however, I felt the wind and I heard clearly the voice of my mother. I answered and then I wrote this event down and forgot about it. Weeks later I visited Berlin and the first thing my mother did was go to the wall calendar, saying, "Did you hear me that day?" I said, "wait a second," and looked into my pocketbook. Sure enough, it was the same day and hour I had heard her voice. It was not just mentally, I actually heard her voice and she heard my answer.

I have talked with many people who were not present or were dead. It is easy at night when everything is calm. But when it happens during the day, I feel a great restlessness and something burning inside of me like fire, shortly before the contact. There is truth in "hot wire" connections, the urgency of the messages heats up the communication waves. Mostly I hear only their voice. They come when they have something important to convey.

Telepathy, precognition, and channeling have not changed my life and there is nothing frightful about these faculties, but the "open exchange" has added new dimensions to my perceptions.

As the energy became more and more available, sometimes people would come when they were in some pain, whether mentally or physically. They would find me on their own. I did not dream of making a living out of helping people. How can one make a business out of faculties which have been given to share? So I needed a profession to pay my rent. It turned out, that all my occupations asked for channeling of energy in one way or the other, whether from the outside in or the inside out.

The reason why I had become an actress, for example, was the result of my restrictive daily life. I needed the stage to give all aspects of myself a chance to manifest. (Because I have no time to expand on this thought, I refer to my essay on the "Multiplicity of being," 1987). Becoming an actress set a process of liberation in motion. The barriers between inner and outer world had a chance to become transparent. It was the experience of conscious expansion. I felt all those different characters on stage were me, too. Or, seeing it from the opposite side of the circuit, the energy went right through me and carried me in a way where I only had to provide the form, whatever form I selected. During the performance, I merged with the expectation of the audience and guided them through the experience. It is very fulfilling because it is a complete experience. It is a shamanic flight, and the best part of

it is that you can take all those in your presence with you into the experience. Theatrical performances first took place in temples where priests manifested the ineffable in visible form. Theater, in its ideal form, reflects the universe and pain as well as ecstasy become transparent and gain meaning.

After I had discovered how to prepare myself for opening toward the energy, I had to learn how to monitor and use it. It has remained a constant process of learning. In South Asia, Indians will talk about *prana* (life force-breath), in Southeast Asia Malay talk about *angin* (life-wind), in East Asia Chinese talk about *ch'i* (life-giving force). Asian practitioners know how to circulate the breath and how to use the energy to protect, to exorcise and to heal. Pain, for example, is an indicator for interrupted flow. Breath and the life force are identical, therefore, breathing and meditation exercises assist and ease the flow.

Events in my life precipitated the process. Living in a war zone during World War II, I had to surrender myself to death which turned out to be the most important initiation of the many initiations we experience during our lives. I crossed a threshold and had to put my fragmented ego together again. I would sense the presence of death which saved my life a couple of times. Signs of approaching death reminded me of my own "death" experience and I learned not to obstruct transformation, but to aid in the transition or to avoid blind destruction where possible. The event I reported at the beginning of this essay falls under the category of communicating with and aiding others in the transition.

Now, I can open myself to the "energy" more easily and can send it off again. To live constantly in contact with it would be too intense, because it consumes everything material. Indeed, whatever has become manifest returns to the fire, but new manifestations keep arising from the fire.

To give some examples from "hard" science, I want to mention here that recent research on the brain supports the idea that brain cells are, in fact, stimulated by use. Carl Cotman, professor of neurology at the University of California, Irvine, said that "dendrites [the arbors that collect connections between neurons] in a healthy older person's brain get bigger with age, showing plasticity [growth] of the brain." He continues telling us that research has demonstrated the brain's ability not only to maintain its circuits and to repair them if damaged, but the brain has also growth factors (proteins) that form part of a self-healing process induced, for example, after injury. The brain is more than a self-repairing computer. It is not only able to restore, but also to make choices and changes. Why do we allow science to tell us that our brain

is an end product when we are just learning to use what has been developed un- and subconsciously over thousands of years.

I did not touch the issues of multiple personality and possession, the first indicating a splitting of a personality from the inside out and the second implying an intrusion from the outside in, because I maintain that we are born with multiple brain layers and have the capability to move from one layer to another. These moves are either triggered by traumatic events or can be cultivated through meditative practices.

While precognition (knowing of events which have not yet occurred in our time and space) and telepathy (communication by some means other than the normal sensory mechanisms) can be recognized fairly easily, this is more difficult with channeling. Stepping out of ordinary reality, we enter different states of consciousness. We believe we channel, but it may be just active imagination or lucid dreaming. Are the "inner voices" we hear our "higher self" or voices from the "outside"? Does our compulsion to name everything lead us to talk about "spirit guides," "door keepers" and other entities? By naming we draw the experience closer to our comprehension, but away from the "source." It was not necessary for me to rely on an intermediary who facilitates the communication with the "source."

Some channels have been found to serve narcissistic ends: ". . . psychologists might say that the dysfunctional disintegration of the self gives rise to channeling. In this case, information comes from within, not through, the individual. One aspect of the split or dissociated personality reemerges, seemingly with a life of its own. As F. W. H. Myers put it in 1903, 'Our physical unity is federative and unstable; it has arisen from irregular accretions in the remote past; it consists even now only in the limited collaboration of limited groups' " (Klimo, 1987; p. 189). In any case, channeling appears to be less dissociative than (a) the fragmentation of multiple personalities or (b) possession which implies an intrusion and a displacement of the core personality. "Echoing the speculations by many skeptics regarding the authenticity of the phenomenon, channel Alice A. Bailey provided the following data from her source, 'the Tibetan.' 2% of the material purported to be channeled comes from 'masters' to their disciples; 5% is from more advanced disciples in training on the inner planes; 8% is from their own higher Selves or souls; and some 85% is from the personal subconscious of the channels" (Klimo 1987; p. 392).

In each case, we have to evaluate the authenticity of the channel and we will always have to allow several alternative explanations about the source. The "cosmic babble" of some channels seems to have discredited the phenomenon. However, the paucity of significant information

obtained through channels should not lead us to junk the whole issue. World religions had their problems with channeled material, too, from Moses in the Old Testament to the apocalyptic visions of St. John, from Mohammed to the Mao Shan and other revelations of the Taoist, used to legitimize political uprisings in China.

In conclusion, I want to exemplify how mediation between the sacred and the profane requires imagery and interpretation and report a vision I had recently while listening to the sound of a rattle.

I enter a long tunnel. Far ahead, I see the light at the end of the tunnel. The tunnel is not man-made. It winds naturally through the mountain. I keep moving fast. The tunnel turns out to be longer than expected. I cannot see the light anymore. There is complete darkness, but I keep moving faster and faster. I am on the way into the womb of the earth. Finally, some reddish glow appears in the distance. The glow increases and turns out to be magma, molten rock, the fiery womb of the earth. I am caught between the molten and unmolten rock and decide to enter the magma. It strengthens my bones. I feel it flowing in my veins and rise with the magma to the surface where the lava flows into the sea. I step onto the beach.

There is a cave on the beach and I know, a dragon lives in it. I challenge the dragon to come out, but it does not stir. I repeat my challenge and it teases me by first showing part of its right paw, then a pointed ear, then part of its back. I tell it to stop the nonsense and the dragon finally emerges from the cave, still clowning around. It keeps rolling its eyes and, looking cross-eyed at me while dancing. It splits neat little lightning bolts in every direction. I tell it again to stop the foolishness and the dragon rolls in laughter. It says, "Don't you know I am you and you am I. Don't you sometimes spit fire like me? You even have a big belly like me." I find this remark rather impolite and remind him that he is supposed to tell me something, but the dragon keeps laughing and changing its shape. He changes into a turtle, a phoenix and an elephant, saying, "Remember, I was also the elephant you rode in Nepal. Didn't we merge when you rode me through the jungle at dawn?"

Finally, I can persuade the dragon to engage in some useful activity and we both decide to clean up the environment. We fly over the land and spit fire, burning up refuse. Everything useless goes up in flames, leaving clean ashes so that the land will be fertile. After a while, we call it a day and the dragon becomes serious. He shows me how to find my way out of deep tunnels, so I won't get stuck in them anymore. We return to the womb of the earth and he points to windows. Each window leads into a different reality.

What can be deduced from this vision? When we decide to enter the path toward self-cultivation, we have to deal first with basic fears. They prevent us from exploring the unknown. We hardly know ourselves, so we continue to search for natural tunnels which lead to deeper layers of our mind. The aim is to cultivate our faculty to reach the core in which every form has been molten down and has dissolved in the "Cosmic Fire." Fire and light are surrounding us and are also deep inside of us. Has not the earth a fiery core? This fiery center of all things then has the power to propel us back to the surface. In fact, it seems to send us, over and over again, back to everyday reality before our ego is molten down to "no-thing" and is allowed to join the brilliant light of the formless. Is this an act of mercy or a teacher telling a student to do his or her "homework" again? At times, we are able to carry some of this "inner knowledge" into "surface consciousness."

In this vision, the fiery lava did not immediately take me back to everyday reality. It spilled me on a beach where a mythical dragon lives. The dragon is a transformational animal in many cultures. Some people say that rainbearing clouds are "actually" dragons who spit lightnings before the rain. Mythical dragons appear where fire and water meet. This dragon taught me how to recognize some of my shapes and how to discover "hidden ones." He reminded me that "I" am more than what conforms to the names given me by society. He also taught me how to utilize the fire to clear the ground for new growth and he showed me new tunnels and channels to different realities.

Summary

Spontaneous psi experiences indicate a sudden breakthrough of information from a different level of consciousness. The propelling force is the urgency of the message conveyed.

Psi experiences can be cultivated by clearing the channels which will reduce spontaneity, but increase the flow of information.

We have to counteract the damage done by restrictive imprinting. We have to recognize that the range of our perceptions began to shrink in childhood, at home, at school and later in our professions whenever our attention was directed toward the specific and we were taught to neglect the whole. This happened, for example, when others were afraid to accept the existence of something greater than themselves and had to be shocked out of complacency by traumatic, so-called "spontaneous" events.

Fear prevents us from using our highest capabilities. This fear is

justified to a certain extent because everything can be abused and we have historical examples. Up to the present day, we have to face catastrophes which are the result of spontaneously unleashed powers of the mind.

When we conquer our fear of the unknown, the "fire" will become friendly and carry us. We will know. But as there is so much to learn, we will continue to need spontaneous psi events to remind us of what we are still ignorant.

The most promising object of our investigations seems to be the exploration of resonances and the conditions under which they occur best. Life situations cannot be restaged in a laboratory because we still do not know all necessary components. To build in the "uncertainty principle" is, therefore, the first step toward more significant results. All over the world, shifts of attention are occurring on many levels. Rupert Sheldrake, for example, is writing a new book in which he talks about "cumulative memory" and repetition through which "the nature of things becomes increasingly habitual." His way of interpreting social and cultural structures in terms of morphic fields, for example, "provides a different way of bridging the gulf between the 'soft' and the 'hard' sciences."

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DISCUSSION

MORRIS: I was very interested in your comments about acting and some of the aspects of the shaman. Brian Bates of the University of Sussex has written a book called *The Way of the Actor* in which he draws on interviews with various members of the acting community. There are parallels between the role of the actor, the role of the shaman, even some of the developmental exercises. Much of the book is orienting people towards following the way of the path of the actor as one way of self-development. I wondered if you might like to comment further on your own experience of being involved in acting and shamanistic practice?

HEINZE: Well, I started anew a couple of times in my life. Now it appears that it was more than coincidence that I brought the different developments together. I fully agree with you that the book you describe presents exactly the same processes. Let's take the element of meditation. I started meditating in Berlin when I was fairly young. Then I was trained as an actress and had to learn breathing exercises which were familiar to me. Much later I went to Northern Thailand and took up Theravada meditation. It was exactly the same technique: to achieve one-pointedness in your mind, to stabilize yourself with the breathing and also to use your breath as a vehicle. You learn the method to tune in to whatever experience you want to get. Also for whatever

experience you want to convey, you use the breath. You use breathing first for tuning in. Breath is a very good stabilizer for attunement. Also you learn how to connect with your mind, to empty it and make it free and open. Breath is a purifying, cleaning and stabilizing element which can be perfected and then you use it for conveyance. You learn how to convey from the diaphragm, or what the Japanese call hara. For those familiar with comparative religion it is the same principle to convey from the center of your body and attach more than the physical words to it, because the breath as a life giving force has more knowledge than you can put in words. Intonation does a lot to the words you convey. So it is a rather complex process of attunement, and conveyance, also as a defense. At the beginning you have to tune in to get the openness and the clearness and sometimes you also have to stop a flooding. I studied mediums and shamans in Southeast Asia and I saw thousands of trances so I know pretty much where they are just by looking at them and being in their presence. I can feel with my skin where they are in their trance. Each good trance-medium, each good actress, everybody who works with trance reaches a stage, where they are flooded. You get more information than you possibly can convey and you'd better do something about it otherwise it blows your mind or the whole performance becomes incomprehensible. Therefore you learn to use your breath to get back to, let us say, first stage which you can monitor. This would be in the third stage, first to get into, second to convey and third to monitor. You experience these periods of flooding, because the information which is available is so immense that the human being can not possibly comprehend it. If you are all of a sudden confronted with it you know you need to get hold of it, and of yourself.

NEPPE: How are you defining channeling?

HEINZE: Well, I balked at it a little bit, because so many activities are called channeling. Channeling in a positive sense I would personally define as the complete opening toward the knowledge that I do not possess. It is knowledge which has not reached my own consciousness, which has not gone through the cognitive process yet. It becomes available to me, and then I am faced with putting it into words, to verbalize it. I have to find images which match in my memory bank or I have to become the image maker and narrow down the knowledge so it becomes comprehensible for others without blowing their minds. The information is immense if you confront it. Trying to bring it down to the human everyday level, is very difficult. It is channeling when you receive information which does not come from any thoughts you can put a finger on. It may come from a very deep level of your own or it may come from the outside. I am not the judge.

NEPPE: What is the difference between that and daydreaming? I know that you will say it is a difference in terms of quality of experience.

HEINZE: I never would call channeling, daydreaming or active imagining. They arise from cognitive processes. I try to expand my cognition and add some new elements, but it is a completely different process. For daydreaming and active imagining you do not make yourself a complete blank slate. For example when I take people on a shamanic journey I tell them that if they want to get at material they have no knowledge of, they must make their minds a blank slate and see what appears on the screen. Do not produce it. You produce daydreaming. You produce active imagining. But if you go away from being a conscious producer of it at the starting point you may go deeper later on. I make myself receptive to something to which I do not normally have access and I do not want to block it by daydreaming or by active imagining.

NEPPE: You are presumably defining this in the context of a kind of waking reality. If this happened in sleep we would call it dreaming.

HEINZE: You can go into a meditative state, where you are not dreaming, but you are just meditating. It is possible also if you use sonic driving or what ever other means you want to use to accelerate this condition, you will reach a different state. But the results of shamanic journeying and sonic driving are not active imagination. I tell everybody who does it not to daydream and not to use active imagination because you will rob yourself of the opportunity to discover a very deep level. Whether it is inside or it is outside does not matter, but I think it is deep inside of me and it is beyond my capacity. We are born with an immense genetic memory. There is a genetic memory and there is also other information available which goes beyond our everyday lives. It is a big world, the whole universe, and you can be connected with it. This would then be called channeling. You can channel into this dynamic force which has all the information, future, past and present, and that is far beyond personal existence and far beyond daydreaming and active imagination. This is what I call channeling.

PALMER: I think one way of looking at this channeling phenomenon from the point of view of technique is to see it, as you suggested, as a continuum from the image or the dream being projected from the self, the source being in the self and the images just being a guided replica of the thoughts. Guided imagery and, I think, active imagination fall into that category. This is something else and I think I would like to have your opinion on it. Do you think that some of the experiences that you have described, visual experiences both precognitive and

clairvoyant in content, could be explained through some voluntary access to dream mechanism?

HEINZE: It is possible.

PALMER: I think that perhaps that makes a bridge between parapsychology, depth psychology and the interests of the practitioner.

HEINZE: I would not exclude it. I fully agree. I would not exclude it at all. There have been quite a few attempts to plot other states of consciousness. I have developed a diagram where increased awareness on one side and decreased awareness on the other or expanded mind and dissociated mind can be plotted through all the stages.

PALMER: From another point of view it could be a lot simpler. In meditative practice there is a great deal of interest in the observer/object relationship. I think that we have a very good opportunity for practitioners who have observed the process of inner perception in this observer/object relationship. In this case, the object would be the spontaneous image with its source in the not-self, not with its source in oneself, one's personal conscious, but to be able to plot a system of meditative practice that does not rely on so many dimensions, but just the degree of immersion of the observer into the dream. That seems to me a more experiential, but an easier way of explaining some of this material.

HEINZE: That is why I am glad you will be talking about it tomorrow. I know you worked on it. There are many ways to do it and I think that Charles Tart's book *Waking Up* is an excellent manual and should be recommended to anybody who has not read it yet.

PALMER: I agree with you that both stress and the most non-stressful, the meditative state, seem to lead to a similar experience. That is very true, I think.

HEINZE: The release of stress is needed so badly that when it occurs the trigger may really be on the borderline.

KRIPPNER: This morning one of our speakers thanked Charles Tart for "waking up." That was a very clever pun, as it is the name of Dr. Tart's newest book, *Waking Up*.

HEINZE: He has done decades of research. It is an excellent manual.

ISAACS: I found it very interesting that you seemed to experience reaching a place where all knowledge was available to you, where you knew everything. I noticed that earlier in your paper you were talking about universal knowledge. From a descriptive point of view is there only one world or are there many? How would you categorize the different worlds out there? Because Lawrence LeShan, with whose work you are obviously familiar was talking about the clairvoyant reality which Eileen Garrett, and others, apparently entered. It is not clear to

me whether what you are describing is the clairvoyant reality of Dr. LeShan's descriptions.

HEINZE: What I said was that all this knowledge is available, but as it goes beyond human capacity we will only be able to grasp a part of it. I did not say it was not there. The moods you describe are only steps towards this universal knowledge. They are one way to go about it. But there are many other ways to go about it, so I think I would not get hung up on them and take them for an end product.

TART: The question I want to ask you is a long-term question as well as something for immediate response. I have been trying to ask this question of people who are in the psychic world for the last few years. You are a unique resource here because you are clearly in the scholarly world and in the psychic world simultaneously. The traditional view of psychic development practitioners is that you just keep doing your practice, go inside, and all knowledge comes that way. What kind of questions would psychics find interesting for experimental investigation from "outside" their practice to focus on? What kind of questions might be answered through scientific research that will not come through just doing one's practice more and more deeply?

HEINZE: I will give you a very personal answer. I want to work from inside and outside as well, to have the opportunity to see what people are doing and compare notes. This is like with an initiate among the Freemasons. You can only compare notes when you are on the same level. You know you have reached the level they understand immediately, because they are on the same level. I am looking for co-workers who can explore the different levels with me. Then we can see if our information matches on the different levels. Then also at the same time we have a beautiful record of how we got there. So I feel that there is a future in psychic research in finding people who have reached certain levels. I am completely non-judgmental. It does not matter what is higher or lower, but who definitely can distinguish different levels and then compare notes with another person who may be on the same level and then see how we got there and how we can proceed from there. We need people who have experienced it and who can verbalize enough to report on it and then compare notes. This would be a beautiful record. As I have said I have seen thousands of trances in Southeast Asia and these are natural trances. They never have been taught. They are born with this capacity. It is their culture. I tried to find out how they got there. I developed personally a skin sensitivity so I can tell what level they are on—level three, level eight, what ever you want to know. But then you have a good record of how you got there. It can only be done by people who have experienced it.

HARARY: I am very interested in what you were just saying about levels. I find there is a non-linear global experience. When we try to express that in language that deals with the linear conscious experience, we find ourselves describing it in terms that are not really directly related to the subjective experience. But I think we are aware of what the problem is there. How do you deal with that sort of dichotomy of stress between language and linear descriptions of reality and this more gestalt-oriented global sense that you are experiencing from within? You are talking about coming from within where you have a non-linear sense. If you bring that out, into a linear context, how do you do that without losing a lot in the translation?

HEINZE: It is a big problem and we do not have the right language yet. Maybe we can introduce instructions into public schools. Children can be taught to keep this faculty. They have it naturally, but they unlearn it at school. We could develop these different stages and then explore them. We have to develop a language for it. Our language is inadequate. I mentioned in my paper too, that at times we have to become the image makers. We have to develop a completely new terminology.

HARARY: Isn't that the same problem you get into when you attempt to bring this global experience into the scientific laboratory?

HEINZE: I disavowed the laboratory experience because it is too time consuming and too many factors are unknown. We do not get anywhere with it, but if we work with real life experiences we get there faster. I am not discrediting laboratories. There are honest scientific attempts made and I give them the respect they deserve, but that is a blind alley, I can tell you that.

PSI AND THE DYNAMICS OF MOTIVATION

ARTHUR HASTINGS

This paper will discuss how psi relates to motivations and their dynamics. The ideas are often speculative, rather than established facts, though I have based them on empirical reasons. The paper accepts the premise that psi exists as a process or ability, not just as the elimination of other forms of interaction. Given this assumption, then psi can be postulated in specific cases or processes where the evidence warrants.

Motivations for Psi Development in Childhood

The first question we might ask is what motivations influence psi abilities in the child. If you look at various biographies of persons who are psychics or mediums, a frequent characteristic is a difficult family situation. The fundamental human motivation is survival, and it appears that psychic abilities may emerge for some children to help their physical and emotional survival. In one case, a woman told me that her family had many hidden agendas and never communicated their feelings. She feels that her psychic abilities developed as a way of sensing what was happening within the family, so she would know what was going on. Another person, Eileen Garrett, wrote of her stern, cold aunt and aloof uncle, and how she used her imagination to put herself into fantasy realms, and how she would slip out of her bedroom window at night to play with three non-physical children. Her sensitivities served to comfort her and connect her with nourishing realms.

However, it is important to observe that psi abilities in childhood often seem to be there from the start, regardless of the family dynamics. Examples of this are Joan Grant, Ingo Swann, Gladys Osborne Leonard and others. Typically, such children report later that they saw auras, had telepathic impressions, precognitions and OBEs. They assumed that everyone had such experiences. Usually they were shushed by their parents. "Don't talk nonsense," Swann's grandmother told him. Eileen Garrett's aunt ordered her never to say such things because she might make her "visions" come true. Mrs. Osborne Leonard was told that she should not see imaginary pictures on the wall. Children may

often react by shutting down their psychic perceptions so they will be normal and accepted. Swann told me that when he was 12 he realized that he had to stop his psychic functioning or else he would not be socially accepted by his friends and family. It was not until many years later that he was able to resume his psychic functioning.

There is another level to the shutting down of psychic abilities in childhood. There is reasonable reason to believe that we are all telepathic with each other at some level of the psyche, and children are not exceptions. Ehrenwald has postulated that a mother-child telepathic link is one of the processes of bonding in infancy. If there is this telepathic communication, then children and parents are aware at some level of each other's inner thoughts and unconscious feelings in the course of family life and relationships.

Family feelings rarely run smoothly. Anger, fear, resentments and selfishness occur along with love, happiness and caring. Parents get irrationally angry at children, but try to suppress their feelings. A child may be afraid, and the parent says "everything is all right," when the parent herself is afraid. Inner feelings and outer expression are often at variance. If the child asks, "Are you angry, Daddy," and Daddy says, "Of course not, I love you," what is the poor child to do? If the child is psychically aware of the conflicting inner feelings and thoughts of the parent, the child can be confused and frightened, may withdraw, may misbehave, may act out the conflict to get resolution, or may become the "identified patient." But the dilemma may also be resolved by shutting down any psi abilities, blocking such awareness out of consciousness. Thus, within the psyche, there may arise an inner defense against psychic empathy, for protection of the self, perhaps unfortunate, but necessary. (Of course, suppressed feelings are also communicated verbally and non-verbally, and psychic abilities are not necessary for conflicts to create problems; my point is that the psychic perception of them is another level to be considered.)

I came across this situation in another way a few years ago. I had attended a talk by a quite reputable psychic healer, who apparently could see auras. He asked me what I thought of the talk. I didn't think it was very good, but wanting to be polite, I said something mildly complimentary. Then I suddenly realized that if he really could see auras, he could probably see that I felt something very different than what I was saying. I was very embarrassed, and no doubt my aura turned many different colors. That led me to realize that if he could sense my feelings psychically, or through my aura, then I might as well be honest and say what I felt, because he would be aware of my genuine thoughts anyway.

There was a next stage beyond this—if we assume that we are all in telepathic contact, then we must realize that we are all aware of each other's inner feelings and thoughts at some level of our psyche. When there are hidden meanings and suppressions, then energy is taken up trying to handle them—by ignoring them, being agreeable, suppression on each side, etc. Again, as with my psychic friend, perhaps a resolution is to cultivate honesty and openness, and accept others doing the same. This increases the richness and range of communication, because it opens the telepathic level of relationship.

I do not mean that this should be taken universally. There are interactions in which one relates from a role or part of the self, and there are situations in which there are other priorities. Also to be open requires development of non-attachment to our thoughts and feelings and release of ego-involvement. That takes practice.

Motivations of Psi in Everyday Life

I consider psi to be an ability that is neutral. Like energy or matter, it can be used in a variety of motivations, from mundane to consequential, from despicable to noble. If psi is seen as the parapsychical communication of information, then it can be used in the service of many human needs.

In business matters and politics, for example, information plays a critical role. Jeane Dixon, who has a psychic reputation, is also a realtor and is said to use her psychic abilities to help clients find the right houses. According to Shirley MacLaine, when Bella Abzug was going to run for Mayor of New York, she was warned by a psychic consultant that an unknown contender named Ed Koch was the candidate to watch. Israeli psychic Uri Geller is now a multi-millionaire, not from bending spoons, but from assisting oil companies in their prospecting. On the other hand, when Edgar Cayce tried locating oil, he was unsuccessful, not because of poor divining, but apparently because of the financial and entrepreneurial problems.

In the area of gambling, a few years ago a precognitive system for roulette was worked out that was reputedly successful. I know of other forays into gambling using psi that were said to be successful, but the people involved certainly were not interested in being known as either psychic or gamblers.

As I am sure you know, it is not the case that most public psychics are interested in making money with their psychic abilities. Their motivations lie elsewhere. One does not expect a reliable ESP test subject or a genuine psychic to be successful financially (or socially or in mar-

riage, or any other human endeavor). Some are, some aren't, just like the rest of us. Neither is it true that you can't use psi to make money, as our next case illustrates.

The best known use of ESP for investment information is the recent case of commodity futures. In its successes and failures, the case throws light on the dynamics of motivation. The technique used was precognitive associative remote viewing, a brilliant methodology. The remote viewing procedure was used to predict the movement of a specific commodity for the following week: up a lot, up a little, down a little, down a lot. The remote viewing was carried out on objects, not the market itself. The viewer's task was to describe an object that would be shown him in the future. Thus his immediate intention was not to make money, but to view an object. He was separated from the rest of the procedure, though he knew about it, of course, and for him it was primarily an interesting experiment. Thus, the targets were not financial ones or numbers, but real-life objects, without the emotional charge associated with acquisition of money. Three pilot runs were successful. Then the group carried out nine viewings over three months. The predictions were given to a broker and on this basis money was invested in seven cases. All nine of the forecasts were accurate and the investments prospered.

As the experiment went on, other factors developed that in my opinion altered the motivations. First, others were told about the experiment and began calling the viewer to ask about it, much to his surprise. Then he learned that some investors involved were calculating how much money they were going to make in three years (virtually the entire silver market). He was criticized for wanting to take a vacation, and he was asked to do the viewing twice a week, rather than once. The relationship began to feel like one of exploitation, rather than collaboration and appreciation. Meanwhile, another member of the group at a party with one of the investors was treated to sincere, but rude questions about his religious beliefs. At this point, the forecasts stopped being successful in two successive viewings. In the first case, in retrospect the transcript was accurate, but the judge matched it incorrectly. In the second case, there was no good match.

I can speculate on the dynamics of the case, if the facts are as I have described. The forecasting process was working effectively until the participants began to exploit the viewer, that is to see him as an object to be used for their own ends. And their own ends were selfish and, one might say, involved with greed and power. Patience Worth, a spirit writing through the Ouija Board in the 1920's, gave an aphorism that is appropriate: "Beat the hound and lose the hare." Further, others

may have believed that they were not accepted as individuals because of religious differences, which were irrelevant to the business at hand.

These feelings would quite reasonably motivate various members of the forecasting group to be unsuccessful, which would end the exploitation and punish the bigotry. On the other hand, the desire to be agreeable, to think the best of other people, to continue to receive the fees involved, to avoid failure, would motivate them toward continuing. But when conflicting feelings are not expressed and discussed, they tend to sabotage. My hypothesis is that this is what happened. Having been a remote viewer and also a judge, I know that unconscious biases and attitudes can shift perception and judging. In the associative remote viewing protocol there are at least five or six points where unconscious forces could shift the results and, I suggest, that this is what happened, as a way of resolving the conflict between trust and greed.

But, let us look at the other people involved. There may have been ambivalence on the part of the investors. Making large amounts of money can have its negative aspects: the love of money, greed and acquisition are all negatively valued in our culture. Stereotypes about those who make money are not always flattering. If a person incorporates these attitudes personally, then they can be a motive against some level of financial success. We do not know if it was so in this case, but there was another factor involved. One or more of the investors had fundamental religious attitudes. A major and common fundamentalist belief is that ESP and psychic phenomena are diabolical and come from the devil. So to be investing and making money on the basis of psychic forecasts could be seen as evil. Obviously this could create conflicting feelings about the experiment—on the one hand wanting it to succeed, and on the other hand feeling that the method is really wrong. One need not have this belief consciously for it to have an effect in undermining the situation, through pushing people too hard, “unintended” insults, etc.

These are speculations and there may be facts that would point our understanding in a different direction. If the scenario is plausible, the point is made that psi abilities operate within the flows of human motivation and they must be congruent with the values and relationships of the people involved. The functioning of psi can be directed, turned on or off by motivation, not just by factors in the process itself.

We can turn now to several other areas where psi furthers motivations. Psi can be used as a means for achieving fame. The most obvious area is in entertainment. Stage performers such as Dunninger, Kreskin and Geller received personal status from their claims of psychic abilities

(whether those abilities are real or not). The lure of the stage, the exchange of energy with an audience, is a kind of excitement that appeals to many. We have a name for it: stage struck. Others gain fame through psychic claims without being on the stage, such as Jeane Dixon and Ruth Montgomery. Of shorter duration are people such as poltergeist agents, who often seem to take a hand in the events to keep the excitement going.

Perhaps related to this is the use of psi to gain and hold followers. There are many proclaimed psychics who have a regular following. Cult leaders and gurus often show apparent psychic powers and people may emotionally surrender to them for that reason. Jim Jones is an example. In his morning talks at his church he would give information about various members apparently obtained via ESP, though it was probably a well developed espionage network among the members. This relates to the dynamics of transference. Followers may give their authority to someone who apparently has ESP abilities, projecting on them qualities of strength, knowledge, infallibility, good judgment, power and righteousness. In effect, the individual submits to the authority of the psychic, and the psychic takes over the superego function of evaluation and judgment. This is not limited to followers of psychics; it happens in religion, politics, education, with Nobel prize recipients and in most other walks of life. It does indicate that much education is needed about psychic abilities, and it is essential to learn discriminating awareness at the level of emotional responses.

Psi can also be used directly to influence people—though I notice that nobody ever talks about the studies that suggest this is true. These imply that it is possible to get another person to behave, feel, or think in a particular way through psychic means. This may be through conscious effort on the part of the agent, but perhaps it can also come from non-conscious desires in the psyche. Motives of power and control may be furthered in this way, as may also be compassionate assistance and support, e.g., which in religion might be called intercessory prayer, in New Age terms, sending white light.

Once when I was President of the Association for Transpersonal Psychology we were holding a conference and the planning committee was invited to meet in San Francisco at a particular institute. Unknown to us, while the committee met, the institute's directors were in a room down the hall, concentrating and trying to get us to name their leader as the keynote speaker. Unfortunately we named someone else, so I guess we were not sensitive enough to get the message. So maybe psi is not the ultimate weapon!

Meta-values and Meta-motives

Most of the motivations previously discussed are ones that are problematic or negative. But I would emphasize that power, control, money, etc., are value neutral. It depends on their uses in the service of values. Power is a good example. When we say that someone has a need (or a lust) for power, we usually mean the motive is a selfish one for deficiency needs, rather than for beneficial uses. But power is power. It may be used to destroy something that is good. Or it may be used to destroy in order to rebuild. It may be used to create. Shiva, the Hindu god, is both the destroyer and the creator. In occult lore, the first ray, the ray of the creative will, is also the ray of destruction.

A useful analysis of these issues is the concept of meta-values. This idea comes from Abraham Maslow, who studied self-actualizing people and found them motivated by what he called meta-values, rather than the conventional personality level emotions. Meta-values transcend the conventional social mores, and are usually viewed as ideals. These are "ultimate" values, or "being" values. They seem to have intrinsic value in themselves. Some examples of these are Justice, Knowledge, Beauty, Unity, Orderliness, Harmony, Uniqueness, Self-Sufficiency, Playfulness and Completion. Maslow found these values were often at the heart of a person's passion for his or her vocation. If one lawyer is interviewed, tracing his values back farther and farther, perhaps Justice will be his ultimate value. For another lawyer, the meta-value will be orderliness, or knowledge. Besides being stronger in self-actualizing people, these values emerge spontaneously in mystical states and peak experiences. They have obvious similarity to Platonic forms, which is not surprising since Plato was an initiate of the Mysteries, which involved transcendent states. They are associated with the higher self in Psychosynthesis and with spiritual attainment in almost all the religious traditions.

Meta-values are also motivations. If beauty is an intrinsic value for a person, then they become motivated to bring about Beauty, in whatever form or circumstances. Indeed people may orient their lives toward the accomplishment of a meta-value, going into law, householding, art, locksmithing, or even parapsychology, because it enables them to further a meta-value with their particular unique character, skills and interests. Other motives and abilities then become subordinate to meta-motives. Power can be used in the service of healing or justice. Money becomes an instrument for expanding knowledge or creating order.

However, wonderful as they are, meta-motives are not automatically given priority by the personality. If a person is self-centered, then justice may be defined in terms of his or her personal biases, rather than

broader principles. Perhaps there are levels or stages en route to meta-values, such as Kohlberg's value hierarchy. There are ways of cultivating meta-values and meta-motivations. Psychotherapy, spiritual practices, natural peak experiences and other forms of personal growth and attitude change may facilitate movement toward meta-levels. What these processes have in common is a lessening of attachment to the personality and narrow identifications, whether this occurs through meditation, psychoanalysis, back-packing, or just eventual maturity.

Meta-Motives and Psi

If psi can operate to further motives at the personality level, it can also be used in the service of meta-motives, at the transpersonal level. Let's begin with an obvious area in which the operation of psi is beginning to be recognized, and that is psychotherapy.

The practice of psychotherapy can embody several meta-motives for either the therapist or the client. These would include understanding, healing, unity, self-sufficiency, aliveness. Different schools resonate to different meta-values. For Freud, truth and understanding were important. In Jungian work, uniqueness and individuality are goals for the patient. Fritz Perls emphasized wholeness and inclusiveness in his gestalt model.

Psi can carry out these motivations in several ways. (1) The therapist can psychically get information about significant events and facts in the life of the client. (2) Psi can identify emotions, motives, or responses that are outside of conscious awareness. (3) Diagnosis—in terms of psychopathology—may be provided by psi. (4) Psi may contribute to the creation and choice of interventions.

No doubt psi must work in conjunction with other clinical skills of observation, knowledge and inference, but some therapeutic information appears to come from beyond the normal channels of perception and judgment. In current circles this process is beginning to be discussed more openly. The ASPR held a conference in New York City last fall on *Psychic Factors in Psychotherapy* and, early next year, there will be a conference in San Francisco on intuition and psychotherapy.

Let us bring in our assumption that we are all in telepathic rapport with each other. Applied to therapy, the implication is that the client is aware of the inner thoughts, feelings and impulses of the therapist, and the therapist is aware of the client's inner process. This leads to some interesting possibilities. In some therapy, the need is for the client to accept his or her own negative thoughts and feelings, say, anger toward a parent or spouse, or guilt over some sexual behavior. The

patient is expected to talk about it, and the therapist is supposed to be accepting and supportive. Therapists usually are, on the surface. But what if their deeper feelings are different and the patient picks them up telepathically? The patient finally admits after long personal struggle that he practices some sexual perversion. The therapist says calmly, "uh huh." But what if inwardly he shudders and feels, "Oh, you nasty person"? If the patient is aware of this through psi, his or her guilt is reinforced subconsciously, and the further message is that the guilt should be suppressed. (Such messages can also come through normal means of communication.) Thus the depth of emotional health of the therapist is important, because it is valuable for the therapist to act as a model for the patient at all levels of the self. If psi can sense the deeper levels of the self, then the therapeutic relationship can occur at those levels as well.

Indeed, the evidence supporting this mutual telepathy is quite substantial. There are ample reports by therapists of clients telling them about the therapist's own feelings or behavior—sometimes information the therapist would rather have kept private! Therapists themselves have reported experiencing hunches, dreams, or psi impressions that relate to a particular patient's therapy. For example, I dreamed of a patient escaping a fire by going out of a room in a direction different from the rest of the group. A few days later I read an account of a French financier and swindler, who escaped a mob by leaving a room via an unexpected route. The similarity was obvious and the client and I discussed the possible meanings of the precognitive dream.

Aniela Jaffe, Jung's secretary, was also a patient of his. She tells how she would sometimes go into the analytic session with various questions and concerns, and Jung himself would start talking. She soon learned to keep quiet, because in the course of his talking he would address all the issues she had come in with.

Spontaneous psi may also come from patients who want to attract the therapist's attention, or to prove their power, or to compete with other patients. In these cases the fact that the information comes through a paranormal channel underscores its connection to an important motive.

Another aspect of this is psychic readings or consultations—in which the psychic talks about the clients issues directly and explicitly (or sometimes metaphorically and obscurely). There are few satisfactory studies of this ability, but anecdotal cases suggest that it can provide personal insights and therapeutic change. A second area where psi can operate toward a meta-motive is in physical health and healing. Psi can assist with diagnosis, as exemplified by Edgar Cayce, Jack Schwarz and

the cases described by Shafica Karagulla. Medical treatments may be also suggested through a psychic modality, as with Cayce.

Psychic processes may also directly or indirectly facilitate healing. This is usually considered akin to psychokinesis, but it may not be the same thing as influencing the fall of dice and shifting random number generators. LeShan identified two types of healing, (I) a meditative state of healing, and (II) laying on of hands. He developed a training program for type I healing, in which the healer learns to enter an altered state of consciousness in which he or she is one with the universe. The person to be treated is brought with the healer into this state of being. Since the universe is harmonious, whole and ordered, if the person being treated is made a part of that order, then his or her body is brought back into harmony, and the body is moved toward normal, healthy functioning. This is an explicit evocation of the meta-motives of order, organization, or wholeness. I was interested to note that in some cases in which the patient was receiving chemotherapy, the healing state apparently caused the body to respond to the chemical toxins as the disorder and try to counter them.

I will briefly mention several other of these meta-motivations, and suggest some of the ways that psi can assist them, whether in everyday life or more abstract matters.

Knowledge, understanding, either for oneself or in educating others. Psi may be able to provide concrete or abstract knowledge. The Yoga Sutras of Patanjali give induction procedures, for example, to gain astronomical information. The remote viewing or thought photography techniques can perhaps be utilized for distant or inaccessible information. The aspect of the meta-value that is education has many roles for psi. Various studies have shown that there can be information transfer between teacher and student, but is the process of education limited to that? In Buddhist teaching, one of the techniques is termed direct mind transmission, in which the teaching is directly transferred into the mind.

Order. To what extent do we use PK to keep the universe in order? Is a consensus PK responsible for maintaining probabilities in accordance with statistical laws? Why is it that some people's cars always run forever and their machines don't break down, while if a jinx comes in, problems begin? Some people cause computers to crash. When I am in a bad mood, my system goes down repeatedly. Is there some connection here between our states of consciousness and our connection with the meta-value of order? If we put an advanced meditator in a room with a random number generator, would it become more or less random?

Beauty. There may be a role played by psi processes in creativity, though creativity itself is no better understood than psi. Certainly many of the reports of artistic and creative inspiration are similar to the hunches, impressions and imagery of psi.

Unity, oneness, wholeness. I was impressed by a comment of Charles Tart a few years ago that the experience of cosmic consciousness might be also described as an open telepathy/clairvoyance channel with all the universe. On an only slightly less grand scale, the early writings on the Christian church mention the "communion of the saints." In the framework I am discussing, this could have been a telepathic connection between people who had reached certain levels of psi ability. Psi is not spiritual in itself, but it may be related to the underlying oneness that all mystical traditions say is the case.

Conclusions

Psi operates within human motivations like any other ability. It is a neutral skill. ESP and PK can be used for good or ill. Psi can be suppressed and repressed, *per se*, or the information it provides can be blocked from awareness, by such motives as fears, defenses, conflicts, etc. Psi can occur discreetly, in collaboration with other sources of information and abilities, or it can be highlighted as a characteristic of the persona, when that serves motivational needs. The processes of psi and the messages or effects it provides will interact dynamically with other needs and motives of the person. The motives will control psi just as they control other elements of the personality. Interpersonal relations may be affected by mutual psi at unconscious levels of the psyche. Psi can be used in the service of meta-values and meta-motivations.

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ADDENDUM

Being Values

- (1) wholeness; (unity; integration; tendency to one-ness; interconnectedness; simplicity; organization; structure; dichotomy-transcendence; order);

- (2) perfection; (necessity; just-right-ness; just-so-ness; inevitability; suitability; justice; completeness; "ought-ness");
- (3) completion; (ending; finality; justice; "it's finished"; fulfillment; finis and telos; destiny; fate);
- (4) justice; (fairness; orderliness; lawfulness; "oughtness");
- (5) aliveness; (process; non-deadness; spontaneity; self-regulation; full-functioning);
- (6) richness; (differentiation, complexity; intricacy);
- (7) simplicity; (honesty; nakedness; essentiality; abstract, essential, skeletal structure);
- (8) beauty; (rightness; form; aliveness; simplicity; richness; wholeness; perfection; completion; uniqueness; honesty);
- (9) goodness; (rightness; desirability; oughtness; justice; benevolence; honesty);
- (10) uniqueness; (idiosyncrasy; individuality; non-comparability; novelty);
- (11) effortless; (ease; lack of strain, striving or difficulty; grace; perfect, beautiful functioning);
- (12) playfulness; (fun; joy; amusement; gaiety; humor; exuberance; effortless);
- (13) truth; honesty; reality; (nakedness; simplicity; richness; oughtness; beauty; pure, clean and unadulterated; completeness; essentiality).
- (14) self-sufficiency; (autonomy; independence; not-needing-other-than-itself-in-order-to-be-itself; self-determining; environment-transcendence; separateness; living by its own laws).

From Abraham Maslow *Toward a Psychology of Being*

DISCUSSION

SCHLITZ: Well, I just have a comment about your example of the commodities experiment. That experiment has now been replicated with a group of unselected participants without making any investments. It was done successfully, but the fact that they deliberately avoided the people who carried it out to make an investment suggests that that kind of motivation they felt was inhibitory.

HASTINGS: It has also been done elsewhere by people with investments and they did very well, but they did not continue it. It was a one shot effort.

HARARY: I do not believe that the financial aspect of it is necessarily

inhibitory, but it does provide a good backdrop for observing some experimenter motivations around psi. As far as the original silver work being replicated, I think that is a big exaggeration. First of all, the original study was a change-the-conditions-as-you-go pure and simple attempt to make money using psi. There was no preset number of trials, and the conditions and probability of success were not consistent across those trials that were carried out. Furthermore, the investment study could be ended any time it didn't make a profit, which is exactly what happened. So if you talk about replicating something that wasn't a formal experiment in the first place, then completely change the conditions, the number of trials, the number of percipients, the background of the percipients, the profit motivation, the way the data are collected and the probability of success, you really aren't talking about a replication at all, but a very different game altogether. In this particular case, there were three correct pre-investment trials described in the original published report, followed by nine correct investment trials for December silver, followed by the correct but grossly misjudged first trial of March silver which Arthur described, followed by one March investment trial that was not successful. That's all there was to the investment pilots and series. Apart from that, there were an indefinite number of very loose and informal attempts at using a variety of different approaches, with various participants, to look at the possibility of supposed displacement after the March investments were terminated. I've recently encountered some misleading reports about the silver experiment, claiming there was a whole series of nine investment trials, but that just doesn't jive with the only published report on the first silver study in *Psi Research*, or with what actually happened in the study. Incidentally, the first miss came immediately after the wrong feedback was given on the misjudged trial. I think that the incorrect feedback had more to do with the miss—because of the confusion caused by my being told that a solid hit was really a terrific miss—than any elaborate theories about target pool displacement, greed or anything else that anyone has so far put forth as a possible explanation or rationalization for what occurred in the trial immediately following the one that was misjudged. If you have done some mental task correctly, but are told that you have made a mistake, your only alternative is to try another approach which is destined to move you away from your original correct approach. Strangely enough, some people think of that original silver study as a failed experiment. I do not understand that personally, but I find it fascinating. They don't know what really happened. For my own part, I finally got tired of the

attitudes of some of the people who were involved with it and stopped wanting to be personally involved or implicated in their activities.

HASTINGS: Well, I do not consider it failed.

HARARY: To avoid risking any money in order to get a successful result I think is unnecessary, unless the particular people involved have some personal problem about dealing with the situation when money is an issue. It is not that money is intrinsically evil. For some it is not even an important motivation. I was offered extra money for the silver study and wouldn't take it. The question is what are you doing it for? Why do you want the money? Do you want it to prove to the world that you can really be successful? That isn't very interesting either, but if you are worried about your image, then you are going to be nervous about the experiment. It is clear that psychic functioning can work quite powerfully in spite of that kind of situation. It is also clear that people respond in some very interesting ways to that situation; ways that may interfere with the process not only on a functioning level, but particularly in the way that they deal with and judge even the most obvious data. I don't think that the functioning itself is actually interfered with. I think it is what people do with the data and how they respond to them. This is not just the silver experiment. I am talking about psi in general, psi research in general. What happens when you start seeing honest to God really powerful ongoing results? I think what happens is that you find throughout the field it is often not the functioning which breaks down but some people's response to the functioning. Some people just freak out—which may be why they also feel unable to handle psi in their own lives. Therein lies the question of what you are doing in this field in the first place. One thing which I submit, is that what some people are doing in the field is not bringing out psi, not studying psi, not helping to make it measurable, but in some perhaps unconscious way trying to control it, trying to own it, trying to use it to glorify themselves and bolster their own self image, and ultimately trying to prevent psi from reliably occurring, because as you say it is a little threatening for some people. Now the idea of preventing it from occurring is a little wacky, considering such a feat would be like preventing nature from occurring. Prevent yourself from noticing it and blame the percipient. That is really what often seems to happen.

ISAACS: I have two responses evoked by your speculations. I found the idea of mass transfers of knowledge very challenging and interesting. Maybe this is something that we simply have not tried because we did not believe it was possible. On the other hand you could argue that Buddhist initiation is a rather different sort of knowledge from a

"Statistics 101" course, which I think is true. I recall and I am starting to reframe some childhood experiences that I used to have in the classroom where I would know things instantaneously. I cannot tell at this distance whether I and the others knew the answers on rational grounds or whether I had telepathically picked them up or worked it out or, maybe, it was a mixture of both. I get a strong feeling that the instantaneous, irrational process may be working unobserved in the classroom. A friend of mine was able to do arithmetic if she did not actually do the calculations, but wrote just the answers down. She used to often get that right. When she had to learn the procedures she failed miserably. So the idea of transfer of knowledge in a way which breaches our parapsychological expectations is an interesting one. The other point that I would make is that the advent and the growth of family therapy and the analysis of family dynamics has made it clear that 95% of families are dysfunctional or have fairly heavily dysfunctional dynamics within them. This presents us with a horrifying view of a civilization most of whose members have gone through an incredibly damaging process on the way to getting to adulthood and therefore reach adulthood in a very damaged fashion. It seems to me that this discovery on the one hand is horrifying and on the other hand is extremely cheering, because it suggests that ultimately something could be done about it, especially in regard to our attitudes towards psi. I found, in some of our PK subjects that if when you were a child your parents were highly accepting of psi and induced you to be very highly accepting of psi, the chances are you are going to be good at psi functioning. You're going to have a leg up over obstacles which other people who went through families who denied psi might find much more difficult. It seems to me that the confluence of those two historical factors in this phase of our civilization is very exciting. It indicates that people may emerge into adulthood without having their ESP bashed out of them through fear and ignorance. It seems to me that this opens a very interesting sociological perspective where we can expect change to occur. I was wondering what your response was to that.

HASTINGS: Actually, it gives us an opportunity for a much more natural situation, so that we can see what the other levels of communication are without blocking them, including verbal and non-verbal psi.

KEIL: I hesitate to say this because I appreciate your enthusiasm very much. But throughout the presentation I had some questions: what do we do about self-fulfilling prophecies? Why do we have to check the assumptions that we made and that we still make in this situation? How can we ever test them? Would you like to respond to that?

HASTINGS: I think that is an important concern. If I were doing it I would use a different strategy than the normal one. The normal one is to set up all of the controls and then see if something happens. I would try as hard as possible to get something to happen, even if it might be a self-fulfilling prophecy, and then try to sort out the various factors that are there. I am much more concerned with trying to get an open response which then can be studied, because then we know that we have something to work with. Now, I have a second reason relating to the social use of psi. In some cases it does not matter whether it is psi or non-verbal communication or one of a multitude of factors. What is important is to get a particular result for a social or individual need. I can give you an example. I did some remote viewing judging. What I noticed was that if you exclude all information but what is on the transcript and match it up with some target, you have a varying degree of success. And so you can establish whether or not psi is present. But in actual practice what you do is not that. What you have is a transcript, and information from the CIA, and information from interviews and from what you generally know. You put it all together to see what the most reasonable answer is without having to rely specifically on psi. That is an entirely different process. Once you have established reasonably that there is some psi going on, then you do not use that source in isolation. You use it just as you do in everyday life. You don't use only one channel of information. On the other hand I do not think psi should be used in isolation, but it should be combined with other forms of input and knowledge so that we have the best basis for decisions.

STANFORD: I would like to go back to what you said about childhood and about psi favorable and not so psi favorable family situations. I would suggest that what might be the most constructive healthy atmosphere in the family vis à vis psi phenomena is one that takes the phenomena plainly as a matter of course, nothing extraordinary, not even to be sought after, but something that does indeed happen and that is no more remarkable or special than when any of the other ways of acquiring information occur. Now, I am not talking completely out of my hat because as, some of you know, my identical twin brother was for many years a practicing and well-known psychic, but he did not begin the whole story. My grandmother had remarkable experiences. In my own home my mother was an extremely intuitive type of person, call it psychic or what ever you want. But there was never any talk of special phenomena or "I am psychic" or "I can tell what you are thinking about, kiddy, so do not try to deceive me"—nothing like that. She knew, sometimes it seemed, very definitely. When I was in college,

anytime I got into difficulty she was on the phone and she did not call all that often. What I am trying to say is that it is one thing to be in a family where people are thought weird or totally out of place because they produce psi. But there may be another type of situation that may not be that conducive, where someone points and says this is something special and by implication says you are weird, you are strange. I remember vividly one night when I was at the Plaza Hotel in New York City and Russ Targ and Hal Puthoff were sitting across the table from me. This was past midnight. We had gone over there after some ASPR function. Russ looked at me and said "I want you to remote view" and I said "what do you mean? Do we have somebody who is going out to a target site right now?" And he said "No I will just go there in my mind, just go ahead." Well, there was something about the way he said it. There was absolutely no question. This is the kind of thing I am talking about in the family. I think this is the kind of atmosphere that helps matters. If you become too self-conscious about it, things can really start to fall apart and become non-constructive.

HARARY: Often what I found in the laboratory is that people come there wanting some validation, some proof that they are psychic. They want to be tested. I found that often the people who seem to do worst in the experiments are the people who have the most to prove. The people who just say "Look, I don't know. I will give it a shot. I think it might be interesting. Probably if others can do this I can do it too" do pretty well. What do we do in that case? We say "Congratulations" and give them a little button to wear and say "Now you are officially a psychic, whatever that is?" People ask me if I am psychic and I don't know what the heck they actually mean or what movies they have been watching lately. I think the answer is not to try to determine which people are psychic out there, but to find out what psi functioning is. A lot of what has been discussed today assumes that there are these special psychic people and then there are the rest of us. I do not believe it. I believe that there are people who have shown in the laboratory their ability to do certain things and have practiced doing that. I speak from personal experience here. I just don't think that there are these weird unusual people and then everyone else. And if you are only defining those people by their ability to do certain things in the laboratory, then that is very limited and ultimately meaningless in the real world. I wonder if it is even worth using the term? And if you are not using it, if you are getting at the idea that there is something that ties these people together in some greater sense, psychologically or in other ways, that has yet to be proven. The people that are described as psychics all seem pretty different, and are not even being labelled according

to consistent criteria. It is an interesting kind of motivational problem in research. If you are concerned that there might be really powerful folks, that might mean that you yourself are less powerful. Then you might try to keep those psychic people down. If on the other hand you are just finding out what people in general are capable of, then there is a kind of connection. Maybe you are capable of it too. Perhaps you find out what is going on in the human psyche a little bit. But I think we need to look at the motivations behind some people wanting to check out what certain people are capable of and bring themselves into that situation.

HASTINGS: I think experiments should also be learning experiments for the psyche of the experimenter as well as the subject.

ISAACS: When I was in Miami recently I was talking to some folks who were there when the neurolinguistic programming people held a big potlatch together. They got in a whole bunch of professional psychics and the idea was that the NLP people were going to find out how high functioning psychics perform. The psychics were going to tell them how they functioned and then the NLP practitioners would model the psychics and were going to be great psychics themselves. What happened in fact was that they pulled in a collection of heavy-weight professional psychics who were featured in the media and who were very famous. They actually threw out the psychics after the first day because they decided that the psychics were just handing out so much bullshit about what they were actually doing, there was such a lot of patter, that there was nothing that the NLP people could actually copy because it was completely ridiculous, a kind of public flim flam. The point I want to make in favor of parapsychology is that if you have some subjects who are doing a remote viewing experiment and they do the work using ESP because the experiment has guaranteed that there are no clues, they cannot use cold reading, they cannot use their knowledge of the other person and they do not use all those cues which the professional psychics tend to use you get honest to goodness real psi functioning. I think that there is an enormous confusion in the public mind where people see alleged great psychics in the media and think that is what ESP is. Many genuine psychics keep a lower profile, but do much more genuine and honest work in the laboratories. I think that this is something of which the general public is drastically unaware at the moment.

HASTINGS: I would say the psychics and the NLP people deserve each other.

STANFORD: Some of the best psychics are people who we recruited off university campuses, who walked in and blew our minds. I mean

people who scored two or three standard deviations above mean chance expectation and did so repeatedly. They never thought of themselves in any self-conscious way as being anything special. I will not go into that further, but they were very interesting people to me. I agree with what I felt is a sort of passion behind Keith's remark about what I would call parapsychological democracy and I like to take that philosophy as an operating one when people are tested in our laboratory. However, I must also quote George Orwell's *Animal Farm* and say "All people are equal, but some are more equal than others." I really think that is true, there are individual differences. Psi performance is a complex thing. Maybe it has something to do with nervous sensitivity. There are many processes in decision making and reporting that go into a successful psi performance. At any one of these levels people are going to vary due to genetics, learning, negative or positive reactions and other factors that make for folks being different. As pragmatists when people come into the laboratory we have to help them to use their psi in the best way that they can. My own experience does, however, belie the notion that all are exactly equal. I believe some are a little more equal than others.

HARARY: Rex, I don't believe that all people are exactly equal, but in no other field do people assume that a particular skill in one area presupposes general spiritual development or an overall superiority to the rest of humanity.

STANFORD: It is just not an all-or-none phenomena is what I said.

HARARY: Sure.

HEINZE: I think everyone of us has psi faculties, but with some they are more developed than with others. It is like playing the piano. Some can study for 20 years and never will play it well. Some just sit there and play beautifully. It is, I think, the quality of the psi faculty that counts, but the faculty itself is latent in everybody.

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.

SPONTANEOUS SYNCHRONISTIC EVENTS AS SEEN THROUGH A SIMPLE COMMUNICATION MODEL

ROBERT MORRIS

Many people experience very striking coincidences in their lives and attribute considerable meaning to them. The study of such coincidences is important for depth psychology, as it may have profound implications for our understanding of the psyche and its relationship with the universe, as well as for the usage of such material in therapy. Parapsychology is interested because, by definition, it deals at least with a subclass of coincidences, those involving unexpected correspondences between events in an organism and events in the environment. But there are other coincidences as well, often seeming to be removed from the domain of parapsychology, not interpretable in terms of ESP and PK. Attempts to theorize about the full range of coincidences reported have generally gone beyond the scope of parapsychology, involving various descriptions of the universe as having a tendency toward the production of pattern, of which meaningful coincidences are but one manifestation. Jung's concept of synchronicity as coincidences fueled by the power of archetypes is one especially well-known example and one that has been important in shaping the course of Jungian analysis techniques. The present paper is an attempt to synthesize synchronicity and related concepts with the subject matter of parapsychology as viewed from a communication perspective.

A major commonality between the two is the meaningful coincidence. Both deal basically with situations in which an observer notices a similarity between two events, not apparently causally related, and attributes meaning to that similarity. Parapsychology tends to focus on correspondences between events in an organism and events in its environment which, when noticed by the observer, imply to that observer that the organism either was influencing the environment (as in PK) or was being influenced by it (as in ESP) without access to known causal processes (i.e., anomalously). Elsewhere (Morris, 1986) I have developed a simple model describing this relationship between observer and observed coincident events, largely so as to organize our knowledge of

how we may be misled by ourselves and others into thinking a psychic interaction took place, whereas in fact it had not. The model can also be used to describe some possible modes of genuine psychic functioning and, as we will explore later, may even be expandable to cover a wide range of apparently synchronistic events as well. It may even be able to generate some testable predictions.

An Observer-centered Model of the Inference of Psi

Parapsychology, for present purposes, will be defined as the study of apparent new means of communication or transfer of influence, between organism and environment. Such new means are referred to as psi. Psi includes ESP, or anomalous input, in which an organism appears to receive information or influence of some sort, from some event in the environment, without the use of known causal processes. This can be expressed in simple communication terms. The environmental event (or target, as it is often called), seems to be serving as a source or sender, the organism as a receiver, and the message is the information they appear to share. It is impossible to specify what channel or medium conveyed the message, because it looks as though there are barriers up to prevent presently understood channels from operating. For example, suppose that at 9pm one evening one of my daughters announces suddenly that she is feeling very anxious and fears that something terrible has happened to her boyfriend. Much later that evening, we get a call informing us that at approximately 9pm he was in a car crash. It thus appears to us, as observers, that my daughter's experience was influenced by the tragedy befalling her boyfriend. The tragic event was the source, information about it (harm to her boyfriend) was the message and she was the receiver. Since the accident occurred several miles away, it appears to us that all known channels were blocked from operating, and we may infer that my daughter had a psychic experience.

In addition to ESP, psi covers psychokinesis (PK) or anomalous output, in which the direction of influence is reversed. The organism appears to serve as source, the environmental event or target as receiver and the message is the informational content of the apparent influence upon the receiver. We can reverse the example given above to illustrate. Suppose at the time of the car crash my daughter's boyfriend had consciously thought of her and "sent" her a strong message, "I need help," and had told this to a companion while they were both still pinned in the car wreck. Upon learning later of my daughter's simultaneous impression, he and his companion may conclude that he was

psychic and influenced my daughter's thoughts. Source, receiver and message stay the same, but a different set of observers may attribute psychic functioning to the source organism rather than the receiver organism. When two people are involved, as in crisis telepathy cases, observers often are inclined to attribute psychic functioning to whom-ever seemed to be actively involved. Had the boyfriend lost consciousness immediately, others would be unlikely to attribute psychic functioning to him.

Some other examples: If you go to psychics and ask them where your lost wallet is, and get a correct answer, observers would be inclined to say that the psychics showed ESP, that they seemed to receive information from the wallet and its surroundings. If someone strokes a piece of metal in front of an observer and it bends, the observer is inclined to say that that person showed PK, and seemed to exert influence upon a target aspect of the environment. In the latter case the concept of a message may seem less appropriate; it here would refer to the informational content of the similarity between the psychic's intentions and the behavior of the target, as perceived by the observer. In both sets of cases, it looks to the observer as though there is a cause-effect relationship, with source affecting receiver, although there does not appear to be any known physical cause involved. This is especially true of intentional psi, as in a formal or informal study, where someone deliberately attempts to interact with a target and is then seen to be successful. In any such study, one varies the message at the source, makes sure the barriers are in place and then monitors the receiver to see if changes in the source appear to have influenced the behavior of the receiver. To say that S has influenced R is tantamount to saying that S has served as a contributory cause for R. In more spontaneous, unplanned circumstances, however, observers may simply note an apparent correlation between two sets of events and not have any *a priori* reason for assuming one is S and the other R. They may assume that there is an S and R, or that the two events are interacting in some mutually causal way, or they may assume some third set of factors as responsible for coordinating (or synchronizing) the two sets of similar events.

Before pursuing some of these options in detail, let us flesh out the observer-centered model a bit more. The basic model states that observers become persuaded that a psychic event has taken place when they observe a strong correspondence between an organism event and an environmental event, such that it looks as though the two are connected meaningfully, yet there are barriers up which appear to preclude causal interaction between the two. There is more to it, of course. The

observers generally are not dealing with the two events directly; rather they are dealing with descriptions of them, the product of acts of measurement and recording, at varying levels of sophistication. This is especially true of organism events, when the observer is someone other than the organism. Such events must be inferred on the basis of verbal descriptions, consequent behaviors, assigned instructions (as in PK) and so on. These two sets of descriptions, be they subjective impressions and memories or more objective formal accounts, are what the observers actually compare. If the descriptions resemble each other strongly, we infer that they are connected in some way. We may attribute a general meaningfulness to the very fact of their resemblance, or we may find additional meaning, perhaps regarding one as symbolic of the other, or the two as sharing a kind of meaningful symbolism. The more meaning we find, the more impressed we are with the apparent connectedness of the two sets of events. In the case of my daughter and her boyfriend, I as observer would be comparing her own description of her experience and my memory of her consequent behavior with the contents of the later telephone call and, eventually, additional corroborating evidence about the particulars of the accident. My daughter could also serve as an observer, comparing her memories of her experience with whatever I told her about the telephone call. Each of us would be relying on information from other observers in part or completely. Any time an observer draws an inference about psychic functioning, he or she may be relying upon other observers for crucial details and may in fact be using third and fourth hand descriptions. In comparing the two descriptions, my daughter and I are using similar, but not identical descriptions. As we assess the similarity between them, we may attend primarily to various surface similarities—boyfriend, accident, 9pm, and any other particulars that may be recalled, such as associated imagery, any pains felt by my daughter in particular parts of her body that corresponded to his pains and so on. We may also seek and find deeper meaning, however. My daughter may have been feeling that their relationship was becoming tenuous, that she was uncertain about how much she really cared for him, such that the intensity of her response on this occasion represented to her symbolically a reaffirmation that she did care for him and would be responsive in his times of need. She may even feel that the accident came at a very timely moment in their relationship and this added meaningfulness could well add to her assessment that the two sets of events were causally related in some way and that they had shared a psychic experience.

The sophisticated observers go a step further as well. In their attempts

to decide whether the connectedness has an ordinary, causal explanation, they naturally pay attention to the barriers that appear to be in place, to ensure that there is no ordinary way for S to contribute causally to R or *vice versa*. But they also attend to the separate sets of known factors likely to have contributed causally to the organism events and environmental events. Ideally, there should be no overlap between them. The barriers should extend back far enough to eliminate any crosstalk or shared commonality between them. This can be illustrated by expanding on the example of my daughter and her boyfriend in two separate versions. In Version 1, the boyfriend is several hundred miles away and has been out of touch for weeks. The accident was sudden and unexpected, the result of an animal darting into the road in front of him. My daughter had little knowledge of his whereabouts and circumstances and, although in general concerned about his welfare, she had not previously expressed any specific concern for his safety. In Version 2, my daughter and her boyfriend spent the early part of the evening together and got into a big fight. He left the house in anger, stating that he was going to have a few drinks with some real friends and then make the long, dangerous drive home in the snow. In the first version, there appears to be good separation between the two sets of contributory causes. The factors affecting the accident have essentially nothing in common with the factors affecting my daughter's sudden anxiety. In the second version there is extensive overlap, such that she would quite reasonably expect him to be accident prone on that occasion. I, as an observer, would be quite impressed by the first version, but not by the second.

Having seen the various basic elements in the observer-centered model, we can now summarize some of the main ways that we can be misled by ourselves and others into overestimating the likelihood that a particular coincidence involves a psi component.

1) Barriers can be skirted in advance. The antecedent factors contributing to the organism event can overlap with the factors contributing to the environmental event. This can include: the presence of a third set of factors, common to the two, which coordinates or synchronizes them both; factors naturally affecting the target become known to the organism; the organism influences factors affecting the target and other crosstalk between the two sets of factors.

2) Organisms can take in and put out much more information than we ordinarily realize, in the diversity and sensitivity of their sensors and in the complexity of their biophysical outputs in addition to psychomotor output. They also can process and store information in more complex and more effective ways than we ordinarily realize.

3) There can be problems with the barriers themselves. Strong barriers can be weakened temporarily, allowing a brief "glimpse" or opportunity to exert influence. Barriers may be weaker in general than they appear and sometimes there is no barrier at all, but we are led to think there is.

4) There can be problems in the measurement and recording stage. Ideally, each should be done independently of the other. If one is done by someone who knows the outcome of the other, then that later description may be biased by knowledge of the former. Also, any factor that the descriptive processes share in common may lead the two resultant descriptions to resemble each other.

5) There can be problems in comparing the two descriptions, if in fact those doing the comparing are strongly oriented toward perceiving similarity or in avoiding perceiving it. We have a natural tendency as observers to look for pattern, since most of what is important to us as we perceive involves extracting pattern from noise, and thus we may be inclined to impose pattern upon ambiguous situations where such pattern does not really exist.

6) There may be problems in drawing inferences from the actual similarity between source and receiver, organism and environment. Just as we are good at attending to pattern and noting similarities, we likewise are inclined to ignore and forget all the opportunities for similarities and coincidences to arise when, in fact, none did. Thus, when we do notice coincidences, we may over-attribute meaning to them.

7) There are many ways that any given observer may not get good information about the other components in the model. They may be shielded from the information they need. They may be given inaccurate information or led to misperceive the accurate information they are given. Their attention may be diverted. They may be led to misinterpret or misremember the information they receive.

An expanded version of these problems, illustrated by strategies of mentalists, can be found in Morris (1986). They must be borne in mind any time an observer or set of observers is drawing inferences about the degree of correlation between two or more sets of events, including even two or more sets of purely physical events that may appear more purely synchronistic in nature.

Apparent Psi-mediated Correspondence between Organism and Environment

Using the above model, let us extend it now to look at coincidences involving organisms that appear to be interacting psychically with target aspects of their environments.

Real-time influence of source upon receiver. One main way of using the model is to hypothesize that when such apparent interactions take place, through some new means of influence, that is exactly what happens. Most of us act as though we think that happens. For ESP, suppose a psychic upon demand describes where a lost wallet is with accuracy. We would say that the factors determining how, when and where the wallet got lost were all ordinary factors, with no psi component. The factors determining the psychic impressions, however, would have included a strong psi component, having their influence during and after the time that the psychic became oriented toward this particular task. Thus the psi influences are in real time and closely tied in to the actual experience of the psychic, perhaps tied in as well to some sort of effort on the psychic's part, such as handling a token object, entering an altered state or going through a preparatory ritual.

For PK, suppose a psychic upon demand successfully attempted to start a stopped watch. The real-time version of this would posit that the factors determining the psychic's decision to start the watch and the volitional experiences of the psychic during the attempts were all ordinary, non-psi factors, having to do just with the social and physical factors leading to and including the request to start up the watch. On the other hand, the factors affecting the starting of the stopped watch would include a psi component, contributed in real time during the time the psychic became aware of the task and took steps to become volitionally involved. The watch was not working before, but now, after volitional effort by the psychic, it is. In each case, the factors affecting the source do not include a psi component, whereas the factors affecting the receiver do. This version of the model appears most obviously causal, with the source always influencing, or contributing causally, to the receiver.

What about precognition under the real-time version? Suppose I dream of receiving money and the next day I do receive money from a friend, repaying a long forgotten loan. Precognition is complex and admits to several versions. The true precognition version would say that I was actually psychic during my dream and was influenced by the future, shortly before and, perhaps, during the precognitive dream. The influence has impact in real time, although the source existed in the future and had to extend retroactively in order to exert its influence. There are a couple of other versions as well, which do not call for retroactive influence. One would posit that at the time of my dream I was serving as a receiver for one or more sources in the environment, sending me information that would lead me to realize that I would get money tomorrow. Perhaps as I dreamed I started to "tune in" on the fact that my indebted friend had now acquired enough money to pay

me off and was making plans to look me up to do so, next day. A second version would posit that I had an ordinary dream, but the next day I took steps to ensure that the dream would come true, perhaps through a combination of my own ESP and PK efforts, acting to bring us closer together, more likely to meet and so on. Perhaps he as well has now served as receiver, being influenced by my dream and subsequent thoughts about it, such that he as well now makes decisions leading him to be more likely to pay me off. This last variant is the most complex of the two and, although it is in many respects a realtime model, it introduces the notion that we will turn to more in the next section, the idea that there may be times when two individuals are simultaneously serving as source and receiver for each other, in such a way as to become synchronized in their activities and bring about one or more strong coincidences. It also introduces the idea that some psi functioning can take place at times other than the moment in time when the psychic influence appeared to be being felt by the receiver.

Psi-mediated interactions among contributory components of the model. In this section, we will consider possible psi effects in some of the components of the model besides the apparent source and receiver. A major opportunity for psi effects concerns the two sets of contributory factors, one for the organism and one for the environment. The complex of factors leading up to each one may include a matrix of physical, biological, psychological and social events, contributing in varying degrees to the final event of interest. Any time that an organism behaves in some way such as to influence part of that determining system, it could be serving as a receiver for a source related to the other determining system. Any time a physical or biological event takes place in one of the systems, it could be serving as a receiver for a volitional source from the other system. If we allow for unconscious psi effects, as most of us presently do, then there is ample opportunity, especially in spontaneous cases, for psychic communication to flow freely from one determinant system to the other, bringing ostensible source and receiver into closer and closer potential similarity, building gradually toward one very powerful and meaningful coincidence. Such coincidences could seem very synchronistic at the time, as though they had been coordinated by very deep structure indeed. Such coordination may involve additional determinant systems as well. Since the universe is not tending to become more and more alike all the time, it would seem important to note that under this variant of the main model, there would need to be some sort of connection linking or orienting a source in one determinant system to a receiver in the other. One becomes salient or important or meaningful for the other, perhaps because of

a basic thematic similarity, or because one is relevant to the needs of another, or because some elements in each determining system have been made aware of the other's existence. Crisis telepathy cases, for instance, involve two people who are well-known to each other and whose lives and experiences are mutually important. What appears as a striking coincidence at a time of crisis may in fact represent a single, powerful moment among a set of other less powerful, but also synchronized moments, to which each pays insufficient attention to notice any correspondences that are there.

Psi-mediated interactions involving observers. Another version of the communication model includes psychic functioning on the parts of observers, as they choose what to observe and when and how to observe it. Each step of the model involves observations on the part of observers, especially events surrounding source, receiver, barriers, their descriptions and the comparison of those descriptions. Observers decide if something involves a psi component. Psi, like beauty, rests in the eye of the beholder. If an observer or group of observers wants to witness a strong coincidence, they may increase the likelihood of doing so by selecting what they wish to observe and how and when to observe it. Obviously, a biased observer can sometimes produce spurious evidence for psi by forcing observation of events with a high *a priori* likelihood of coinciding. Comparably, a psychic observer could serve as a receiver for information from relevant sources directing him towards the right time, place and manner of observing. A psychic observer could engage in volitional acts, wanting to observe coincidence, thus serving as a source for receivers that are then modified such as to bring about the coincidence. In addition, there could be psi-mediated errors of observation, such that the descriptions of source and receiver are brought closer together than they should be. If I go to the psychic to find out where my wallet is, I may unconsciously know where it is and select to visit him at a time when he is likely to be thinking about the kind of location that actually contains the wallet. Or I may have two or three items missing, but only select to ask him about the item lost in a place that he is likely to describe. And, finally, I may mishear or misinterpret the psychic's description of his impressions, such as to create a stronger correspondence with the wallet's actual hiding place. Such observational effects are similar to the kind of psi-mediated experimenter effects frequently discussed in the research literature. In spontaneous cases, where observers are reacting naturally rather than in artificial, preassigned experimental roles, there is ample opportunity for a host of people to interact such as to bring about the observation of a powerful, meaningful coincidence. And the coincidence as seen by one set of

observers may be far stronger than that seen by another set of less involved or psychically active observers. It should also be noted that the above effect can apply to individual observers or to hierarchies of observers as well, as one secondary observer selects which of several possible primary observers to listen to or decides where, when and how to ask others to take observations.

In summary, there are many ways that a communication-based model can be used to link various sources and receivers together to produce the observation of a strong coincidence between organism and environment, of the sort usually labeled as psychic. Some of these can involve quite a few people, each contributing in relatively minor ways to a powerful final observation. Such complexity can upon occasion make it hard for any given observer to identify an obvious psi source and receiver, thus leading the observer to conclude that he has just seen a very strong coincidence, but it is hard to reduce it to terms of ESP and PK.

Coincidences Emphasizing Physical Events

We now move to a set of coincidences less likely to be attributed to psychic communication, namely coincidences between two physical events or between one physical event and a relatively disinterested individual, or an observer who regards himself as a passive onlooker. In each case, the observers regard the physical event or events as the true anomalies, such that it would not ordinarily occur to observers to attribute any psychic functioning to those involved.

Single physical events with observers. Here we have situations in which someone observes a very unusual physical event (or perhaps a quasi-physical event such as seeing an apparition) and attributes meaning to it. This can involve the feeling that the event has considerable importance for oneself, relating either directly or symbolically to one's (the observer's) personal circumstance or the general circumstance of the moment. Examples often cited from Jung's writings would include the scarab-like beetle that suddenly appeared at the window following a conversation about scarabs, or the sharp noises from the bookshelf during the debate by Jung and Freud over psychic phenomena, including the prediction by Jung that the second noise would occur. Both the beetle's arrival at the window and the loud noises seemed anomalous, unlikely, unexplained and special. Both were interpreted by observers as extremely relevant symbolically to the ongoing intense conversations. In both cases therefore there was a coincidence between organism events (the intensity involved in the issues being discussed

and their content) and an event in the environment, with meaning attributed to the coincidence. But the essence of what impressed observers and what led to the wide citation of these occurrences as examples of synchronicity, was the extraordinary characteristics of the physical events and the meaning attached to them by observers.

Given that there were observers who were intimately involved, a psi-communication based interpretation of such events would closely parallel the points raised in the preceding major section. Real-time source-receiver interactions with the environment could be responsible. Both Jung's client and Jung himself could have been real-time receivers of information about an unusual event in the vicinity, a beetle that had blundered its way into strange territory, such that this affected the turn of their conversation and maintained its focus and intensity. Analogously, Jung and perhaps even Freud may have received information in real-time (or perhaps precognitively, bearing in mind the problems alluded to earlier) of the likelihood of such a noise occurring due to some combination of structural weaknesses and environmental changes of some sort. This may have affected the content and intensity of the discussion, decisions about when and where to hold the discussion and even subtle actions in the vicinity of the bookcase which might have put the structural weaknesses over the threshold level. Or, if we take the concept of PK seriously, especially the possibility of macro-PK, we must consider that Jung (and perhaps Freud as well) may have served as a psi source with bookshelf as receiver, either providing a small "push" to an already somewhat structurally disposed bookshelf, or a sizeable effect upon a bookshelf not at all about to produce such a noise if left alone. Following the arguments developed earlier, it is also possible that source-receiver interactions took place earlier in the sets of factors determining the conversations and the events leading to the anomalous physical event, throughout the time period preceding the events and their observation. It is also possible, for such events in general, that there are frequent opportunities throughout daily life for apparent anomalies to be observed, and that potential observers periodically serve as psi receivers for information about how, when and where to conduct acts of observation such as to increase the likelihood of meaningful anomalies being observed. Once again, granted the concept of PK, it is conceivable that various potential observers, including secondary observers, contributed in some measure as psi sources to the events they observed.

Coupled physical events. Here we consider circumstances that seem even less removed from interpretation as psi communication, namely coincidences between two physical events or sets of events that are

noticed by observers and to which those observers attribute meaning. Examples of this would include the kinds of serial coincidences of such interest to Kammerer and Koestler (e.g., Koestler, 1972), such as the repetition of specific numbers in a series of events or an unusual name cropping up several times in a short period of time. Here, of course, one must be especially wary of the fact that we tend to underestimate the likelihood of such coincidences occurring in accordance with the laws of chance, largely because we conveniently ignore the many opportunities for coincidence to occur and yet none in fact does. Once a short series has been noticed by an observer, that observer may well now be on the lookout for further instances and be very selectively attentive. This also provides motivation for the observer to participate in source-receiver interactions with the environment, such as to increase the likelihood of continuing to observe events that will continue the series. The notion of observers interacting with their environments unconsciously, but using psychic functioning to address basic needs (such as a need to observe meaningful coincidences) has been very well developed elsewhere by Stanford (Stanford, 1974a, b). An initial strong coincidence, either at the start of a series or of sufficient impact to stand alone, may be produced in part by such observer effects and in part by source-receiver exchanges in the two sets of factors serving as contributory causes for the two separate events, especially if there is a prior linkage between those two sets of factors.

Thus the communication model, positing one or more source-receiver exchanges involving the organisms among the various real-time components of a coincidence, or their contributory causal antecedents, or the observers that contribute to the final decisions, can be applied to all circumstances in which one or more observers conclude that a meaningful coincidence has taken place. But there are alternative interpretations as well, that appeal to something much deeper than a series of individual psychic exchanges.

Third Factor Coordination of Coincident Events

Various attempts to account for coincidences have rejected the notion of cause-effect linkages between the two coinciding elements and have talked instead about third factor coordination of the coinciding events, holding neither event nor its antecedents in any sense responsible for the other.

Intelligent, volitionally active third factors. Such third factors might include: (a) an individual human, or group of humans, interested in the induction of pattern, including coincidence in their environments,

whose physical and mental activities contribute to the production of sufficient coincidence that it will be noticed by others and the pattern detected; (b) another discrete entity or group of entities doing the same, for their own reasons, as is frequently noted in mystic accounts of gods and lesser spirits as they interact among themselves and occasionally interfere with the course of human events for their own purposes and (c) an intelligent, coordinating principle at work throughout the universe, perhaps tied to various monotheistic traditions or even to variants of the gaia or strong anthropic principle interpretations of the universe as an organized, living entity in itself, capable of planning and implementing a plan. All three of the above can be viewed as extensions of the communication model, except that the concept of the organism is no longer confined exclusively to biological organisms and there are few if any limits placed upon the capacity of the entities posited to communicate.

Non-intelligent, passive third factors. An alternative set of views pulls back somewhat from the preceding and talks about the universe having characteristics that are conducive to the production of pattern. Some of these may be bound into currently understood physical, biological and psychological principles. The universe as a whole may have a tendency toward pattern as a result of aspects of its deep structure that may remain unknown to us, except perhaps crudely when we experience mystical states. Such deep structure may be reflected on the surface in part in terms of our current scientific understanding of how the universe works, as well as in terms of other factors only partly understood, but which impel us occasionally to experience pattern that is not obviously consistent with current views of science. Such factors could then serve as the "third factors" responsible for coordinating anomalous coincidences of the sort that have served as the theme in this paper. One of the most extensively explored of these, at least qualitatively, is the concept of the archetype, along with its associated idea of synchronicity. For the remainder of the paper I will focus on this concept and how it may relate to the communication model developed above.

Synchronicity and the archetype. Jung referred to synchronicity as an "acausal connecting principle," by which he meant acausal in the sense of not due to presently understood physical mechanisms. He did not mean it to stand outside the idea that one factor can influence another in ways other than those understood by the physics of his time. Rather, he used synchronicity to describe the coordinating or synchronizing of two or more sets of events as the result of the activation of an archetype from the collective unconscious. Such coincidences would be strongly tied to the theme of the archetype, albeit perhaps symbolically,

such that an observer of the coincidence could recognize the consequent meaningfulness of that coincidence, either directly or as a result of proper reflection. One component of Jungian analysis involves helping clients understand and utilize the meanings inherent in the coincidences they observe (see Bolen, 1979, for a recent discussion of this process, including its relationship with parapsychology). It is important to note that Jung did not use the term synchronicity to refer to all meaningful coincidences, only to those for which an archetype could be identified (cited in Bender, 1977). No archetype, no synchronicity.

What then is an archetype? Crudely put, it is itself a potentially active component of the collective unconscious, the apparent product, at least in part, of repeated universal experiences of humankind, which have occurred so often and with such consistency that the underlying theme has come to take on a life of its own, so to speak, not necessarily with intelligence, but with the capacity to exert influence when activated in an individual in some way, such as by thematically related ordinary events having impact upon that person. It shows up repeatedly in myth and symbol throughout different cultures and can emerge in human consciousness at many different levels, taking on a "habitus" specifically adapted to the idiosyncratic experiential history of the individual person, yet unchanged in terms of its fundamental structure and meaning (Jacobi, 1962). Archetypes can be very broad, such as shadow, animus and anima; or more specific, such as death, the sun, the trickster, the wise old man, mother, father and so on. The archetype can be actively involved in the production of coincidence since, when an individual starts to become involved in an archetypally related theme, this serves to increase the likelihood that the archetype from the collective unconscious will become activated and have influence upon the further experiences of that person as well as in the events that happen to that person, without recourse to physical cause in the usual sense of the term. The specific details of such an activation process and its consequences, as viewed by Jung, are not regarded as well understood today and I have probably done them enough disservice already (see Jacobi, 1962, for a clearer discussion and for reference to appropriate works of Jung). Rather I will now try to blend my understanding of some basic characteristics of the archetype-synchronicity system with the communication model developed earlier, to see if it can relate the two in a way productive for parapsychology.

Synchronicity and the Communication Model

Let us start with a tentative notion of the archetype as representing a deep theme that pervades much of human culture, shows up repeat-

edly in myth, is capable of producing strong emotional experience in us and may serve in some sense as a third factor in coordinating synchronistic coincidences. Synchronistic coincidences are ones which have (or can have) strong meaning for observers that is related to the central theme of the archetype involved as third factor.

How might such archetypes develop and hold their strength? Jung felt that the basic themes of archetypes were linked to repeated, intense experiences shared by people in a variety of different societies. The abundance of crisis telepathy and related anecdotes suggests that intense experiences can function as effective psi sources, that they tend to produce information that is more readily available to relevant receivers. If such experiences occur simultaneously, in real time, they may reinforce each other, having an additive effect and, perhaps, creating an even more powerful message. Once experienced, such information is stored in the experiencer's memory, perhaps retrieved and embellished now and then, perhaps augmented by similar, later experiences. Such information may, therefore, increase its strength as source. The core of the message, the most powerful message, would be the common denominator, the shared, consensus nonidiosyncratic elements of the experience. Such a source could be received from time to time, or work its way into awareness, without necessarily seeming to be anomalous or special, or as part of a coincidence. If the core theme is received, it may then appear fairly directly and intensely, or it may undergo idiosyncratic processing and emerge embedded metaphorically or symbolically. If certain associations to the theme are also shared by many individuals, this could lead to common processing modes and thus to common metaphors or symbols. If those symbols repeatedly get incorporated into the central theme of the archetype, they too may become part of the core message, becoming near-universal symbols.

As it develops, an archetype might gain strength as a source by dint of natural reinforcement, coming to take on an identity of its own, perhaps related to aspects of the nature of psychic exchange that we have yet to learn about. If something tangible in some sense is exchanged during psychic communication, that something may enable additive effects in the development of a stronger source, more readily accessible to receivers. Or, it could simply be that the mere frequency and intensity of a particular kind of experience constantly provides more alternative sources for the same message, thereby increasing the availability of that message to a wide range of receivers. Any receiver accessing the same message from more than one source may receive that message a little more strongly, may extract the core of the several available messages, may be more likely to have that message survive various levels of processing and filtering and emerge into consciousness.

Such filtering appears to be part of any psychic functioning, in that somehow we have filters that screen out far more information than they admit. If various archetypes do develop and acquire properties as a powerful source, then there may be special filters associated with them that buffer us from being overwhelmed by the collective intensities of the past. Such filters may have evolved and have common as well as idiosyncratic aspects. Their presence and occasional breakdown, partial or complete, would be involved in the only occasional emergence of archetypal material into consciousness. Perhaps when Jung talked about activation of the archetype, he was talking about the kinds of factors (such as powerful ordinary experiences associated with the archetypal themes) that would temporarily circumvent the filters and allow more direct access to archetypal sources. If a workable model involving the archetype concept is to be developed and tested, one opportunity to do so will be to specify the nature of the filters and the conditions that will facilitate their bypassing.

How might an archetype strengthen itself over many generations? Information from the past might become available to us in different ways.

1) If transtemporal influence of the sort involved in true precognition or retroactive PK is possible, then retrocognition may also be possible. This would mean that earlier experiences would be available as original source at any time in the future, for later receivers. Retrocognition is very difficult to test directly.

2) There is some evidence for the concept of psychometry, that physical objects such as personal items (watches, keys, wedding rings and so on) may serve as repositories for information at a later time, by someone in the vicinity. This notion could be tested, as it would predict increased archival activation in the presence of objects physically associated with archetypally relevant original experiences.

3) For major archetypal themes, the past always overlaps with the present. We are all experiencing wise old men, or parents, or death at various times, and the cumulative effect may roll on not unlike a wave. At any given moment, thousands of people are having thoughts and experiences connected with death, the trickster, the life-giving properties of the sun, and so on. Hundreds of thousands of others store very vivid memories of such experiences, including (if the model has validity) archetypally induced experiences. All represent real-time sources available to relevant receivers.

4) As mentioned earlier, experiences and their communication may have properties which allow the build-up of information on its own, not just specifically linked to a particular experiencer. Jung talked about a collective unconscious, which served in part as an archetypal repo-

sitory, as though there were a tangible, independent reality attached to it. Any such repository would serve as an available psi source; if one considers the possibility that such a repository could have an intelligent, volitional aspect, then it could serve as an active as well as passive psi source.

Within the communication model, then, any concept related to the notion of an archetype or a repository of intense, repeated experiences clustering around a theme, or any other way that such experiences can have a long-term existence, would posit that such experiences directly or indirectly contribute to a source of some sort, thereby providing access to present and future receivers.

How might such archetypes bring about synchronistic events? By being a widely available source, they could contribute causally to a variety of event-determining systems, thereby increasing the likelihood that coincidences will occur which relate to the theme involved.

1) Once activated, perhaps by a vivid experience occurring in the ordinary course of events, a particular archetype would then become increasingly accessible to the experiencing individual and those associated with him or her in various relevant ways. They may become aware of the archetypal theme in direct or only indirect ways. Once they had been influenced by the archetype, they would then become more likely to serve as psi sources and receivers for thematically relevant aspects of their environments, thus contributing to a slight reshaping of the environment and increasing the likelihood that observable second events will emerge in the environment (in ways already discussed much earlier) that will produce synchronicities for them. It may often be that the person whose initial experiences were most responsible for activating the archetype might not figure in any final observed synchronicity at all—it may happen instead to an associate.

2) A strong event, such as an unwitnessed death, may serve as a strong enough source in the environment that it could in itself serve to activate an archetype, thus having influence upon associated individuals and producing synchronicities without anyone ever directly experiencing the event initially responsible.

3) Once activated, an archetype would become a more salient, attractive source in the environment in general, and might reinforce the salience of other events and experiences naturally occurring in an environment, such that these related events and experiences would in turn be more likely to serve as sources, or, if organisms, as receivers themselves for thematically relevant information.

4) Once activated, an archetype could contribute to the ways people observe what goes on around them, thus leading them to seek out

random, but interesting coincidences. The coincidences themselves would not be synchronicities; the linked, coincident observations of them would be, however.

5) Once activated, an archetype could influence the interpretations people place on events that they notice, such that they might be inclined to impose an archetypal theme on events that really were unconnected in any sense and would not seem synchronistic to the observers under other circumstances.

Implications for our research. Can such notions be applicable to our research in particular and our general efforts at theory construction? One problem involves refining the concept of the archetypal theme. Various lists exist, which include concepts that can be intact as theme and yet can have considerable overlap. If your wise old father dies, that event relates to three archetypes, albeit perhaps in varying degrees, depending on the circumstances. Archetypes as construed by Jung were major and universal. But if we relate archetypes to frequent thematically cohesive intense experiences, we may find a continuum, including culture-specific ones, universal but minor ones, thematically diffuse clusters, ones declining in strength, and perhaps nascent ones (the cathode ray tube or computer screen archetype, perhaps, the soft square as its associated mandala). It may be possible to take various criteria for archetype generation and derive archetypal themes freshly, based on a knowledge of intense human experience, and see how they map onto those derived more extensively from cross-cultural explorations of myth.

Some good descriptive work by a set of experienced (and naive) observers deliberately assigned to keep coincidence diaries would help. Such diaries would include both material on what strikes one as a perceptibly impressive coincidence as well as what strikes one as a perceptible and meaningful coincidence. Of especial interest would be a detailed attempt to describe the apparent crucial causative events, to see if there is evidence of commonality, even psychically mediated commonality. In the Jung-Freud case, for instance, what decisions were made to hold the conversation on that theme at that time and place, what was the immediate history of the bookcase, and so on. One would look for evidence of coordinating efforts organised along an archetypally relevant theme. Additionally, such diaries would enable one to look for clustering around identifiable themes and, when read by others, could assess the ease by which coincidences can consistently be assigned the same archetype by different observers.

A more active approach would explore attempts to activate an archetype deliberately within a semi-closed system of friends and ac-

quaintances, to see if appropriate coincidences seemed to emerge. If so, then one (with some trouble) might even be able to move toward a procedure analogous to free response blind judging, wherein after a week, the group (or individual) would rate whether an archetype induction had been attempted for them, and if so, which one. There are ethical issues here and such work would have to be planned carefully with full approval from all concerned.

Regarding research endeavors themselves, what can we say about controlled experimental studies? It has been argued elsewhere (e.g., Bender, 1977) that experiments, because of their cause-effect nature (manipulate the source deliberately and monitor the receiver) do not provide opportunity for archetypal coordination and thus fall outside the domain of synchronicity. Yet Jung included such experiments as part of his evidence for synchronicity. Perhaps, given the sporadic nature of experimental results in parapsychology, such experiments are themselves examples of synchronistic successes and failures, succeeding only when the psychic endeavors of all those concerned are sufficiently coordinated. Experimenter effects could be included here, mediated in part by decisions such as when to schedule a session, selection of target, selection of routine by the subject earlier in the day and so on. It is easiest to apply this to free response studies, given the rich descriptive information to be compared in evaluating the result. Are researchers and experimental participants, then, passive participants in synchronistic processes at best, when they succeed, and insufficiently involved with an archetype when they fail? Can one decide effectively to study synchronicity? Could one sufficiently step outside the synchronistic process such as to observe it, or would any such set of decisions about when, how and where to study such a process only succeed under conditions under which an archetype had been adequately invoked, thereby including the researcher inevitably in the system being researched?

A related question concerns the idea that experiments, in and of themselves, during their planning and conducting, may activate an archetype. Elsewhere (Bolen, 1979) it has been suggested that experiments may be most likely to succeed when those involved take the time to activate a facilitating archetype, such as "the miracle." It may also be that we may occasionally activate alternative archetypes, such as "the trickster," that are not so psi-conductive. Of course, more than one may be activated, and each individual participant may have activated a helpful or not so helpful one.

These are very fuzzy ideas still, but they do take some steps toward testability, especially in the design and conducting of studies where

sources of noise are used in target selection. They also suggest certain procedures that could be tried to activate favorable archetypes. Perhaps this is related to the extensive preparation procedures of such successful researchers as Braud and Schmidt, as described by Schlitz (1986).

Summary

The present paper is still far too vague in its attempts to tie together various strategies for interpreting coincidence. Four themes have been explored: ordinary explanations, real-time psi communication, trans-temporal psi communication and third factor coordination, as exemplified by the concept of the archetype. They are not mutually exclusive, more than one may transpire at the same time, and more than one may turn out to be saying the same thing as the others, to be reinterpretable in terms of the other. If we are to progress in our understanding, it is important that we continue to evaluate such concepts and their potential relevance for the work we do, including the kind of conceptual sharpening that will allow testing and evaluation.

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DISCUSSION

HASTINGS: This is a wonderfully explicit and well thought through proposal. Thank you for detailing it. In transpersonal psychology the psychologist Stanislav Grof has discussed a concept very similar to your

discussion of archetypes, but in the individual person, which he calls systems of condensed experience in which events cluster around a particular emotional tone or event and then operate within the individual to cause events. So that might be useful to add to your panoply of resources and to connect this with my discussion on motivation. Very often in the stories of these synchronous events what one finds is that they are responsive to motivations from the deeper self. There often may be a deeper psychological purpose to these synchronicities. It may not be that the person is in the grip of the archetype, it may be only that the person is doing something which furthers his or her own growth, his or her own progress in life, and the archetype is a part of that. So one often can see that there is motivation underlying these as well as just an archetypal imagery.

MORRIS: It is very interesting, because when you get into motivation you normally think of volition. In apparent synchronistic systems, where if at all, does volition or free will enter in? Some would say that in such circumstances we are not at all volitionally affecting our own destinies and are somehow being carried on by other influences, beyond our control.

HASTINGS: I don't know that it is motivation at that free will level.

ISAACS: What I liked about your communication model is that it makes things explicit which are implicit in other models. But I think some people may not want to approach psi in that way. They may not want to see psi as communitative. Nevertheless it seems to me that one of the classical attempts that we must make to frame psi must be within the communication model. You are doing a really important job there. Having said that, there are some specific comments I would like to make which I think lead me to questions which might go underneath some of the theorizing you have presented here.

MORRIS: Let me just interrupt for a response to that. I think that it is important to view this as something that is set up not because I necessarily espoused the communication model, but simply because I would like to give it a good, stiff workout so that if it is badly flawed we will gradually come to realize it.

ISAACS: I agree with the spirit of that. One very interesting study of the mood adjective check list happened by chance when a group was given that test just after the Kennedy assassination. It was found that the whole class of students had shifted massively away from the norm. What I am suggesting is maybe you get good sitter group PK when the whole group is charged up and in a very positive mood because of Australia winning the Cup. I would suggest there may be an effect on mood there rather than an archetype. In terms of the archetypal evo-

cation being psi-conductive, Stephan Schwartz has reported (I don't know his data well enough to know how formal this is or whether it is well controlled or not) that certain of his targets in remote viewings which could be seen as having archetypal connotations, things like stone circles, churches, sacred sites, are preferentially hit by displacement in remote viewing experiments. It is as if the targets have a very high numinous value and signal their occurrence to the viewers who preferentially tend to pick them up rather than targets having less archetypal value. The point I want to put to you is this. One of the problems in Jung's theorizing is that there is a great deal of ambiguity about how unconscious the archetypes are. It seems to me that at some level people are aware of the kind of emotional response or thrill which accompanies religious sights and many of the archetypal elements such as death, destruction, the miracle, the coming of the new age, etc. I am not so sure that the archetype language is useful if we are confused about what status these archetypes have. Jung's original use of it was that these were unconscious and they were within what he models as an unconscious mind. We seem to be wanting to use these in a more conscious way, where there are specifically identifiable emotional reactions which are clearly accessible to consciousness. The implication of your talk is that if the theorizing is right—and I understand that you are fairly neutral in this area—is that in order to obtain large scale psi events you have to evoke and activate the archetypes. Then the idea of normalizing psi function becomes impossible unless we also normalize procedures and practices which evoke archetypal forces. This has a direct bearing on the issues of ritual, of visualization, etc. What it means is that maybe psi will never be the kind of thing we do today sitting in front of a computer in a very normal kind of situation. Then psi will never be readily accessible because of the fact that archetypes are not activated under those conditions.

MORRIS: I think the concept of the filter becomes one of the most important ideas with regard to how conscious or aware one is of archetypically-related material, and that concept needs to be expanded quite a bit. Some of the individuals who contribute to synchronistic events may not be that much aware of the ways in which they contributed. Also my construance of the archetype was that it would be experienced in ways that could be quite idiosyncratic to the person involved. Observers might not even necessarily be able to identify the particular contributing archetype. I think here the point would be that as people do serve as receivers they may not even be conscious of what goes on. Unfortunately as far as I am concerned such awareness is a

continuum, not a yes/no notion. For instance, I cannot tell for sure at any moment whether I have totally stopped thinking about death.

With regard to the notion of the archetype as necessary for psychic functioning, note that what was being proposed above was that the archetype really was serving as a third factor source. It would then induce various circumstances which would in turn lead to other psi-mediated interactions. In the case of an intentional study, it is quite possible that you do not have to rely on this complex process. Instead you just in fact make a conscious volitional decision which sets things in motion.

ISAACS: The interesting notion arises that perhaps very practiced psychics have portable archetype activators which they can switch on when they operate psychically.

MORRIS: It is an interesting idea because we may talk about an overall activation for an experiment, but each individual participant may have his or her own particular one as of the moment.

STANFORD: Bob, you describe this as a communication model. I want to point out two things. One is that I can see how you construe it that way, but I would also like to point out that it is rather different than the traditional communication models that we use, in the sense that they are usually going across the barrier. And so this is a really orthogonal kind of view that is really quite different than the traditional one. The other point arises perhaps simply because I use the same self-handicap as you did, namely that I really do not know much about Jung. But I see something in your model and you do not really claim this is Jung. You say that it is something that is inspired by it, but it seems to me it might be a little bit different than Jung's idea, in the sense that he speaks of an acausal model. You have been talking about archetypes activating these psychic elements. I think that this may be fundamentally different in Jung in that regard, but I could be wrong. I do not know that much about it.

MORRIS: My impression is that when Jung talked about acausal he meant primarily acausal with regard to physics as defining cause, that he was in favor of the notion of an active agent's influence but not in the usual physical sense.

HARARY: You mention that crisis telepathy tends to be reported more often by your students, but it also tends to be the kind of thing that you notice. There is what I think of as the Holiday Inn effect. If you are sleeping in the Holiday Inn and you have a dream about the guy upstairs and his numerous affairs, you may never know it because you may check out before he does and never meet him in the hall. On the other hand if you dream about somebody in your family dying,

that is apt to become very clear to you when it happens. To take a contrary point of view, I am not sure that it is necessary to activate archetypes in order to have psi functioning. It is possible that such psychological factors make the information more noticeable. But certainly in a typical remote viewing experiment, where somebody goes and hides and someone else finds him apparently mentally, there are not necessarily archetypes coming into play when somebody draws a picture of a building. The other thing that concerns me is this. Do token objects in psychometry contain psychometry information or simply serve as a focus of attention? That is important because when we think about psi in a receiver model with information flowing from one place to another it implies to me a possible transmission. But so far we have not found anything that could block such a transmission. I am not sure that a transmission is in fact what is going on in psi and I am not sure that is what you are implying either. So when we talk about receivers I think we should be careful to make clear whether we are talking metaphorically about receivers, about paying attention, or if we literally mean to imply a linear information flow, which I do not think is necessarily taking place. I think what is happening is that we ourselves tend to perceive things in a linear fashion and therefore we structure our impressions in that way. That is not necessarily what is actually going on, that something is being sent and received.

MORRIS: As far as crisis telepathy is concerned, the main point I was trying to make simply is that there is abundant indication that powerful experiences can be involved. Your point regarding becoming aware of events more when those involved are close to you is well taken. The second one essentially I agree with as I was mentioning in my response to Julian. The third one about the token object usage, is a very good point. Both of your interpretations are ones that should be looked at.

PALMER: There is some confusion in my mind about the active receptive kind of model that is being used. So I would simply reiterate Keith's concern about that. The other point that I wanted to make was with respect to the idea of invoking archetypes. I think a spontaneous experience like crisis telepathy or a spontaneous spiritual experience of some kind, occurs in a setting that would fit your definition of invoking some unusual emotional state or some period of numinosity or whatever you want to call it. But once that spontaneous experience occurs, replicating it, making it reliable and repeatable is a matter of very hard work. It has nothing to do with invoking archetypes. It has to do with practicing your internal attention states. So I would say that it is perhaps enough to bump it through the filters at the beginning of

the experience, but that once that experience has taken hold something else which is just plain learning has to occur.

MORRIS: If archetypal influence actually is contributing at all, I would suspect that it is something like the particular version that you just articulated. It may be helpful in serving as a guide now and then, but certainly this is not in any precise sense a description of "how it works."

HEINZE: My remarks are actually not so much directed against your model because you presented it in a very thoughtful and eloquent way. I fully respect that. I am only a little bit uneasy about something. One element is missing and this is the force which activates it and which makes it go. It is like an engine; it would not run without fuel. And I am reminded of the age-old problem; to create life in the test tube we still need genuine sperm and a genuine egg to do it. If you dissect it the life is gone. To enliven this model, which I find very helpful, we have to start from a life force that makes this energy available and then train people. When we have trained people over ten, twenty years as Charles Tart has done we can see what we have learned about this energy. We need to enliven this model.

SCHLITZ: It occurs to me that your presentation is a linear type of model. I wondered if you could conceptualize it within a cybernetic framework where there is a feedback loop that changes both the receiver and the stimulus of the information. In a sense we need to think about the energy conceptualization and what drives it. It would then be a self-perpetuating system. Chuck Honorton has done studies where he has shown that people who have had multiple psi experiences are the people who then perform best on the experiments. In a sense maybe that is the feedback loop.

MORRIS: Right, I do agree.

NEPPE: This is a very interesting model. I am wondering whether it may be useful to incorporate "defect" features as well as "positive" features. For example, is the Bergsonian Filter in some way broken down by organic brain defects, producing a greater perspective of being able to conceive of psi experience?

MORRIS: Yes, that is an interesting way to look at it.

TART: I want to point out a factor here that we have to remember. According to Jung, archetypes have incredible emotional power, numinosity and I think we'd better recognize at the start that there is not going to be a simple intellectual consideration of this model. This model is going to evoke resistance. This model is saying "We are not the designers totally in charge of manipulating our passive subjects" and similar common fantasies, but there is something else happening here

also. We may not have had a choice in certain experiments we have done. Now the degree to which that is true is partly an empirical question, but perhaps one that can not always be answered. The emotional repercussions in the background are strong ones and, of course, they are stronger yet if they are not made conscious but remain as unconscious factors. For example when do you give a particular archetype co-authorship on your paper?

MORRIS: When does it give me the co-authorship?

TART: You have presented a very nice problem. Are archetypes passive, just bundles of energy which can be tapped into in a mechanical way, like a grant given with no strings attached? Of course there is another model. Archetypes are not just passive, at least some are active, independent entities with a "mind" of their own, a grant with strings attached. That idea will bring up even more resistance. I think it is very hard to just consider this in an abstract intellectual sense. We have to consider how comfortable we are with the idea, otherwise our intellectual consideration of this excellent model is going to be biased in some way. You started a nice thing here!

MORRIS: Thank you very much, Charley. I was briefly running through some of the classes or groups of third factor clusters. The archetype in a way was just simply one subset of one of those clusters. Some of the more active versions of what you just described would feed into some of the other ones that we did not even get into in the paper.

ANOMALOUS EXPERIENCE AND PSYCHOPATHOLOGY

VERNON M. NEPPE

1. *Normality and Abnormality*

An important area for exploration is the relationship of psychiatric illness to parapsychology. The scope of such a relationship in its narrower sense involving the interaction of psychiatry with parapsychology ("parapsychiatry") (Neppe & Smith, 1982) in its wider framework involving interactions of psychiatry with all mysticism (metapsychiatry) is very broad (Dean, 1975). Psychiatry tends to focus on the individual manifesting particular psychopathology. The behavior is perceived as *abnormal* and the patient commonly is having anomalous experiences. Anomalous experiences in this context refer to happenings which apparently do not fit within our conventional physical framework (Neppe, 1984). In contrast, parapsychology focuses not so much on the individual, but on the anomalous experience itself so that the approach to such happenings as delusions, hallucinations and illusions involves several poles—psychiatry, parapsychology and also anomalistic psychology which attempts to explain such events within a *normal* framework (Neppe, 1982).

What, therefore, constitutes normality (Neppe & Smith, 1982)? Normality can be conceived *interalia* along statistical and psychological frameworks. In my opinion, a practical conceptualization involves a functional definition with a sociocultural base. The normal person is able to cope adequately at intrapsychic, interpersonal, familial, occupational and leisure levels. Conversely, the psychiatrically ill person does not cope at at least one of these levels, often resulting in behavior perceived as abnormal within his culture. The paragnost (the "psychic") generally functions within his community. He has no major problems with coping and is therefore perceived as "normal." The mentally ill person may or not perceive himself as ill. If he or she does not, generally his or her culture does. Such lack of perception of illness in self occurs frequently in the psychotic who by definition is out of touch with reality.

Despite these fundamental differences in conceptualization, phenomena may be interpreted differently in the context of one's training. Let us look at a few examples in this regard.

2. *Symptom Perspectives*

2.1 *The Hallucination.* Hallucinations, perceptions which occur without external stimulus, have traditionally been regarded as major symptoms of psychiatric illnesses (Van den Berg, 1982). However, a great deal of literature involving studies in at least six countries, has indicated that a significant minority of ostensibly normal people infrequently have the subjective experience of hallucinations (Neppe, 1983b). It appears that most of these occur in what these people interpret as a "paranormal context." Consequently, it is necessary to discriminate out the normal from the abnormal hallucination.

The hallucination cannot be perceived in total isolation, it must be conceptualized in the context of the present neuropsychiatric mental status of the patient. The major focus of interest for the psychiatrist is its *form* not its content. Form of experience has largely been ignored in parapsychology. The self-reference quality of form is particularly important; it refers to the hallucination relating to the experient himself—to the subject having it. Such self-reference generally transcends through the boundaries of the subject's ego and intrudes into his consciousness. Pathognomonic of psychosis is a voice instructing the subject to think or act in a particular way. This involves intrusion through ego boundaries causing a passerby experience to occur in the subject: he or she is controlled—others are handling his or her mind. They are giving messages about himself. Such messages are often frightening and not infrequently grandiose. A major clue, however, relates to *content*: the behavior would be perceived as aberrant within the environment. Thus, the hallucination cannot be perceived in total isolation, it must be perceived in the context of the non-coping mentally abnormal person (Van der Berg, 1982).

2.2 *Subjective Paranormal Experience Psychosis.* An extension of differentiating the pathologic hallucination from the far less commonly accepted veridical type of hallucination sometimes seen with subjective paranormal phenomena, is what I've called "subjective paranormal experience psychosis" (Neppe, 1980, 1984). This condition was described in a series of case reports of people who had had numerous subjective paranormal experiences, generally originating in childhood and who, at some point, experienced happenings with self-reference and influence as major aspects. These delusions would generally pertain

to at least one of these subjective paranormal experiences, (Neppe, 1984) often relating to death and they would be associated with a phase of acute turmoil and at times sudden recovery after the SPE had been shown to be false. They did not have family histories with major psychiatric illness and did not have phases of deterioration longer than six months as seen in schizophrenia (American Psychiatric Association, 1980). Affect was reasonable with no previous psychiatric history and absence of response to conventional management using neuroleptics.

2.3 *The Psychotic "Psychic"*. An interesting variant of subjective paranormal experience psychosis is the acceptance of certain cultures, for example, preliterate or primitive cultures, of people who accept the biochemical and clinical abnormalities of the psychotic or the epileptic as psychic (Neppe & Tucker, in press). This is so because the aberrant pattern of behavior may be perceived as part of the magical ritual of inducing psi and the delusional thinking and hallucinatory perceptions may be interpreted as paranormal knowledge.

In my experience this kind of patient is not infrequently admitted to psychiatric wards. The onset of the psychotic illness is frequently associated with the awakening by the patient that he or she must become an indigenous healer and, commonly in indigenous Black Africa, the indigenous healer as part of his training is required to eat a concoction which is apparently hallucinogenic and sometimes produces an organic brain syndrome associated with hallucinogen intoxication (Neppe & Smith, 1982). The reason for referral is invariably disruptive behavior *within* the community, noted by the community. The culture recognizes the abnormality even when their belief system is not alien and when they are regarded within their culture as genuine indigenous healers. The culture will still recognize departure from normal behavior (Neppe & Smith, 1982). By so doing they will impose their normative values. Extrapolated to Western cultures, when subjective paranormal experiences do not cause disruption they are tolerated at least by the subculture. However, the manifestation of such disruptive behavior will not protect him or her from his or her culture perceiving that he or she requires treatment. The content of the unusual subjective experiences themselves should not necessarily be perceived as symptomatic of psychosis. The diagnosis of psychosis should be based on the form of the underlying psychopathology being present (Neppe, 1983b, 1984b).

2.4 *Delusions*. An impressionable feeling may become strongly fixed in the experient's belief system. It may become an aberrant belief, the truth of which is firmly held despite others regarding such a belief as patently untrue or extremely unlikely. The experient may further not

regard such an impression as illogical. In this instance, the impression may apparently fulfill the qualities of a delusion. To other members of his or her culture it would be regarded as a false fixed belief that is held against objective and obvious contradictory proof to the contrary (Neppe, 1982; Reed, 1972).

Delusional thinking is a hallmark of psychosis as its content indicates the experient is out of touch with reality. In the context of the subjective paranormal experient, his or her hallucinatory or pseudo-hallucinatory perception (an unprovoked perception experienced *within* the percipient's head) may lead to interpretations in which he firmly believes. Alternatively he or she may develop a vague knowledge or feeling of some kind of impending event or about a particular object or person which seems irrational and may therefore be a "delusional idea." Similarly, he or she may describe a sinister or awry sense of something being different, a "delusional atmosphere." Thus such awareness interpreted as "psychic" may alert the experient to certain information on which he or she may act (Ehrenwald, 1948). The situation may be further complicated by the subjective paranormal experient believing that outside agencies such as dead spirits or a higher power are guiding him.

The fixed ideas of the subjective paranormal experient may therefore appear delusional to the psychiatrist. Alternatively the latter may argue that such beliefs although aberrant within the larger subculture are not deviant within the spiritualist or other micro-culture to which the psychic may belong. This micro-culture may consensually validate the paragnost's beliefs (Rogo, 1975). However, psychotics may be drawn into the psychic community. Alternatively, a normally functioning psychic may not be a member of any micro-culture and his or her belief system may be contradicted by his or her wider culture. Nor can *post hoc* events be interpreted as necessarily assisting. Thus if a paragnost's delusion comes true, doctors cannot by that fact unlabel it to non-delusional. Psychiatrists must base the interpretation on the here and now, realizing that future objective validation of the ostensibly strange ideas may never occur (Reed, 1972).

2.5 *Ego Boundaries*. With hallucinations and delusions, the third major guiding principle in the analysis of subjective paranormal experiences psychiatrically is the concept of ego boundary disturbance (Reed, 1972). The ego is that part of one's psychological function which mediates between the person, his or her instincts, needs and moral behavior and the external reality of the real world. Intactness of the ego boundary relates to the ability of the ego to differentiate the real from the unreal and to discriminate between self and non-self. Ego boundaries are

characteristically greatly disturbed in schizophrenia as the patient has a disorder of thoughts, emotions, drives and instincts and self-reference features. Such ego boundary disturbances can easily be regarded as extrasensory communication and in fact schizophrenics commonly believe they have telepathic abilities (Greyson, 1977).

2.6 *The Out-Of-Body Experience.* An extension of ego boundary disturbance reflected well in the psychiatric context is the out-of-body experience (Irwin, 1985). A person who describes himself waking up and finding himself outside his body such that he can see his physical body and cannot move it, would be described by the psychiatrist as having extreme ego-splitting with sleep paralysis (Reed, 1972). This may be perceived as a defense against anxiety and it may be regarded as due to underlying abnormality, thus a normal symptom (based on its incidence in "normals" Neppe, 1981; Swiel & Neppe, 1986) may be perceived within the psychiatric contexts as abnormal.

3. *Familiarity Perspective*

Hallucinations, delusions, ego-splitting and related subjective paranormal experience psychosis, out-of-body experience and psychotics being perceived as psychic, all have a common theme—the need to analyze data in detail. One hierarchy of explanatory levels as conceived by George Devereux (1974) and later myself (Neppe, 1980a, 1985a, 1985b) relates to the level of familiarity of the event. In the psychiatric context two are particularly important, pseudo-familiarity (Neppe, 1980a) due to some brain disturbance in the percipient and ante-familiarity (Neppe, 1980a) which would involve explanations via the unconscious, particularly psychoanalytical explanations. This can be contrasted with "latent familiarity" (Devereux, 1974) involving sensory hyperesthesia explained in an ordinary physical framework; "para-familiarity" (Neppe, 1980a) which would require modification of conventional physics; "meta-familiarity" (Neppe, 1980a) where radical alterations of one's world view are necessary; and "non-familiarity" (Neppe, 1980a) involving unmeaningful coincidences, pure chance as opposed to ordinary physical explanations—the "real familiarity" (Neppe, 1980a).

Using the ante-familiar explanation of psi, ESP has been attributed to several different psychodynamic mechanisms ranging from defective reality testing through to escape from existential isolation and flight from reality (Neppe, 1980a, 1985b). Exactly which symptom is hypothesized may well depend more on the psychotherapist than on the

subjectively telepathic experience. Ante-familiar explanations are particularly attributed to subjective paranormal dreams.

In contrast, pseudo-familiarity may be regarded as "the brain abnormality explanation of psi phenomena." SPE is due to some disturbance in the brain of the experient. My own research, demonstrating that subjective paranormal experience collates somewhat with the temporal lobe, is an example of this (Neppe, 1980c).

4. The Need For A New Classification System

It is clear that in order to analyze anomalous experiences meaningfully, there is a need for a classification system that can look at the experience in an appropriate context, but have sufficient detail such that people from several different disciplines could have the data available to interpret the experiences in their own framework. Because of this I have suggested a Multi-Axial Schema for Evaluating Psi Experiences (MASEPE). An early variant of this was NAMES I ((Neppe, 1985b) and II (Neppe, 1980c)—the Neppe multi-axial evaluation schema. The term MASEPE seems more appropriate. These axes run through from A to P (note the A and P in MASEPE).

Axis A: Anomaly Level. Prior to describing any specific kind of anomalous experience, it is necessary to establish whether the phenomenon being described is, in fact, ostensible psi—can it be regarded as of such a kind that a modification or rejection of our present Newtonian laws of physics is necessary (Neppe, 1980a)? This implies looking at the level of familiarity and what Devereux has called the para-familiar or meta-familiar explanations—"para" implying an extension of our natural laws and "meta" referring to non-physical explanations (Devereux, 1974). The alternatives as indicated are subliminal stimuli, Devereux's "latent familiarity," organic explanations like hallucination or memory disturbance, Neppe's "pseudo-familiarity" or psychological non-organic explanations based at the level of the unconscious (i.e., "dynamic"), Neppe's "ante-familiarity." Before explaining or describing something as anomalous, we should decide on the level. Because these are commonly difficult to differentiate, I suggested the term "delta" for any kind of anomalous experience which may not necessarily be psi (Neppe, 1984a). Delta is a composite term and Axis A would be used to describe, for example, a precognitive veridical dream as "psi" when it occurred unexpectedly, with correspondence within a day with the real event in several specific and unusual ways. If, however, the same dream could potentially have occurred because of residues from the previous day's experience, there may be a psychoanalytic or broader psychodynamic

explanation so that A would be "psi/dynamic." Alternatively, after the real event the subject may have been uncertain of the exact dream, in which case memory distortion may be important, "psi/organic." Similarly, overhearing a conversation while asleep may lead to subliminal or "latent" explanation (subliminal/psi). Because more than two explanations would be bulky, "delta" would imply uncertainty as to the likely explanation when more than two exist. It is probable that most spontaneous subjective paranormal experiences (SPEs) have psi and dynamic components, both of which may interplay. The research should preferably place the most striking component first. Psi/dynamic would imply putative psi with possible dynamic factors, dynamic/psi on Axis A would imply the reverse (Neppe, 1980a).

At times, the phenomenon may be common or expected. "Delta" implies extra-chance experience. If the phenomenon could easily be coincidental, Axis A should be chance/delta or chance/psi or psi/chance as the case may be.

In summary, Axis A describes the level of the anomaly. This can be chance or delta and delta is further subdivided into subliminal, organic, dynamic or psi (para- or meta-differentiation of these two is usually impossible) (Neppe, 1985b).

Axis B: Base Level. "Base" refers to the locus, the position or direction of the phenomenon. Where is it based (Neppe, 1985b)? It could be on the level of incoming information/communication/perceptions (i.e., "afferent") as in so-called "extrasensory perception" where information is received or apprehended. Alternatively, the base could be "efferent," control, influence or manipulation of objects or events as in so-called psychokinesis. There could be "afferent" and "efferent" aspects to the base. For example, in a controlled telepathy experiment the efferent aspect is an "agent." The afferent aspect is a percipient, this is "afferent-efferent" (A-E). The word afferent preceding efferent could imply that the focus (person or animal) being described is receiving or perceiving SPEs. Alternatively, E-A would imply focus on the agent, for example in so-called "paranormal healing" where the healer is influencing the patient and supposedly the "psychic" partner.

A central integrating/modulating/executive level could also exist. In man this is usually conceived of as nervous system or brain. In dualistic philosophy "mind" may be more appropriate at times. I call this "central." An example would be an out-of-body (separative) experience.

Thus Axis B, the Base, can be subdivided into Afferent, Efferent, Central, A-E or E-A.

Axis C: The Content. Content includes the concomitant symptoms that are occurring. For example, olfactory hallucinations can be described

in great detail associated with degree of affective tinge (e.g., pleasantness) quality (e.g., perfumey), associated perceptual aspects (e.g., the impression of a dead presence of someone) and associated symptoms (e.g., thermal perceptual change, buzzing in the right ear, or marked change in emotion). Thus, content is the area of extreme importance in trying to link such symptoms or such experiences up with psychopathology, with organic brain syndrome and with the medical and psychiatric model. It can be applied in reverse as content is fundamental to delusional, hallucinatory and ego boundary disturbances (Neppe, 1985a). In summary, affect, quality, other percepts and symptoms operationalize Axis C.

Axis D: Dimensions. The dimensional level refers to an attempt at placing the anomalous event into a three-dimensional space, uni-dimensional time framework (Neppe, 1985b). Time is fundamental to describing any SPE, the terms "retrocognitive," "contemporaneous" and "precognitive" being the common scientific equivalents for events in the past, present and future respectively. Spatial relationships are less often described. It seems logical to qualify this by "laboratory" or "right there" (abbreviated R-T) as opposed to "distant" (e.g., a telepathy experiment over thousands of miles or a remote viewing experiment).

Time and space can often be quantified. Thus there may be a substantial difference between precognition of an event a few seconds as opposed to a few months before. This should be recorded (e.g., pre-12h would be precognition—12 hours, and distant 2 k would be distant—2 kilometers).

Finally, certain events seem to involve a time or space shift. For example, some *déjà vu* experiences begin in the present, and the person then believes he or she knows the immediate future (Neppe, 1983c). I have called this "precognitive extension" (PE). By the same token "retrocognitive extension" can occur and jumps from the present to the remote past ("retrocognitive distancing" RD) or remote future ("precognitive distancing" PD) may be described also in the *déjà vu* context. *Déjà vu* may also have a "spatial extension component" where the experience seems to incorporate more and more or a nonspecific "growing" aspect ("growth"). These terms can equally be used to describe other SPEs.

Thus, Axis D, Dimension, can use such time components as Precognitive, Contemporaneous, Retrocognitive or even Timeless. Extensions of these may be PE, PD, RE or RD. The temporal component should be followed by the spatial level e.g., lab, RT, Distant, SE, and Growth. Quantification should be attempted where possible. In a remote viewing

experiment, Axis D may read Contemporaneous/Distant 4K, and in a precognitive dream, Prec: 8h/Distance 500 m.

Axis E: Ego Consciousness Level. The ego consciousness level refers to the state of the main focus, the ego, the person or animal implicated in the experience.

Consciousness is the specific state of the ego and is the major area of Axis E. The normal day-to-day state is "clear consciousness," and abnormal impaired consciousness due to disease is described as "clouded." Clouded consciousness may involve progressively decreasing levels of awareness of and responsivity to the environment from drowsiness to torpor to stupor to semi-coma to coma (Neppe, 1985b).

Important in anomalous experiences are the various altered states of consciousness (ASC). For example, several such states might disputably be conducive to psi—namely hypnotic, ganzfeld, meditative, mystical or religious. Sleeping, including dream states, and hallucinatory/illusory states immediately before or after sleep (i.e., hypnagogic and hypnopompic states respectively) and drowsiness could be regarded as physiological forms of ASC. Another important group of ASC are so called "trance-states" characterized by an ASC with communication allegedly from the dead. When the medium is totally amnesic for events that have occurred, I call this "dissociative trance" (or D-trance). Mediums in full consciousness with no amnesia but focusing on something (e.g., a brooch during psychometry), I call "focused trance" or F-trance. In the absence of focus, dissociation or amnesia, but a claimed trance state, this can be called "clear trance" (C-trance). ASC which do not fall into any of the above categories can be described as non-descript ASC (N-ASC).

If shifts of consciousness are occurring, one could punctuate such states with "shift" e.g., hypnosis shift, or between two states hypnosis/clear would imply shift out of the hypnotic to clear consciousness states.

Other ASC or pathological phenomenological states may occasionally more appropriately be designated as depersonalized or derealized. Hence the term "Ego-Consciousness" as opposed to "Consciousness" alone.

Thus Axis E, Ego Consciousness, can use the following main terms: Clear, Clouded, Coma, Sleep, Dream, Hypnagogic, Hypnopompic, Drowsiness, Hypnotic, Ganzfeld, Meditative, Mystical, Religious, D-Trance, F-Trance, C-Trance, N-ASC, Depersonalized and Derealized. Two can be linked together in appropriate order and the term "shift" can be added to any of the above (Neppe, 1980a).

Axis F: The Form (Special Characteristics). The form of experience has been emphasized. Most important in this context is self-reference com-

ponents—components pertaining to influence of self or alienation of self and distortions of ego boundaries. In a delusional, hallucinatory, illusional or dissociative condition, the form of experience is intimately linked with the content and involves a broader interpretation of content. A content of a voice heard three inches outside the right ear, insulting the experient and ordering him to do certain things would be interpreted in form as a self-referential, complete auditory hallucination of influence. Content and form therefore involve the links of such experience to major psychopathology (Neppe, 1983b, 1985a; Reed, 1972).

Axis G: Gestalt Factors. Axis A through F list briefly the quality of experience and of the experients. Axis G, Gestalt Factors, is used to better allow a holistic perspective. These list the contextual factors often best in tabulated form. As this kind of information may be somewhat peripheral to the actual SPE, the data may be unknown.

The "expectancy" of psi occurring under the specific circumstances of the experiment or SPE should be listed for each participant, namely: high expectancy (HE), uncertain (UC), or low expectancy (LE) of positive (+) or negative (-) outcome. Thus five points HE+, LE+, UC, LE, HE- could be used (Neppe, 1985b). Such expectancy in itself is a rather complex area interacting with such general factors as attitude to psi (i.e. sheep, goats, supersheep, supergoats) and overall personality.

"Motivation" is the second quality to list. Again this will be in the context of the SPE. A graded system of Not at all Motivated (NM), Slightly Motivated (SM) and Highly Motivated (HM) can be used.

Thus expectancy/attitude/motivation is the basis for Axis G—Gestalt—expressed in that order, e.g., HIE+/sheep/HM-.

Axis H: Heuristic Perspective. Axis H, Heuristic Perspective, involves using the components of Axes A to G in the context of the anomalous experience to make a diagnostic or operational evaluation. This should be short and involve the way in which an experience of that kind is usually described in parapsychological, psychopathological or anomalous psychological journals. Examples would be "precognitive dream," "out-of-body experience," "recurrent spontaneous psychokinesis," "waking ESP," "schizophrenia" and "subliminal perception."

Axis H is the quick reference axis; the axis that describes what would have been briefly "diagnosed" without a multiaxial schema (Neppe, 1985b).

Axis I: Intention. Axis I, Intention Level, focuses on the intentions that preceded the SPE. In other words, was the SPE "spontaneous" in that it occurred in a non-laboratory setting unexpectedly? Alternatively, was it the result of a controlled experiment (CE) or uncontrolled ex-

periment (UE)? Did some kind of ritual precede the SPE? The ritual could be for example, meditative or a specialized cultural ritual. The intention may or may not have been to induce psi. One can therefore speak of intended induced (II), unintended induced (UI) or possibly intended (PI). The magical rituals found in preliterate cultures (e.g. Malopo dancing) are examples of the latter (Van der Hoof, 1980).

Axis I emphasizes therefore the mechanism which precipitated the SPE. This can be spontaneous, experimental (CE, UE) or induced (II, UI, PI).

Axis J: Judgement. Axis J involves Judgment. On the basis of the information at hand, from Axes A to I, what interpretations can be made? These judgments involve a "guesstimate" of the probability of the SPE. Operationally SPE is of the kind described in Axis H. Axis J takes into account information that may not have been mentioned such as reliability of witnesses, the degree of correspondence of the description with the actual event. It emphasizes the level of the anomaly—Axis A—the correspondence with events and the validity based on this. There is a substantial difference between a vague feeling compared with a description of actual details of a train accident which occurs exactly as described. I previously attempted to use terms such as "not-validated SPE," "high-score SPE" and "low-score SPE" (Neppe, 1980c). These terms seem to me unwieldy and I now prefer to use unvalidated, relationship, validated. Unvalidated implies a subject admitting to a particular kind of SPE. Relationship would imply that the SPE is not easily contingent or very peculiar, but is symbolic or non-equivalent or alternately was not recorded in some way prior to its verification. Validated implies a far higher level of subjective validation, actual equivalence, direct cognitive or behavioral components, some kind of external validation involving written records unseen by anyone else prior to the event (subjectively validated or SV) or objective communication with someone else (i.e., OV). This external verification could be unconfirmed (UV) or confirmed objective validation (OV). Again quantity can be stated (e.g. OV four people).

One further level of "validation" is whether or not the components have psychotic elements, for example, out of touch with reality and delusional influence or self-reference. I've called these "psychotic SPEs" and the level of correspondence is psychotic (Neppe, 1980c, 1984b). This may be combined necessarily, so we may have the term "psychotic unvalidated."

Thus, Axis J has two components, the second being a judgment scored as very evidential (record VE), evidential, suggestive or non-

evidential. The first component would be unvalidated, relationship, S validated, U validated, O validated and psychotic (Neppe, 1985b).

Axis K: Prior Knowledge. Prior knowledge of events and the impact these events make are special demographic extensions and they constitute vital information (Neppe, 1985a). For example, do subjective paranormal experiencers with some theoretical knowledge of parapsychology react in the same way as those ignorant of the work? I've used this comparison very fruitfully in my olfactory hallucination study (Neppe, 1983a). In psychopathology, patients are often aware that they should not speak of the hallucinations. Their prior experience with psychiatrists leads them to not give adequate information about the experiences. Thus, Axis K involves a twolevel scoring system, the first, for parapsychological knowledge and the second, for psychiatric base of their condition. Both could be scored as an 0, 1 or 2 in each instance, no knowledge (0), mild knowledge (1), extensive knowledge (2) (Neppe, 1985a).

Axis L: Localization Of The Focus. Focus in this context refers to the person allegedly having the paranormal experience. In clairvoyance experiments, for example, it would be the percipient. In RSPK, the focus involved may be unclear. If so this should be indicated. Or the options as to whom the agent might be should be listed. Occasionally an experiment may center around the experimenter, in which case, he or she may be the focus. Commonly there may be several foci, for example in telepathy experiments. The focus may be non-human or human. A conceivable focus could be inanimate, for example the electronic voice phenomenon may be argued to be an effect on magnetic tape not due to the experimenter involved. Localization of focus is therefore a controversial area. When more than one focus is noted, the first mentioned should be the one whose ego consciousness has been reported in Axis E.

At times, it may therefore be more logical to list more than one person in Axis L. Localization of focus therefore involves one or more of percipient, agent, experimenter, animal, inanimate, relationship, dyad or other.

Axis M: The Mental Status Examination. The mental status examination has become the fundamental method of evaluation in psychiatry (Neppe, 1983b). It is important to list mental status features in parapsychological research as well as in psychiatric patients. I have developed a mnemonic ACCLAIMED to best describe mental status: appearance, consciousness, cognition, localization of cerebral pathology, affect, insight and judgment, motivation and motoric behavior, ego in relation

to environment and dangerousness. Where possible, the mental status should be described in this detail.

Axis N: Neurophysiological Correlates. At times, neurophysiological correlates—either clinical, for example specific sleep disturbances or more commonly laboratory, for example electroencephalographic or quantitative EEG—have been noted. Thus, Axis N, Neurophysiological base lists relevant clinical experiences, electroencephalograms, sleep records and pharmacological studies. Specific neurophysiological bases such as temporal lobe features, epilepsy and migraine are specific areas to be documented.

Axis O: Organizing Environment. The organizing environment has two components, a physical and a psychological. As much physical detail to the experiment should be noted. The parapsychologist is particularly adept in this regard at experimental research describing the physical environment in great detail. Sometimes left out however, are such factors as diet that day, alcohol, cigarettes, temperature and time of day. These should be noted if possible. The psychological environment is also important. For example, several of the mental status issues, emotional status, cognition, alterations in time sense, attitudes, motivations and expectations described above are relevant. If not included in other axes, (e.g., feelings of fatigue, duration of time of experiment) these should be included under Axis O. Thus, Axis O, Organizing Environment involves physical/psychological descriptions of the environment.

Axis P: Psychiatric Diagnosis. Just as Axis H, Heuristic, gives a description of the anomalous experience using parapsychological terminology, there is a need to describe the experience in the context of the broader patient, using psychiatric terminology. Axis P, therefore may focus on the person, using multi-axial diagnostic systems such as DSM-III-R. For example, Axis I, Paranoid Schizophrenic; Axis II, Premorbid Schizoid Personality Disorder; Axis III, No associated organic brain syndrome; Axis IV, no psychosocial stressors; Axis V, poor functionality over the past year; and Axis VI, intelligence normal.

Conclusions

This paper has attempted a broad link-up of detail at a phenomenological level trying to marry the sciences of parapsychology, anomalous psychology and psychiatry. The areas very often talk about similar kinds of experiences, but from directions which differ at the outset. In order to be able to compare and quantitate behavior and experiences at all of these levels, we need to be able to detail such experiences substantially. This will involve an enormous number of variables, how-

ever, but it may give a realistic perspective for complexity of the problems of trying to analyze a phenomenon such as telepathy or psychokinesis as if it were one single phenomenon occurring in isolation.

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DISCUSSION

HASTINGS: I want to thank you for the level of detail and especially the careful conceptual working out of these issues. In just looking at your listing I was reminded of many factors which will be very useful in working with people in an interview. I especially like the conceptual clarity of the subjective paranormal experience, which puts it where it should be originally placed as a phenomenological experience, from which the external factors you have listed can be analyzed and correlated. That is a very useful concept and I wanted to thank you for it.

HARARY: I really think that you have raised a lot of important ideas about psi experiences. In a research sense I think that that is a really useful kind of thing to do, especially if you are taking a poll of what is out there and what people are experiencing. Several years ago I worked with terminally ill people for a while on the wards. Kübler-Ross's categorization of stages of death and dying were very popular and I found that the clinicians spent a lot of time trying to decide which stage of death and dying Mr. So-and-So was in at the time. Staff meetings involved a lot of discussions of that back and forth. When we actually went out there to talk to the folks it did not matter, because we were actually human beings and psychologists and patients talking to each other about what was going on. I found that people coped with death the way that they coped with life. They did not necessarily fit into these simple categories and the categories did not necessarily tell you what to do as a clinician. What I am concerned about is evaluating the meaning of an individual's experience, especially as categorized in a *DSM III* kind of sense. I think it may be valuable from a research point of view, but from a clinical perspective I am not sure that you want to lock yourself in that way. I have dealt with clients who have reported what I call apparent psi experiences, because I do not like the word paranormal. I have a personal thing about the word paranormal. I think what we are dealing with is normal, so I say apparent psi experiences. But when we are dealing with these experiences the concern is that we not force people into categories and try to evaluate their mental stability based upon the content of the experience itself. In my own clinical experience the important thing is how a person deals with

his or her experience, whatever the experience is. I have seen people who talk about what seems to me to be the simplest kind of precognitive or apparently precognitive dream who freak out over it. And there are people who describe the most full blown apparent psychic experience who are just fine and people who are just the opposite. There are also people who appear to be stabilized by something that seems to be quite powerful indeed. The important thing is often where the person is coming from in the first place, what his or her frame of reference is to begin with in relation to that experience, in relation to the possibility of such experiences, in relation to his or her self-image, to his or her personal sense of who he or she is in relation to other people and to the cultural context. All of this cannot be described just by categorizing the structure of an individual's set of experiences and then saying that, because this is the content then this is what it means. I am not sure in a clinical sense that it matters what it ultimately means in order to be able to work with a person. But I do not want that to obscure the fact that I think what you are doing is really valuable from a research point of view.

NEPPE: I have listed every one of the factors you mentioned within the framework of my own classification. I have spoken about going beyond the context of the actual experience and looking at it as a whole. One is not looking at psychiatric diagnosis necessarily in the normal person. One is saying that if a person is busy functioning and coping there is no psychiatric diagnosis. There is no label. But one has to know whether a person who has a diagnosis of schizophrenia is saying that the president is going to be assassinated. It is very different from somebody named Keith Harary coming along and saying the same thing.

HARARY: The only thing that I would add is that we have to be careful when people come to us. I think that to keep all of this in mind is a good idea, but we should not sit there with a checklist interviewing people because that is not really what you should be doing in a clinical sense for the individual.

NEPPE: One is classifying the kind of experience and the kind of holistic background the person has. Ultimately one is thinking in that kind of framework, not necessarily with a checklist. People might not mind listing their expectancies, their motivations, or their attitudes, but some of the data are obviously more sensitive. This is where one gets into the framework of sub-specialization. One cannot make a proper psychiatric assessment if one is not a psychiatrist. One can however, say one does not have that information, but it does not imply that if one does have that information one should not try and use it.

HARARY: We are not always sure whether the experience is "genuine" when a person reports it and many of the labels are not all that clinically useful.

NEPPE: This is where the term subjective paranormal experience comes in.

HARARY: If you are trying to determine a person's state of mind, regardless of whether you think an experience is genuine or not and you sit there categorizing it, and labelling it, you haven't really explained anything and that is not going to help the person directly with their real wide-ranging problem in coping with that experience.

NEPPE: But one is not doing that. I think I have clarified that.

MORRIS: I appreciated very much all of the painstaking thoroughness that went into your paper. I am concerned about what sometimes still comes across as a dichotomy between normal and abnormal, ill and not ill, psychotic and not psychotic. Could you comment further as to whether you feel that by developing these descriptives you may be able to break down that dichotomy or perhaps clarify what we might mean by abnormal, psychotic, ill? I know a lot of us would say some people may be placed too firmly in one category when in fact they did not belong there.

NEPPE: This is an extremely difficult question. There is no easy answer to it. I have used an operational conceptualization of normality/abnormality that is not optimal, by any means. One has to use one's own clinical judgment where a person fits in. If one is uncertain, one can refer the person to appropriate specialists, if necessary, to clarify one's labeling. There is no real answer of what is ill and what is not ill. What one is looking at from a parapsychological point of view is the kind of experience that provides a frame-work for the person. One can say that during the time of the experiment the person was very agitated or very distressed and describe it in those terms. I do not think psychiatric nomenclature has made major advances over the past 100 years. In fact I have a suspicion that we were better off in 1922 than we are now. I am not joking. Psychiatry does not have the ultimate answer.

LANG: Both as a therapist and as a psychic I appreciated your talk very much. I have done some work with the police. When I do a piece of work that is going to be used in a homicide investigation I ask for a tape and a recorded transcript of the work so that I have veridical comments about the work that I have done. I do that to study the kinds of experience that I have in terms of sensory processing of information. Is it visual? Is it auditory? Curious things have come up in terms of hallucinations that I think are veridical and that I want to ask

you to comment upon. For example, there was a precognitive piece of information on a case in which the body was found later. I said that I actually smelled a horrible stench that reminded me of chicken manure. This was also in the context of talking about where the body would be found. In fact the body had not been found when I gave that piece of information. Later it was found that the field had been chemically fertilized the day before the body was found there. Also I smelled a heavy smell of smoke in a truck that was used to transport the body and I described the truck in great detail. I notice that over the years in these cases a person can pick up tastes, smells and other sensory inputs. I just wondered if you could comment on that kind of human experience.

NEPPE: Your discipline is very relevant for a variety of reasons. First, the kind of description you are giving relates to others. In other words, there is no referential component—there is no self-influence component. We do not know much about the A to P aspects that we have spoken about in these contexts, but as you said we are talking about what at a subjective level anyway we would call a veridical hallucinatory kind of experience. You have emphasized one kind of perceptual experience, the olfactory experience, that is particularly interesting in subjective paranormal experiences, because it seems to be the single common kind of subjective paranormal experience I have found in my work. Talking to many other researchers I have found that amongst psychics one invariably finds the experience of a smell which is pleasant perfumey, a one of many different kinds of olfactory hallucinations. It is very interesting that this is a common factor, so much so that I have sometimes used it as a very rough test for trying to sort out who may be a genuine natural psychic from who may not be. This is another way in which phenomenological analyses help enormously, because this is the kind of data one gets from using detailed analyses like this. I have developed a series of questionnaires, the first called the Brief Paranormal Questionnaire (BPQ) and the second one is the Subjective Paranormal (Experience) Questionnaire (SPQ). This goes into a lot more detail asking about subjective paranormal experiences. The BPQ can be administered either over the phone or the person involved can do it himself. The SPQ needs a personal detailed interview. You can elicit virtually all the information that I have spoken about this way.

THE PSYCHIC FACTOR IN NEUROTIC STYLE

HELEN PALMER

Background

This paper describes the consequences of a series of spontaneous psychic experiences that occurred during a situational life crisis I went through many years ago. The interest of the report is not in the psychological content of the experiences, but in the fact that verifiably psychic impressions appeared during what might have otherwise appeared to be stress-related anxiety attacks. The positive outcome of my crisis was that it awakened an immense curiosity about psychic functioning and prompted me to begin an inner-life practice in an attempt to regain the state of mind that had emerged spontaneously under stress.

My own experiences have convinced me that people are often psychic about the issues that preoccupy their inner attention and form the basis of their neurotic concerns. With this point of view in mind I have, over the last ten years, interviewed many hundreds of highly functioning normal-neurotic individuals about what they pay attention to and, more important, how they pay attention to the critical issues in their lives. The subject pool was drawn from graduate level classes in psychopathology and psychological assessment at John F. Kennedy University, Orinda, California, and students at the Center for The Investigation and Training of Intuition in Berkeley, California.

Experienced self-observers use revealing language when they talk about ways in which they pay attention to loaded personal issues. There are statements like "I merge," or "A part of me gets pulled forward," or "I take their feelings on," or "I see their inner face," or "I detach and watch." Are such statements based purely upon the distortions of psychological projection? Do they stem solely from an inflated desire to believe that we can access special information about the issues of tension in our lives? Are they based upon minimal physical cues, or do these statements stem from a genuine sensitivity to the issues that underlie neurotic style?

I am constantly struck by the fact that my interview subjects are convinced that they have an intuitive insight into the problematic areas of their lives. For example, we could contrast two antipodal neurotic trends such as paranoid and histrionic coping styles. Individuals who identify themselves as paranoid believe that they can detect the "real intentions" of other people; intentions that lie beneath the mask of surface facade. As an antipodal type, self-identified histrionics are convinced that they have the ability to merge with the wishes of others. There are claims of "becoming" what others want and of "intuitively altering in order to please." For the psychically inclined histrionic, such alterations of self-presentation can happen so unconsciously and automatically, that the histrionic loses touch with the sense of a permanent and unchanging self.

It is of course true that paranoids feel safer with an idea of themselves as able to predict and, therefore, ward off potential harm; and that histrionic's needs for attention and approval are supported by the belief that they can assume the characteristics of an ideal mate. Still, I remain impressed that self-reports such as these imply that we are intuitively attuned to the very issues that perpetuate the suffering of particular character types.

Purposes

This paper explores psychic perception as a possible independent factor that co-exists with psychological defense mechanisms in an undetected way. Discussion focuses upon the shifts of attention that underlie projection, the major defense mechanism that perpetuates a paranoid coping style.

The unconscious, defensively organized shifts of attention that underlie projection are contrasted to the possibility of "accurate" shifts that support the paranoid claim of "recognizing" the inner intentions of others. The "accurate" shifts are remarkably similar to particular meditation practices that are organized to enhance the same paranormal abilities to which paranoids feel themselves inclined; namely recognizing the hidden intentions of others and precognitively knowing the future in order to ward off harm.

Indications are given for the application of attention practices in the clinical area. The value to the client is to learn to discriminate between false perceptions stemming from defensive maneuvers and accurate psychic impressions that may co-exist with psychological systems of defense.

Phenomenological Report

I operate from the paranoid perspective. I first encountered the psychic possibilities within my neurotic style during a period of time when I was heavily involved in the political resistance to the Vietnam War. During times of intense concern for the safety of myself and my friends, I would, in a classically paranoid fashion, sit in my room and imagine the possible outcome of our efforts in vivid, highly detailed mental imagery. Over time, and without my realizing that anything unusual was starting to take place, my visual imagination, fueled by apprehension and concern, became powerful enough to cause me to lose awareness of the room in which I sat. For short periods of time I would forget that I was sitting in a living room chair, thinking about the things that might go wrong with a particular political action, and I would become absorbed in a visual reverie that was powerful enough to replace the physical environment.

These visions would appear in front of my open eyes and would play themselves out in the middle of the room. Although they were projected outwardly, I always knew that they originated within myself. Even during moments when the mental imagery was so compelling that I could not retract my attention, I knew that I was not hallucinating. Although I could not stop the intensely focused flow of internal imagery, I still felt that I was watching something happening to me. Watching the visions was much like sitting in a darkened movie theater. Once the action starts on the screen, you cannot turn your attention away. At times you are aware of the space between you and the screen and you know that you are only observing a flow of images; but at other times your attention becomes so immersed in the action that you forget the fact that you are an observer and momentarily feel that the movie drama is happening to you.

I never became so identified with a vision that I lost the sense of an observing self. Later on, when I began a structured visualization practice, I immediately attached great importance to the teachings that describe the observer/object relationship, realizing that, although my mental images could become powerful enough to approximate a scary movie, I could retain awareness that I was observing a vision and would always be able to come back to myself.

My first psychic experiences were so embedded in a paranoid mental style that they went unnoticed. I had fallen into the habit of imagining possible outcomes to political actions and, in retrospect, I realize that I came to conclusions and acted on the information provided by my

visions, while remaining fully convinced that I had thought out the solutions in a reasoned way.

As my imagination became more believable and profound, certain shifts of attention began to take place, not because I was meditating in a conscious way, but because I was in a panic of needing to know the future in order to ward off harm. These shifts of attention bear a remarkable resemblance to those that form the underpinning of specific inner-life practices that are organized to accomplish exactly the task that my paranoia was driving me toward; namely, to access hidden information and to know the outcome of future events. I now realize that what I had thought of and dreaded as panic attacks were precisely what was needed to precipitate me into recognizing the shifts of attention that were necessary to fulfill my psychological need.

The first clearly psychic events were precognitions that appeared during panic attacks of imagining the worst. I would become aware of an unexpected outcome, or occasionally a stranger would appear, interacting with people I already knew. Shortly afterward, the stranger would show up physically. At the moment when a precognitive impression appeared, it seemed no different from the rest of my imaginings. It was always startling to recognize a stranger I had previously seen, because it was only with his or her arrival that I knew that something paranormal had happened.

A second psychic predisposition had probably been developing for a long time before I discovered what I was doing. I gradually realized that under pressure I looked at people's faces for signs of their unspoken intentions and of their hidden points of view. In a classically paranoid fashion, I was scanning the environment for clues to hidden intentions, but my version of looking for hidden intentions consisted of imagining how the expression and emanation of a face would change in response to an internal question of my own. For example, I might be under pressure to decide which of several draft resisters would be the most reliable man for a job. I would imagine the commitment in his face. Did the face seem firm or shaky? Would he show up on the day of an action? Was he really a resister, or an imposter planted by the military police? I had learned to pose very simple questions and to observe how the face would show me its response. A face's features might soften in answer to my mental question or might even alter to express a small sequence of future behavior. I remember once I had to decide between three men for a particular job. One resister's face actually seemed to move backward, while the other two faces literally shone out their commitment to the work.

I saw a lot of what I called emanation, which to me meant that an

inner quality of feeling was being expressed through the face. Once I finally figured out what I was doing, I realized that I quite naturally shifted to the face-gazing device when my suspicions were aroused or when I was pressed into making a decision with insufficient information.

At first the psychic impressions were so indistinguishable from the rest of my thinking that I was unaware of the fact that I made decisions based on that source of information. However, once I caught on to what I was doing, in true paranoid fashion, I never questioned the fact that some of what I saw in the faces was real information. Looking for minimal cues that indicate the inner intentions of others was so systematic in my thinking that I never really doubted that I was seeing something authentic. This aspect of paranoid ideation was actually an advantage because, when a face would change, the alteration and its meaning were simultaneous occurrences in my mind. With a lifetime of habit of reading meaning into small physical cues, an associated meaning was simultaneously stimulated with whatever I would see. I would pose a question to a face and my imagination would alter it in simple ways. It would begin to look sneaky or spacey, or settled or determined and whether I was projecting wildly or was accurate in what I saw, in true paranoid style, I believed that I understood the message that was written on a face.

I became convinced that faces were a source of information. I taught myself to shift my attention from the physically unchanging face that I saw with my physical eyes to the state of mind where the face would alter in response to an inner question. It was a breakthrough for me. Moving my attention back and forth between the "real" face and its imaginative counterpart was an isolated practice that I could try out and then attempt to verify my impressions against the facts. Within a few months after I started working with the face-changing practice, my entire world view had altered. I had found a hypnosis teacher and the panic attacks had almost ceased. As my emotional life became more stable, I also stopped experiencing the spontaneous precognitions that occurred as a result of the extreme focusing of attention brought on by my neurotic concerns.

In retrospect I now believe that I was slowly remembering the practices and finding the people who would help me to gain access to the psychic world. I was drawn to hypnosis, which I found attractive because it was a visual technique; however, in retrospect, what I gained from hypnosis had nothing to do with what I supposed the technique was going to offer.

The hypnotist suggested that the most effective application of the technique would be to learn self-suggestion and to work regularly with

a situation in which I wanted a behavioral change. I chose to work on teaching fright because I had recently taken a teaching position and, during those times when I was involved in an antiwar action, I had a very hard time keeping my panic reaction at bay while I was in the classroom. My real agenda was to learn to hypnotize myself and to somehow learn to tell the difference between when I was projecting and when I was seeing something legitimate through my imagination.

The trance state felt like going home. Within 10 sessions I could hypnotize myself to the point where, as in my panic attacks, I would lose awareness of the room in which I sat even with my eyes open. The hypnosis practice took on a driven quality. I rode visual elevators and escalators down to a small replica of the classroom in which I taught, which became increasingly detailed and clear. I visualized myself as calm and clear minded in the teaching situation, gave myself the suggestion that I would feel composed when I was in class and then returned to myself again. The effects were practical and helpful. The suggestion held while I taught and I felt like my old self, before the panic attacks had begun. However, what was most compelling about hypnosis was the fact that it transported me.

I felt as though I could move into a totally separate world, one that became a source of nourishment. I could not wait to be alone to go down the mental escalators. The self-hypnosis sessions became the high points of the day and I got in as many of them as possible. If I could not find the time to practice, my attention would begin to move toward the trance state, so that I would have to stop what I was doing in order to let myself go back to the classroom inside my mind.

The internal reverie was so pleasurable to me that I simply went with it. It was not the classroom scene, or the fact that I was returning to being a better teacher that was compelling; it was the pleasure of following the images and of letting myself be drawn into the beauty of an inner reverie.

I lost interest in the purposes of hypnosis. Somewhere along the line, the whole procedure of going to the visualized classroom dropped away. I forgot to keep the suggestion going that I would be a relaxed and capable teacher; I felt recovered in that department and, besides, the reveries were so compelling that all I wanted to do was find enough time to go into that world over and over again. There was a span of at least eight months in which I would go down an elevator or an escalator and never know what would appear to me. I never made it to the classroom at the bottom of the last stair because I would be diverted by something much more interesting along the way. There was no vestige of the frightening images that I had once seen, nor did

I feel that I was being guided or taught or that I was approaching some spiritual crossroad. I was simply enjoying the pure pleasure of letting my mind show me things before I knew what I would see.

I fell quite naturally into the state of mind in which I could receive a teaching. When I did my first psychic reading, it did not seem at all unfamiliar or unusual or wonderful. It felt like the obvious next step of a process that had been emerging for years in unrecognized ways. I had joined a psychic development group and what I found there was remarkable in its simplicity. I found a body of traditional visualization practices that implies a solution to the problem of projection. This particular set of practices relies upon the habits of attention that are intrinsic to the paranoid mind. The organization of attention that is required to do these practices well was already so formed in my mental habits that it felt as though I was slipping into that visual world, this time in a highly structured way.

The technique that opened the psychic world to me is a simple, straightforward focusing exercise. It requires strong powers of visual imagination and the ability to immerse one's attention single-pointedly with respect to a visualized representation of objectively real external events. My imagination had certainly been strengthened during the panic attacks and we are all naturally single-pointed when we are afraid. If a lightening bolt strikes, or a lion appears on the road, attention quite naturally becomes single-pointedly focused. In some sense I had been staring at a lion for years, feeling perpetually threatened. I was therefore inclined to the kind of sharp attention that others experience only at times when there is something objective to fear.

My teacher simply said, "See me as a rose," which sounded both absurd, yet at the same time very familiar to me. There was a short internal conflict between wanting to resist and wanting to go with whatever he would tell me to do. The rose appeared externally, just as I had seen the faces change when I looked at them with my eyes open. My teacher's face became a rose-face; I could see his features distinctly, round blue eyes and baby-smooth old face, and at the same time I was seeing a complicated lavender rose that was enmeshed within his features. The rose was a *Sterling Silver*, a hybrid tearose of the kind that grew in our backyard at home. I understood immediately that the face and the rose were somehow identical, that what happened to one happened to the other. In that moment, my *Sterling Silver* and the physical reality of that man's life were the same.

The next instruction was something along the lines of "Take the rose inside." I closed my eyes and internalized the image. Next it was, "Read my rose." I lost myself in the object of my attention, I let the

impressions surface into awareness and then come back to myself and I reported what I had seen. I went home from class with a new mantra: "See the rose, be the rose, what did you see?"

Two years after I saw the rose-face for the first time, I could produce a modest psychic reading at will. By that time I had the rose-face teaching translated into the observer/object relationship that is basic to meditation practice. The rose-face had triggered the realization that objectively real events can be contacted and seen through inner visualization. It had broken my dependence upon projecting a vision externally, where it seemed more "objectively real." I was not interested in face gazing anymore and was never attracted to external focusing devices like tarot cards or yarrow sticks.

I adopted a makeshift version of the observer/object teaching. My goal was to disappear completely into visualized representations of outer events, to learn how to pull through any messages that I might perceive in that state of mind and to then check out my impressions with the facts. The sense of awakened memory continued. I remembered how to stabilize images and how to narrow my attention until the image replaced everything else in the internal space. I remembered how to shift attention back and forth between the awareness that I was separate from the image and allowed my full awareness to be drawn into the beauty of the stationary object in my mind.

When I, as the observer, immersed myself into the visualized object of attention, the image became active. I knew that I had found a voluntary access to the dream mechanism, because when the observer and the image unified, it felt as though I had shifted from controlling an internal image to having a dream about that same image. When the image took off as a dream, it unfolded from a controlled, stationary form into a short sequence of impressions that appeared, as in a dream, without any interference from myself, and that I would understand the moment I began to think again.

It became clear to me that the difference between observing a visualized image that symbolized an outer event and dreaming that same symbol was the difference between a guided image and a psychic vision. The guided image was still directed by my thinking/feeling self, a situation of think-see; whereas the images that had psychic content appeared in a See-Think sequence. The psychic impressions always appeared spontaneously, before I knew what I would see.

I also realized that I had unwittingly negotiated the See-Think shift of attention in the panic attacks that had produced precognitive information. My task was to learn how to replicate that shift without the

support of the single-pointed attentional force that naturally took place when I was terrified.

I also saw that it had been difficult for me to grasp the psychic component in my stress-related experiences because of the bias toward focusing on worst-case scenarios. The observer/object unification that produced a psychic impression therefore tended to take place with worst-case image objects, with no attention paid to best-case possibilities. Any genuine psychic information that I obtained had to be so heavily biased along paranoid lines, that it did not stand out from my usual patterns of thought. According to my interview information, paranoid types tend to view imagining the worst as the touchstone of reality, while imagining the best is thought to be naive make-believe, or unrealistic wishing. As a result of this attentional bias, the psychically inclined paranoid type is likely to develop an unconscious psychic connection to information that perpetuates conflict and suffering without equal access to information that counters the fearful point of view.

I eventually became competent at the Think-See sequence of attention by borrowing freely from the lines of traditional meditation practice and applying what I learned in monastic settings to my own developing needs. I learned how to detach from thoughts and other objects of attention. Most important, I learned how to stabilize an internal image and to tell the difference between times when I was making the image up (Think-See) and times when the image began to turn into a dream (See-Think).

The Attentional Basis of Projection

My biggest psychic concern has always been the question of projection. From the beginning I knew that paranoid imagination and accurate psychic impressions were closely associated perceptions. They were so close that, before I began to work with inner-life practices, I could not tell the difference between projection and a precognition until the latter was physically played out.

The question of source loomed very large in my mind. Was the message contained in a visualization merely a projection, or was the source of the message outside of myself? The difference between a guided image and a psychic vision is subtle work and the question of source came up over and over again for a long period of time. Did I think the image up, or did I see the image before I knew what I would see? The issue was solved only through an immense amount of practice. There were days when I thought I was making the whole thing up,

and other days when I could just sit and practice without getting in my own way.

Projection is so central to the understanding of paranoia that it has almost come to define what is meant by the paranoid tendency. This mental maneuver reduces the tension of having to recognize unacceptable or dangerous tendencies within oneself by attributing those tendencies to the environment and to other people. For example, if a paranoid type begins to "see" or "know" that others are hostile, it is likely that an unacceptable feeling has arisen within the self, which is then attributed to an outside source. Placing the perceived source of threat outside makes the issue more manageable and allows the paranoid to take action in self-defense.

The cognitive shifts that underlie projection as a paranoid defense are relatively easy to examine. For example, a paranoid can be unconsciously angry at another and then begin to focus on the other's faults until those faults begin to shape themselves into threats. These perceived threats then justifiably lead the paranoid to either leave the situation (phobic reaction), or to defend against what has become a clearly threatening possibility (counter-phobic reaction). The counter-phobic strategy allows the original aggression to emerge in a safer posture of self-defense. The cognitive shifts that underlie projection do not necessarily account for the frequent paranoid claim of "seeing" the threat in the external situation, or of "knowing the inner intentions of others," while at the same time suffering no thought impairment or withdrawal of attention from the external environment. David Shapiro comments in *Neurotic Styles* (1965, Basic Books, Inc.):

Projection occurs in the act of cognition with keen attention to the external world. Thus projection is generally faithful to and does not distort apparent reality, nor does it usually include perceptual distortion (hallucinations). Projection distorts the significance of apparent reality; It is an autistic, interpretive distortion of external reality. This is why the subject matter of projection does not usually deal with the apparent and the actual, but with the potential and the hidden, with the intentions of others, their motives, thoughts, feelings and the like. Projection consists of an interpretively biased cognition of actual events or behavior.

The experience of projection is very different than a cognitive explanation would suggest. One can know that one is projecting, yet be unable to change the false perception of the environment. For example, one can be in the shower, with the water sounds cutting off hearing, then hear the phone ringing so loudly and convincingly that it seems

reasonable to turn the water off to check. Projections are overlays upon reality, in which imagination coexists with the physical environment and heightens the look and the sound of reality to such a degree that the distortion is honestly mistaken for the truth.

After years of observing my own mind at work, I still find that, when I am frightened about some issue in my life, I will tend to see the environment as more threatening than usual. The mood of the day feels ominous, the postman's steps sound like bad news coming. Opening the mail entails a slight apprehension because the contents may be critical, although I cannot remember what I might have done. People's negativity seems perilously close to the surface, looking for an excuse to strike. Any available external surface is visually heightened along the lines of hidden tension. People standing in the park appear to be arguing with each other until one walks by and hears them laugh. At a distance they seemed to be locked in a standoff; stiff legged, elbows jutting, heads held at defiant angles. When you hear the laughter the look of their bodies softens and their real intentions are obvious again.

At these times, attention is so outer directed, so focused on looking for some way to account for feeling terrified or angry that, without some training in self-observation, it is extremely unlikely that a paranoid type will remember to look inward to see if the source of such feelings lies within the self.

The paranoid habit is to look outward for explanations of an inner sense of threat. As one might expect, indications will be "found." The clue is "written on their faces," it is "in the tone of the voice." A paranoid's inner hypothesis is confirmed by the finding, or reading in, of clues that verify the idea that the source of tension lies outside of the self.

Conclusions

I suggest that one of the mechanisms of projection is an unrecognized use of the imagination which overlays faces and other objective surfaces. This suggestion is supported by the fact that, in extreme cases of paranoia where visual or auditory hallucinations are present, the shift of attention to imagination can be profound enough to replace the environment altogether. Hallucinations are a prime example of the Think-See sequence, in which the ability to imaginatively heighten external objects of attention is dominated by unresolved subjective conflicts.

I further suggest that, under particular mental conditions, this habitual and unconscious use of the imagination can produce a state of psychic attention in which the inner observer unifies with single-point-

edly focused impressions of situations that are unknown to the thinking/feeling self. Such impressions are most commonly experienced as inner images or voices, but can also appear as a visual overlay upon external surfaces. It is in the state of mind in which observer and image objects unify, that the imagination can become a vehicle of paranormal information.

The mental conditions under which imagination can become a genuine vehicle of paranormal perception are:

1. *Extreme stress*, especially conditions of stress with ambiguous outcomes or where not much information is available, i.e., conditions that produce paranoid tendencies.

2. *Guided imagination*, also called creative reverie, a state of mind in which spontaneous art, innovative inventions and original solutions can appear. Most guided imagination follows a Think-See or a Think-Hear sequence, in which imagination is directed by thought. However, within the creative reverie, attention can shift to See-Think or a Hear-Think sequence, in which case impressions can arise that are truly spontaneous and original.

3. *Psychic states of mind* that can be induced by the unification of the inner observer and an imaginary object of attention.

The spectrum of possible relationships between the inner observer and imagined objects of attention are:

1. *Projections*. In which observer and imaginary objects of attention are not unified, as in hallucinations, night dreams produced from daily residue, daydreams, fantasies and most guided images.

2. *Intuitive Impressions*. In which observer and imaginary objects of attention are unified, insight dreams in which accurate impressions appear that are not known to the thinking/feeling self, insights that come from dreams are highly valued in the practice of psychotherapy, where they are seen as a vehicle of communication between conscious and unconscious functioning, precognitive dreams, guided images that follow the sequence See-Think or Hear-Think, and which convey innovative information, psychic impressions that appear as the result of observer/object unification.

In conclusion I suggest that an analysis of the attentional basis of defense mechanisms, such as projection, will allow us to recognize the occurrence of several aspects of psychic perception that coexist with unconscious defenses. Such an analysis would support the clinical client in the task of observing and detaching from unconscious defenses and would allow the psychically inclined client to recognize ways in which paranormal perceptions may be operating to intensify neurotic concerns.

DISCUSSION

HASTINGS: I do not think I really heard this point made so clearly as you have done it. That is (let me see if I can say it right) that the particular style a perception may have when it is driven by a neurosis may simply call upon psi abilities that just seem like a part of that information gathering style and it takes a bit of inner sorting and outer confirmation to tell what you are doing.

PALMER: Yes. I think it is a very rich source of unrecognized psychic functioning.

HASTINGS: And you would think that other styles like the histrionic and the obsessive might have similar . . .

PALMER: Yes. I have made a study through my students at John F. Kennedy University and through the people who come to training at my institute of very highly functioning people who are consequently quite able to observe their own processes. For example, those that are histrionically inclined are convinced (not always accurately) that they are able to merge themselves with the wishes of others. I have thousands of interviews of people that I am collating along a very simple questionnaire basis, of people who are self-identified as belonging to different neurotic styles. None of these people has had a psychiatric disturbance. I am probably more crazy than any of them and have been closer to the edge of my perceptions than many of my students. But to the histrionic type, just as an antipodal example to the paranoid, you get responses like "Yes, I walk into a room and I say hello to someone. I find myself subtly altering along the lines of how I will get approval from that person."

HASTINGS: How do they know that?

PALMER: How do they know that you know it is accurate? Well, if it is only two percent accurate it is certainly very interesting to investigate, because at that two percent level they are into something that is unconscious, intuitive and buried in their ordinary defenses and has been there since those defenses were erected. There is a lifetime of habit behind it. So I think it is very worthwhile to take seriously the phenomenological report of people when they say something like "I intuitively alter to please." It is not merely neurotic, but it may in fact have a basis of something very authentic in it. If the individual is highly functioning and can observe the difference within himself through learning basic meditation practices and how to tell the difference between shifts of attention that he already goes through, they might be

able to uncover already existing, perhaps very developed patterns of psychic functioning.

HASTINGS: Also, I just want to thank you for so freely telling about your experience.

PALMER: When I first started teaching my colleagues were very concerned about my using myself as a subject. "Nobody is going to study with you, Helen, if they find out that you have hallucinated. They are not going to like that." I have not found that to be the case.

MORRIS: I was very impressed with everything that you have done. I want to echo the notion of appreciating your handling it this way. You used the word *neurotic* to describe yourself and, of course, much of your behavior I suppose could be described that way. But you also were in a very strong need circumstance. Amongst other things you have deliberately chosen to put yourself into a situation with strong needs built into it. You were trying to do something that was very intense and very valuable from various perspectives. It could be argued that had you not adopted some of those mind sets you would have been a little neurotic. If you just sort of sat back and said "Boy, this is terrific. I can hardly wait to meet everyone who comes down the street." Here are the circumstances in which somebody acts with great concern about what people think of them in the environment when, in fact, everything is fine versus the situation where there are real sources of information out there. There probably were quite a few people who did not particularly care for you or your style. Given your personal circumstances, it was very realistic, adaptive and appropriate for you to be very vigilant, psychic or otherwise. Had you denied the need for vigilance, you could easily have been regarded as neurotic.

PALMER: I would even argue it in another way. To me the attraction of the political movement was humanitarian at that time. But I was also attracted to it because it was exciting, because it had paranoid-making content. You know, a lot of my good friends in graduate school did not know there was a war on. I thought I was at war. There is an attraction to it, but I am also attracted to rigorous techniques in meditation, where you go to the edge. I am attracted to that as a style. What I am trying to do is to build a case that there are different styles that have different attraction points in meditation. Different meditations are more useful for different kinds of people. So I do not mind the word neurotic really. I also feel this sense of awakened memory. I do not really know how to categorize that, but it was such a powerful thing in me that it somehow was also familiar, almost as though I was just walking through the motions of something that I had done before. I occasionally run into this statement with other people. They engineer

situations that will allow this memory to come forward and I think some of that was at work. I was attracted to the situation that would precipitate the opening.

MORRIS: That fits in with the concept of those factors that I presented earlier.

PALMER: Yes, it does. It does fit very well with your theory.

ISAACS: I was very fascinated with your paper to the point where speaking frankly as one paranoid to another I was very . . .

PALMER: I think you are more narcissistic actually.

ISAACS: Do you think I am? I think I'm more a paranoid type.

PALMER: There is an underlying core of paranoia, but it has a very fascinating style if you would like to discuss it.

ISAACS: Rhea White did an analysis of the means by which the old time psychics got their impressions. A comparison between the old techniques and the new card-calling techniques came up with an almost identical description of what you are calling the paranoid style, in terms of people having a single stable object such as a rose that they saw, which was then followed by their psychic impressions. If you look at Eileen Garrett's work and Larry LeShan's abstraction of that, it looks much more like the histrionic style where there is a merging with the events. I wondered if you could give us a more detailed description of the histrionic style or the kind of induction process in the same way that you have done for the paranoid.

PALMER: Well I could describe it from the point of view of attention practice. Paranoid attention is one way of getting a psychic impression, an impression of something you do not know about in your own mind. In the paranoid style you use a stable visualization object. You see the object. You are aware. You see there is a discrepancy between the awareness of the observer and the object. You become one and the impression flows spontaneously from that trajectory of your attention. The histrionic is much more inclined to a feeling state. They are not very mind-based. They are more emotionally based so you have a whole different worldview and a whole different kind of history. You get a history with a histrionic and, incidently, with the dependent type that is actually parallel to the active repression, forgetting themselves. An example would be the young child. The histrionic or the potential histrionic comes home from school full of his or her own project, full of his or her own life and realizes "If I walk in here with my agenda and my position in mind and I speak about it I will be rejected. Nobody will be interested. I do not like that. So what I will do is forget my own agenda or my own perspective which is emptying." It is also repression, but from an intentional point of view you are not interested in repressed

content you are more interested in the fact that one forgets oneself. And then the attention is focused on another person and the histrionic would feel him or herself altering slightly.

In other words, an aspect of himself that is most appropriate for this individual to gain attention and approval comes forward. Now on a mechanical level that does not sound very intuitive. It is like "Daddy likes me when I am a certain way, so I will forget myself and alter into a mood and a presentation and surface that appeals to him, so I will be that way and he is going to like me." So it starts out like that, not being able to be yourself, having to forget yourself, having to pay very close attention to another and turns into an internal question of "How am I similar to this other person? How am I like the other person?" It is a feeling-based intuition. Then you can generalize. You have several different people who love you because you have altered yourself in conformity with what they approve of. It starts out mechanically. Through learning and habit it becomes a kind of ability where you can walk into a room full of strangers and you can sense where the approval is going to come from. You put your attention on somebody, but it does not hit. All of a sudden it hits, "That person is going to like me" and you find yourself altering into an aspect of yourself. It is not an alien aspect. It is one of many aspects of yourself that would be approved of. You meet the person. You shake hands. Now, whether it was necessary to do so, whether they would have liked you as your real self or you had to alter none of that is the issue. The fact is that you just do this habitually all the time. So within that habit there are going to be misses and hits. The psychic task is for the individual who has this varied and potential ability, to be able to go into him or herself, empty his or her attention and be able to discriminate. Did I just do it automatically or did I do it because this person reminded me of something that I did because I was lonely? What was the motive behind it? A good self-observer can observe those things. I do not have that talent, I had to learn how to do it. I did not have it by history or training, but somebody who is really interested in developing it would be able to recognize it. I am deliberately going to go empty. I am not repressing. I am not deliberately forgetting. I am just practicing how to empty my mind. You replicate through practice. Now I am going to put my attention on another person and I am going to observe how my attention has to focus. How intense does it have to be? Is it lightweight? Does it have to match the other person? What happens to my gaze and focus relative to the person I am trying to please and how do I recognize the shift in myself? And how do I know the difference between a genuine outcome and a habit? So that is a training strategy.

ISAACS: Is this ESP people-centered as opposed to object centered?

PALMER: I do not know. That is your department.

KEIL: I appreciated your extension of psi experiences to a wider field, but I just wondered how far what you called your veridical psychic experience should really be labeled what Dr. Neppe called subjective paranormal experience?

PALMER: I do not know. We would have to apply the scale to my situation, see where I sit on the scale.

KEIL: Ultimately we do not really know whether it is a psychic experience. It may very well be, but when you call it veridical I would feel that it is going a little bit too far, really.

PALMER: I started out with a very simple face-gazing exercise to see if I was projecting or whether I wasn't. Then I moved into spiritual practice and since 1972 I have been a psychic reader. I have done thousands of sessions for people along these lines, so I would have to say it has a repeating aspect to it. What started out as a spontaneous experience became something that was repeatable for me through my practices. I do not know if that answers your question.

HARARY: Helen, I think what you are saying is really important. I will refer back to Freud. He looked at the way that people have apparent psi experiences, how that functions within their psychological frame of reference and why you particularly might focus on a particular kind of information. You are doing that rather than saying how did this strange thing happen to this person and let's try to figure out if they are okay or not okay based upon this unusual thing that happened. You are going much deeper than that and saying that this kind of thing probably occurs, now let's try to figure out what its role is in the psyche. To me that is a very integrated kind of clinical approach—to ask what is the purpose here, what is going on?

PALMER: The purpose is survival, at least in my case and in many of my students. Attention is focused on a narrow section of concern, for example the histrionic need for interest and approval, the paranoid need to ward off harm. There are eight or nine diagnostic categories for each, but because we are focused on a very narrow slice of reality we may be flagrantly psychic within that narrow realm of concern. Because we can not see the 360 degree total reality it washes out. We do not even know that we are into something. The importance of the practice is being able to discriminate between the histrionic who alters in a psychic way to please, and one who just does it by habit as a non-psychic maneuver. Both of them probably would see it as a burden, not as a blessing. Neither of them would probably know that they were doing anything unusual. It would have to be pointed out to them. Now,

the importance of the practice is that once you learn how to get an entrance and you can convince your thinking mind that your access is clear, then you can broaden the question immensely. So when I am doing sessions for people I am not interested particularly in their paranoid issues. I am not only trouble shooting or looking for what might go wrong with the picture. But once you get access to the world through these discrimination practices of being able to tell the difference between projection and real impressions, the whole world opens. You are not just getting to be a better paranoid predictor in harmful events or a better histrionic people pleaser.

HARARY: I think you are asking the right questions and I really applaud that.

NEPPE: I was just going to ask about the wonderful term we all use and sometimes use as a euphemism possibly for psi experience or some other kind of delta and that is the term "intuition". It seems that intuition has a lot to do with what you are talking about. With no differentiation of sex people tend to still talk about feminine intuition. Do you think that this attempt to try to discriminate the real from the unreal is in some way related to the so-called phenomenon of intuition, what ever it means?

PALMER: Oh yes. I definitely do. In the popular mind psychic is just a street word for intuition. It is more popular and, therefore, because it has been so over-used it is a less high falutin' way of describing one's non-linear perceptions. In the body of a paper like this you could cross out psychic and write in intuitive and it would fit just as well.

NEPPE: That was the easy question. Here comes the more difficult one. You have outlined styles of behavior. Do you think that one can with a majority of the population delineate out particular styles or are most people far more complicated with several different styles or no styles at all?

PALMER: The more flagrant of the symptoms and the least flagrant of the symptoms, are the two ends of the spectrum and are the easiest to work with. It is the mid-range where you have a poor self-observation, inexperienced self-observation, unwillingness to self-observe; that is where the difficulty comes, I feel. When the machine is really broken down it is a lot easier to see the difference between the paranoid and the histrionic. When you get up into the neurotic end it is a little harder in the middle to diagnose. Yes, I do think people break down into object relations, that we are focused on very different objects of interest. That stems from childhood. I think that if you follow the object relations theory, which is relatively new, it will shed a great deal of light and make our diagnostic task a lot easier. In terms of meditation object

relations is a very hot area because you are observing objects you see in order to practice and develop your awareness of very subtle objects. At the very high end where you get experienced self-observers is the group I am used to working with, meditators and people who are working on themselves. They are pretty easy to recognize. They can self-recognize themselves. At the low end where it is broken down it is easy. I think in the middle you have a little more trouble. There you need a clinician, somebody to assist and perform the witnessing or the observing function.

HEINZE: Well I want to congratulate you first of all for reporting so freely. It is exactly the research we need in observing the process. I wish you would write about it because you have collected so many cases already, just observing the process and seeing what you can filter out from that. So I congratulate you for starting that.

HARARY: Don't you have a book coming out?

PALMER: Yes, I have a book at Harper & Row.

KRIPPNER: What will be the name of it?

PALMER: The book is actually about an ancient diagnostic system, a nine point-system called the Enneagram. It deals with some of the material of the internal attentional style that is specific to the nine different types. The Enneagram is interesting because it maps almost on a one-to-one basis the current psychological *DSM-III-R* diagnostic categories. So it is very impressive from that point of view that it is an ancient system, but it has a modern application.

SPONTANEOUS PSI IN MASS MYTHOLOGY, MEDIA AND WESTERN CULTURE

KEITH HARARY

Psi and the Role of Negative Stereotypes in Mass Mythology

In a recent meeting with a well-known science fiction film producer, the author expressed his concern about Hollywood's depiction of people who have apparent psi experiences. The portrayal of such individuals in film and television fiction, I argued, is characterized by negative stereotypes and exerts a potentially harmful influence both upon individuals and society at large. The producer listening to this argument agreed that film and television portrayals of those who have psi experiences are highly negative, but maintained that these stereotypes serve a deliberate purpose in perpetuating the values and mythology of mainstream Western culture. Hollywood, he explained, is not ready for characters who have psi experiences and survive unscathed, as such depictions might actually encourage people to seek out these experiences. In response, the author more cynically pointed out that scaring the daylights out of people is a reliable method of boosting ratings and selling tickets.

The producer's assertion that fictional media stereotypes serve a deliberate cultural purpose is not indefensible. It is his stance toward apparent psi experiences which is questionable. As film scholars have often pointed out, the media do not exist in a vacuum. Films may be seen as cultural artifacts which "are informed by and constitute the socially symbolic narratives of . . . a culture's 'political unconscious' (Sobchack, 1987).

In 20th Century Western society, it is clear that mass media images which represent certain negative stereotyped cultural attitudes can also serve to perpetuate those attitudes by their "larger than life" mass media portrayal. These negative stereotypes not only have a detrimental impact upon individuals, but also adversely influence our collective attitudes as a society which is heavily influenced at all levels by the

images and underlying values presented and perpetuated by the mass media.

In the case of sexist or racist stereotypes, the detrimental effects of the unqualified depiction of cultural biases are plainly apparent because the target groups in question are readily recognizable. Few people would argue, for example, that the portrayal of blacks in films such as *Birth of A Nation* or *Shaft* had a neutral or positive effect upon the image of black people in America. By the same token, productions such as *Roots* and *The Bill Cosby Show* have not simply reflected more rational attitudes toward black Americans, but have no doubt also served as a catalyst for positive cultural change. That these productions, and others which also violate long-standing cultural misconceptions about particular groups, have enjoyed excellent ratings is testimony to the public's ability to rise or fall to the level of the entertainment that is offered them.

In the case of stereotyped mass media images of individuals who have apparent psi experiences, however, there is no casually recognizable group which is the subject of bigotry. Rather, it is a particular dimension of human experience which is targeted for media misrepresentation. It might be argued, therefore, that we are all victims of a peculiarly insidious brand of invisible persecution, one which is colorless and genderless, yet no less effective in shaping our attitudes toward ourselves and our capabilities than advertisements inducing us to use a particular brand of toothpaste every morning, or face the claimed consequences. If there is an aspect of each of us which is capable of having psi experiences, our personal and cultural attitudes toward that aspect and toward those experiences are necessarily influenced by the images we are exposed to in the media.

Negative Psi Stereotypes in Film and Television Culture

It is impossible to fully understand the meaning of apparent spontaneous psi experiences for a given individual without also understanding the cultural context within which these experiences occur for that individual. It is not only the subjective nature of the experiences themselves or even, if such could be described, their objective scientific nature which determines the ways in which we will respond to them. It is rather our personal predispositions toward such experiences as directly influenced by the social environment in which they originate that may most strongly influence the ways in which we are likely to react. This reaction in turn often perpetuates the existing stereotypes which provide an ongoing subjective validation and apparent objective

basis for the overall cultural mythology with respect to these experiences.

Understanding the cultural context for apparent spontaneous psi experiences is crucial not only to individuals who are attempting to deal firsthand with these experiences within a Western frame of reference, but also to clinicians who would assist these individuals in productively integrating such experiences into their lives. Developing a working understanding of the potentially negative psychological impact of this cultural frame of reference is also valuable to researchers who are studying psi functioning as it occurs spontaneously in the field and under controlled laboratory conditions.

The Western cultural context for apparent psi experiences, as reflected in their depiction in film and television fiction, is rarely balanced or realistic, but follows a predictable pattern of fear, horror, general strangeness and moral condemnation. Apparent spontaneous psi experiences are typically presented as destabilizing psychological influences, or as the almost exclusive domain of occult practitioners, cultists, aliens, primitives, discarnate entities or otherwise atypical or deviant individuals.

Rarely in modern television or cinema do psi experiences coexist comfortably in an integrated fashion with a lifestyle that may be culturally-defined as "normal" or with positive human emotions and relationships. In the fictional media, those who deal most positively with psi experiences are typically extraterrestrials, and even they do not always use their psi abilities with the best of intentions or results.

In the original *Star Trek* television series and subsequent films, Mr. Spock is a half-human, half-alien who is capable of performing remarkable psi feats—such as telepathic fusion with a purely silicon-based life form—but is virtually incapable of coping with any human emotions. He is, however, capable of a unique brand of survival after death, becoming a modern embodiment of a cultural messiah by literally resurrecting himself from the dead ("Alien messiah," 1986). He is, it might be argued, not merely psychic or an alien (who does, in fact, help save the world in *Star Trek: The Voyage Home*), but a specific manifestation of a stereotyped *psychic* messiah, which appears in a variety of guises as a prevalent characterization throughout the history of cinema.

This extraterrestrial ability either to spiritually survive death, as in *Star Wars*, or to literally resurrect self or others as in *The Day the Earth Stood Still*, *E.T. the Extraterrestrial*, *Starman* and *Cocoon*, is a recurrent theme which typically coexists with more "average" psi abilities among aliens in media science fiction, along with some "above average" psi

abilities as well. This juxtaposition creates the impression that "ordinary" psi experiences are nothing special, particularly when they occur among terrestrial mortals.

We are rarely surprised to discover that mass media extra-terrestrials such as *My Favorite Martian*, who sprouted psychic antennae at least once in every television episode, the alien Mork of *Mork and Mindy*, the modern *Superman* of the recent films (as per his theme song, "Can You Read My Mind?") or the mystic alien Yoda and a host of other alien characters in the *Star Wars* trilogy all have highly developed psi abilities. In fact, we all but expect it.

We are also not astonished to learn that half-humans who have these abilities in film and television fiction have them only in deference to their alien forebears, as in the case of Mr. Spock, the title characters in television's *The Powers of Matthew Star* and the film *The Man with the Power*, and the half-human/half-reptilian/alien little girl in the television mini-series *V: The Visitors*. All of these television and film characters have in common formidable psi abilities and the fact that their mothers are human, while their fathers are originally from other planets.

Full-blooded human beings who have psi experiences and abilities in film and television fiction are never as at ease with their expanded functioning as their alien counterparts. Even in *Star Trek*, ordinary human beings acquire psi abilities only under unusual circumstances and more or less at their peril. The abilities themselves are either short-lived, lead their characters to psychological ruin, or become the general repository of a variety of anti-social tendencies. They may even, as in *Forbidden Planet* (the classic science fiction version of Shakespeare's *Tempest*), open up a Pandora's box by unleashing repressed emotions in the form of an all but absolute power that, if it is not the death of all who come into contact with it, certainly leads to the destruction of those who come into contact with it most directly.

Back on Earth, the title characters in television's *Girl with Something Extra* and *Nanny and the Professor*, the title characters of the film *Scanners*, and even the healer heroine of *Resurrection*, learn that psi abilities are not for everyone and that most people cannot comfortably deal either with the abilities themselves or with people who have them. The realm of psi is therefore better left unexplored, or at least kept under a veil of secrecy or diplomacy.

In the wrong hands, we are led to believe, psi abilities might be used as terrible weapons, or be perverted to serve the sordid tendencies of corrupt individuals, corporations and governments. In *Scanners*, the characters suffer nosebleeds when they are being telepathically

"scanned" or have their heads explode on camera when the "scanning" goes too far. The scanners develop their abilities as a result of an experimental drug taken by their mothers during gestation. They are psychic thalidomide babies, hunted down and murdered by those who would either control or eliminate them.

There are, we are told, select groups which have had special knowledge of their own "psychic" capabilities for quite some time, but have deliberately kept this knowledge from the rest of us because we are supposedly incapable of intelligently handling it, or are not initiates of a magical order. For the most part those in the know are not human, but are either witches, as in the film *Bell, Book and Candle*, and the television series *Bewitched*, or genies as in the television series and film *I Dream of Jeannie*, and the film *The Man in the Bottle*. On the positive end of the continuum, they may also be the Jedi Knights of *Star Wars*. On the negative side, in the same cinematic mythology, they may be embodied as Darth Vader, an errant Jedi Knight seduced by and embracing the dark side of "the force," a "psychic" interconnectedness in nature not unlike the matrix of ancient magic or the theoretical function of psi proposed by the author in "Psi as Nature" (Harray, 1982).

We need only consider the extent to which phraseology such as "may the force be with you" and "beam me up, Scotty" have become virtual clichés in our societal lexicon to recognize the degree to which the mythology of film and television fiction is fast becoming the surrogate collective history of our cultural consciousness. No less than George Washington chopping down the cherry tree, the mythology of film and television fiction is our cultural mythology, made all the more real than mere legends of our collective experience of the same images, acted out with appropriate sound and visual effects and striking "reality" on the film and television screen for all of us.

A mythology which is influenced in its inception as much by the desire to boost ratings and sell tickets as it is by a more basic interest in perpetuating traditional cultural values is bound to reflect some peculiar compromises. Nowhere is this fact more evident than in films which perpetuate a traditional religious viewpoint with regard to spontaneous psi occurrences, but which nevertheless feed the public hunger for cheap supernatural thrills.

In *Amityville Horror*, *The Exorcist* and *The Sentinel*, for example, we are treated to enough occult spectacle to satiate all but the most perverse cinematic appetites. Our salvation and redemption, we learn, and presumably that of the film producers and directors, is not to be found in the hands of secular psychics and scientists, but in the religious sanctuary

of the church. Spontaneous psi experiences, in these films, are the domain of Satan and his hordes. They are not to be trifled with. It is only the church, we are told, which can deliver us from the presence of evil of which spontaneous psi experiences are only symptomatic. It cannot, however, deliver us from our thirst for even more extravagant occult spectacle the next time around in sequels like *The Heretic*, *The Amityville Horror II* and variations on a similar theme such as *The Omen*, and *Poltergeist*, which sold enough tickets to give ritual birth to their own predictable sequels.

Even when the supposed relationship between the supernatural and spontaneous psi experiences is made less explicit, it remains a prevalent underlying theme in many highly successful motion pictures. Not surprisingly, the characters who have supernatural or other-worldly psi experiences in productions such as *Carrie* and *The Reincarnation of Peter Proud* suffer from interpersonal conflict and estrangement as a result of their experiences—or vice versa. These characters differ from those who only find themselves wandering haplessly into “haunted” environments in that they are personally haunted in a more profound sense than the possession of any inanimate building. They are tragic figures, as inevitably doomed by their psi abilities and experiences as *The Illustrated Man*, a character whose entire body is covered in phenomenal “skin illustrations” which “come alive” to create disquieting precognitive visions that lead people who view them to want to murder him.

Among the characters who populate film and television fictional treatments of apparent spontaneous psi experiences, murder is not an unfamiliar element. For that matter, neither is the general subject of death, regardless of whether it is natural or supernatural in origin, or whether the act of murder is itself carried out by live human beings or discarnate entities.

In films such as *The Reincarnation of Peter Proud*, *The Eyes of Laura Mars*, and *The Psychic*, the title characters all have precognitive or retrocognitive visions of murder. The visions contain a compulsive element, in that the characters appear pitifully incapable of either ignoring or preventing their manifestation. We learn, from these films, that psi abilities may subject us to unwanted impressions and may thereby even expose us to actual personal harm. We also learn that psi impressions are primarily negative in nature—who would deliberately encourage psi experiences of such intrusive and destabilizing proportions?

The cinematic relationship between spontaneous psi experiences, death, murder and the supernatural is made explicit in the nearly Film Noir visual and psychic atmosphere of *Don't Look Now* which culminates in a synchronistic on-camera psychotic murder, and the recent fiasco

Witchboard in which the heroine is possessed by the spirit of a psychotic murderer. The malevolent entity in *Witchboard* initially seems almost harmless, but quickly makes easy victims of most of the significant characters, including an unabashedly eccentric medium/psychic—in the form of a bespectacled punk rocker cum hippie who behaves as though she swallowed a bottle of stimulant drugs. The psi experiences in *Witchboard* center around a *Ouija* board that seduces the hero and heroine into near physical and spiritual destruction. The message, as usual, is that psi experiences may be powerfully compelling, but can only lead the innocent into serious trouble.

The most innocent to be led down the path of destruction by their psi experiences in cinema are, as seems logical, children. The glowing eyes of the youthful inhabitants of the *Village of the Damned*, known later simply as the *Children of the Damned*, symbolized a dreadful telepathic manipulation, ultimately motivated and controlled by Satanic forces. The fate of those children was no less enviable than that of the pathetic psychokinetic teenager *Carrie*, who symbolically showers in her own menstrual blood in the film's opening sequence, and is ultimately consumed by the metaphorical fires of hell at its conclusion.

Children, we learn, are in their innocence no more capable of coping with their psi abilities and experiences than are the cinematic adults around them. They are easily as corrupt, as in the classic *Twilight Zone* episode, repeated in the modern motion picture, in which a psychically powerful little boy holds an entire community captive through psi terrorism in the form of horrifying telepathic and psychokinetic manipulation. He wishes those who displease him "into the cornfield" (a euphemism for committing psychic murder without need for the formality of a funeral). He also commits other more brutal acts of mental and physical torture, with the psychic power of a little boy's perverse dictatorial whims. "It's a good day," the characters repeat over and over to one another, "a good, good day. Isn't it a good day . . ." They dare not say or think anything which might displease their captor at the risk of terrifying consequences.

Even psychic children whose motives are essentially pure still find themselves confronting evil in the movies. In *Children of the Corn*, for example, a psychic little girl is used by an evil children's cult for their own malicious purposes. More recently, *The Golden Child* finds himself the captive of a winged demon from hell, who does his best to murder the child to prevent him from using his abilities for the benefit of humanity. Significantly, even this more positive representation of a psychic child is not relevant to the lives and experiences of "ordinary"

children. *The Golden Child* is a mystic, and more than that is a prepubescent embodiment of the cinema's familiar psychic messiah.

The innocence that is not reserved for children who have psi experiences in film and television fiction may instead be reserved for the members of primitive cultures. In films such as *The Beastmaster* and television shows such as *Kung Fu* we find this innocence expressed in what may be its most unadulterated form.

The Beastmaster earns his name and reputation by virtue of his incredible psychic communion with the animal kingdom, a power which emanates from his life-long relationship with primitive magical forces. It is precisely this communion which results in his saving humanity from destruction at the hands of religious fanatics. In other words, *The Beastmaster* is the psychic messiah in one of his more neolithic manifestations.

In an almost equally primitive embodiment, Caine, the hero of television's *Kung Fu*, wanders barefoot through the old American West, relying upon equal measures of intuition and physical violence to rescue those in need of his services—a spiritual Lone Ranger whose powers emerge from a childhood spent in a monastery in China. Like Spock, Caine is a so-called half-breed (part-Chinese, part-Caucasian) who is as alien to the people of his time as Spock's half-human, half-Vulcan character is to the people of the future.

Not all cinematic primitives who have psi experiences fit the stereotype of the psychic messiah. Some, as in the case of the aborigines in the film *The Last Wave*, are in touch with their psi abilities by virtue of their closeness to nature, as a kind of natural magic undiluted by the trappings and distractions of modern technology. We are led to believe, therefore, that psi abilities are more available to primitives than to the rest of us, and that the further we stray from tribal living, the more we must lose touch with our native psi potential.

The members of cinematic alien or primitive cultures are close enough to their psychic cultural "roots" that they typically access their psi abilities directly, by a simple exercise of will with only a subtle or occasional altering of their state of consciousness, as in Spock's Vulcan mind-meld and Caine's Zen Buddhist style meditation. Their modern counterparts, especially in the case of ordinary human beings, typically rely more heavily upon altered states as a crucial element in accessing their psi potential.

These human characters may initiate psi experiences through the dream state, as in the films *Dreamscape* and *The Reincarnation of Peter Proud*, through altered states technology, as in *Brainstorm*, through out-of-body experiences, as in *Dreams Come True*, or through hypnosis, as

in the film *On A Clear Day You Can See Forever* and the classic television series *The Sixth Sense*. Rarely in films or television do ordinary mortals gain access to their psi potential by simply exercising their will to do so and rarely, if ever, do they have spontaneous psi impressions without falling into a trance or some equally dramatic altered state. This is particularly evident in the Canadian television series *Seeing Things*, in which the lead character is an investigative news reporter who happens to be subject to not infrequent psychic fits.

In film and television fiction, those who research psi functioning are as subject to mass media misrepresentation as are those who experience psi occurrences firsthand. Perhaps it is because the latter group has been subjected to so many negative stereotypes that the former group cannot escape unaffected. In what is perhaps the most reprehensible and perhaps all too realistic cinematic depiction of a typical contemporary psi researcher, the "parapsychologist" who befriends the title character in *The Reincarnation of Peter Proud* is a bitter, incompetent, vengeful and psychologically grotesque individual, a man who is out to exploit those he studies for his own selfish ends.

On the opposite end of the spectrum, the *Ghostbusters* are amiable, if not always entirely above-board characters. In the opening scene, one of them deliberately falsifies experimental data in the hope of seducing an attractive coed. In a likely psi research equivalent of *The Three Stooges*, *The Ghostbusters'* initial pretense of expertise in investigating reported apparitions dissolves the moment they are confronted with the genuine article. As the plot evolves, however, the *Ghostbusters* redeem themselves by saving the world and the heroine from supernatural destruction without ever losing their sense of humor—the psychic messiah revisited.

Evidently, there is no room in film and television fiction for mainstream-oriented scientists painstakingly conducting experiments in a deliberate fashion, but such individuals also have admittedly little room in psi research. Understandably, there is not much cinematic action in a scene of a researcher punching numbers into a calculator, or carefully analyzing a percipient's free responses. The laboratories and equipment in films such as *Resurrection*, *Ghostbusters* and *The Reincarnation of Peter Proud* reflect an apparent scientific understanding of psi functioning, and a level of ongoing experimental activity more developed than that which would be found in any real-life contemporary psi research laboratory. The apparent level of funding enjoyed by the scientist in the university laboratory in the *Reincarnation of Peter Proud* leads one to wonder, in fact, why he expresses such bitter sentiment about his supposed lack of academic acceptance among colleagues from other dis-

ciplines. Many real-life parapsychologists would be laughing their way to the bank.

Psi and Mass Media Stereotypes in the Clinical Context

For clinicians as well as for those who have apparent psi experiences, it is necessary to understand the possible impact of cultural stereotypes upon a given individual's self-image and worldview in order to effectively assist him or her in dealing with his or her reactions. This is true not only for those who feel they may have directly experienced spontaneous psi occurrences, but also for those who may indirectly experience these events through, for example, personal contact with someone who describes a particularly striking personal experience to them. This latter group, not insignificantly, includes clinicians.

Given the confusing role models represented by film and television depictions of those who have psi experiences, it is surprising that individuals who feel they may have had such experiences in real life might undergo some mild or severe identity crises? The clinician should perhaps not be thrown, for example, by a client who expresses concern that his experiences may signify abilities that are extraterrestrial in origin. The idea so permeates the media, that this conclusion may not appear to be without a subjective basis. Instead of hustling the client to a locked room in a straight jacket, the clinician should first attempt to ascertain—and clarify for the client—the possible media origins of this misconception. The same is true for any other self-image crisis that may be as much a reaction to media role models as it is to a particular experience.

In the same spirit, the clinician should examine his own reactions to people who report apparent spontaneous psi experiences. The author once had a college professor, for example, who became convinced that the author believed he was from another planet simply because he had discussed some apparent psi experiences in a term paper. Although no such claim to alien ancestry had ever been made, or could have been, the professor was convinced—no doubt by mass media stereotypes—that anyone who reported such experiences was, in effect, claiming to be an extraterrestrial.

Since clinicians also watch television and go to the movies, they should listen carefully to what a client actually says about the way he responds to his own experiences, instead of jumping to a stereotyped conclusion that any response to a reported apparent psi experience must, necessarily, be maladaptive. Many people have apparent psi experiences in everyday life without going crazy, becoming dramatically alienated

from other people, committing murder, being overrun by demons, joining primitive tribes, or flying off in UFOs. In fact, the research and clinical evidence strongly suggests that psi experiences are probably widely available to all sorts of people, in a manner that is quite independent of a given individual's physical, spiritual or emotional state (Harary, 1986; Mintz, 1983).

It might be worthwhile, in the clinical context, to confront specific media stereotypes directly with clients who report apparent spontaneous psi experiences. These icons of mass cultural mythology may then be used in the course of therapy to elicit responses from the clients about their reactions to their own and others' reported experiences. As such, they might provide a more effective method of uncovering unconscious material in the course of therapy than might otherwise be readily available.

Psi and Mass Media Stereotypes in the Experimental Context

For experimental researchers it is vital to elicit accurate, reliable psi functioning in the laboratory in order to properly examine and scientifically evaluate this functioning. To whatever extent possible, it is therefore worthwhile for researchers to assist experimental participants in overcoming the potential influence of negative cultural stereotypes upon their experimental performance.

It is also worthwhile for researchers to examine the possible influence of adverse cultural conditioning upon their own responses to apparent psi functioning in the laboratory. Since these researchers do not merely exist in the laboratory, or limit their scientific studies to controlled environments, it is also useful for them to explore their culturally influenced responses to apparent spontaneous psi functioning in the everyday world.

Upon reflection, the researcher may discover, for example, that he is at best ambivalent about observing unbridled psi functioning in the everyday world, and has therefore retreated to the relative safety of the laboratory, where psi may, under certain circumstances, be diminished in its ability to express itself if not altogether suppressed. He may find that his desire to conduct psi research is motivated as much by an unconscious desire to find methods for *limiting* psi's manifestations as by a conscious desire to discover psi's capabilities. By examining his individual response to negative psi stereotypes in the mass media, such a researcher might uncover some of the basis for his own resistance, either in the images themselves, or in his own psychological development as reflected in his response to these images.

As in the case of clinicians, it is crucial for experimental psi researchers to understand the misconceptions which many experimental participants carry with them into the laboratory. Many of these misconceptions are, if not media-generated, media-perpetuated to an extent that cannot be ignored for their potential impact upon a given experimental outcome, as well as upon the experimental participants themselves.

Influencing the Cultural Mythology

The author is not naive enough to suggest that it is a simple matter to significantly alter the way in which apparent psi experiences are represented in the mass media. Negative cultural stereotypes maintain their own momentum and are best encouraged to shift direction through the collective efforts of a great many people over a long period of time.

There have been, however, a few encouraging signs of slow media change in relation to fictional depictions of psi experiences. These signs have manifested primarily in episodic television, among familiar characters who find themselves having realistic apparent psi experiences to good dramatic, and sometimes humorous, effect. This represents no minor footnote, as it was the non-stereotyped portrayal of blacks and women in episodic television which signaled their more positive, broader treatment both in film and television fiction and society at large.

It is essential to encourage this more positive fictional mass media perspective toward apparent spontaneous psi experiences in order to facilitate a more positive integration of these experiences into our overall cultural world view. Such a positive integration could benefit not only individuals who have such experiences, but also, potentially, society as a whole. Until and unless there is a radical positive shift in the ways in which apparent psi experiences are depicted in film and television fiction, it is up to each of us to actively counteract the potentially negative influences of the existing mass cultural mythology in the laboratory, the clinical setting and our everyday lives.

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DISCUSSION

MORRIS: First of all, do you have much sense of who makes the decisions to organize things in the way that you have just portrayed? There are people who deliberately made a decision to present such a negative picture. Secondly, could you comment a little bit on the relationship between what has shown up in film and the portrayal of such individuals throughout myth in various cultures. In other words, some people might argue that what you are seeing here are people attempting to portray various myths in a way that is not too unlike fairy tales back in ancient times in a variety of different places.

HARARY: About the decision making, I am glad you brought it up. I was in Hollywood a while ago and I went to one of the big studios down there to see a producer whose name you would all recognize immediately and who is responsible for some very successful films. I said to him as I sat in his office, "You know there are a lot of negative images out there even around kids who have what appear to be psychic experiences. Don't you think there would be a market for something more positive? After all, people report these experiences all the time. Couldn't you do a film in which the hero is a human being and does not wind up burning in hell at the end of it and maybe has some healthy response to the experiences? Maybe the experiences could be depicted as part of some actual positive psychological experience? Maybe they could actually help the hero." The producer sat back and pontificated. He is a nice guy and he said, "Well, Keith, the fellows who make the decisions here in Hollywood, the fellows who put up the money and smoke the fat cigars and produce the films, don't want to do that." I could not believe the directness of the answers. He said, "Producers don't want to give people the idea that these experiences are okay. They don't want people to think that they should go out and have these experiences." So I said, cynically, "What you're telling me is they feel it will sell tickets to make certain things seem as horrible as possible. But you can also sell tickets by doing it in a more positive sense." He insisted that Hollywood was not ready to portray psi in a positive way and that he would not have any part of it. Ironically, some of the characters in his films are quite psychic, but along the lines of what I have been talking about. What I have not mentioned is that there are

nevertheless some really positive images showing up in a few places, mostly in episodic television. In one or two TV shows that I can think of you will see one episode where someone has a psychic experience and it winds up being not only okay for him but even includes some of the real dynamics. That is to say some of what they get is correct and some of what they get is not correct. Therein lies the dramatic tension, because we are led to wonder if it is going to all turn out to be real. Then it turns out there is some misinterpretation, more like what goes on in real life. As far as films reflecting the long standing myths that we have had, it is hard for me to comment on that. I suppose the extent that images presented in myths and old fairy tales may become incorporated into the films and television of today, they are also taking on a contemporary life of their own. We are a long way from the Wizard of Oz. Even the Wizard of Oz was benign. The girl learns to contain her own power and take control of her own life and whether it is a dream or whether it is an out-of-body experience or anything else is not totally clear. Certainly witches are mythical depictions of what happens to you if you are psychic, but witches represent not only psi, but many other things as well. I am not an expert on mythology, but I think that even if certain mythological images relating to psi have gotten into the modern cinema, they now have a life of their own. Media images comprise our present mythology, which is what I am most concerned with here.

MORRIS: Early cartoon full-length feature films might serve as a link there, if you could also do the same sort of analysis of how psychic functioning is portrayed in some of the major productions of the Disney Studios. Because they were in some respects trying to represent and reflect myth and yet also they probably established many of the criteria by which people might judge what is going to sell.

HARARY: That is a good idea. I would like to check out what Disney has been up to in that area. I know Loyd Auerbach has done some nice analyses of the cartoon comic book images.

STANFORD: I certainly would not disagree with you that being bombarded with this kind of stuff regularly from childhood on up could really have a negative affect. We do not have any evidence actually, but I am inclined to agree with you. I would not be surprised. I am really glad you have given me a good feeling for how I can explain the fact that my last experiment did not seem to really come out so well. That is the only good thing I can say about it. I really think if we did have a more positive image or a much less negative one it might be good. Having said that, I wonder if you might not have over-interpreted some of this a bit. I am not so sure this is so much a vendetta against

psi phenomena and the psychic or anything of that sort. I think that some of your remarks suggest a fundamentalist Christian negative orientation about parapsychological phenomena. I know, however, that a lot of evangelical Christians are very down on some of these movies. They think they are horrible. So I do not think you can quite say it is reflecting that either. I have another suggestion to make and this is that we are seeing this everywhere. Our movies are full of violence and other aspects that parody the human condition. Youngsters see thousands of murders and tortures on television before they reach high school. This does not reflect cultural values according to which these things are acceptable. I do not think the media events to which you refer reflect cultural values about psychic matters so much as that the media makers do not share our concerns with psychic phenomena. They are simply reflecting the kind of human existence, the violence and perversity, that you see depicted in the movies of all genres. I think we should not over-interpret it to think that they are out to give a bad image to this field regardless of what individuals may say. What I do not understand, Keith, is why these people think that audiences really want to see this. I guess it is because they continue to succeed at the box office.

HARARY: They sure do. They spend hundreds of millions of dollars going to the box office and it sells tickets, so there is a real interest in the subject. I do not think and did not want to imply that it is a vendetta even though this particular producer told me "No, they are not ready to portray a positive image. They do not want to give the wrong idea." It is subconscious in a way or it is just automatic in another way. You ask the Hollywood folks and most of them will not be as honest as this producer. They will say "This sells tickets and this is what the public wants to see." That is what they will tell you about violence and that is what they will tell you about many other things. I do not think that it is possible to make a film that does not reflect cultural values when cultural values determine if and how the film is made. My particular interest is in the way psi is presented, but you could look at all sorts of things in the movies. As for the fundamentalist Christian aspect I don't think I was implying that it is the fundamentalist Christians in Hollywood who are out to get us. There is one particular area of horror films that deals with the church rescuing us from demons, such as *The Amityville Horror*, *The Sentinel*, *The Exorcist* and so on. That message comes across to people. Now you can decide for yourself what you want to make of it. In fact, having said, "Here's what I think is going on," you can decide for yourself where it is coming from. In a sense

it does not matter whether it is deliberate or not. What matters is the effect it has on people when they experience it in their own lives.

STANFORD: Films like that obviously blow way out of proportion what happens in real exorcism cases, as far as I can tell. It is true that historically there is such a phenomenon as exorcism. The Roman Catholic church has the specific rites to practice it, and they do not have to talk about it or do much with it nowadays, but that is not completely ahistorical. It is not the kind of fantasy that so much of this involves.

HARARY: Even in that film they blew the real case way out of proportion. In fact you get the idea from seeing such movies that people apologize for having what they feel are psi experiences that are not powerful enough. They think that they cannot really be genuine experiences if the paint isn't peeling off the walls, the spirits aren't coming out of the floor, they are not able to guess every card, they are not able to evaporate and float through the roof and they are not visiting earth from outer space. So they tell you, "Well at least I am from outer space or at least I know I had an ancestor who was." People get the idea that they themselves have inadequate experiences when their experiences quite often may be real, but they are comparing themselves to what they see in the movies.

ROGO: The over-riding message you are trying to give is one that I think we are all very sympathetic to, which is that psi functioning is normal to human kind. I think all of us agree that psychic functioning is a capacity that is normal to us, but this leads me to a very interesting line of speculation drawn basically from anthropology. That is the fact that ours is certainly not the only culture that sees or has seen the psychic individual as being unusual, alien or something out of the usual. If you look back at different cultures you find that most of them will see psychic individuals as unusual and will institutionalize their practices. We have the Shamanic culture and the Amerindian culture where you find the same thing with the medicine man. Among the Greeks you have the whole concept of the Greek Oracles. You see this in every culture. Now this leads me to ask a question and it is one that has puzzled me for a few years. If in fact psi is so normal to mankind why in all places and among all people is the psychic person seen as something very unusual?

HARARY: I do not think it is true that in all places and in all cultures such individuals are seen as unusual. For example, in the Basque culture of Spain they use specific exercises with their kids to develop what one anthropologist from the area described to me exactly as the development of psi abilities. The child is expected to describe those experiences to his or her parents and it is considered just part of the normal milieu.

I think part of it depends on the sort of overall religious perspective of the culture. I would argue that in Western culture our "religious perspective" is determined, is influenced by what we see in films. We are way beyond the point of a word of mouth culture. I am not sure that it is true that in every culture psi is considered unusual. In some cultures such as the early Northwest Coast cultures of North America, the Native American cultures, I think everybody had some feeling of interconnectedness with nature. You had special shamans who were considered really powerful and others who still felt they had some normal ability. You did not have this dichotomy where the complete outsider/stranger was contrasted with everyone else. Also these shamans were generally more integrated into the culture than we see with the depiction of those who have psi experiences and abilities here in contemporary film and television fiction.

AUERBACH: I am glad that Keith and I have seen all the same movies. First of all I would like to say that there are of course a lot of other movies that you left out. One of the things that I think comes out of science fiction films, as opposed to some of the horror films, is that psi is portrayed in both directions. Psychics are still portrayed as special people. At some of the science fiction conventions I have heard that the next series of *Star Wars* films which take place before the current series, is going to show a lot more people being psychic because there are going to be a whole group of Jedi knights. In other words anyone can aspire to be like Luke Skywalker. It is also going to show the downfall of the Jedi knights when Darth Vader got taken over by the dark side and helped eliminate all the good psychics. So there is a little bit of both in that. Now the character in *Star Trek*, who is the new character that he just mentioned is an alien. She is a psychic. She comes from a race of psychic humanoids who have really weird eyes, as they are going to see in an episode later in the season. But they are people who develop that ability according to the writers' manual that just came out from Roddenberry. I read a lot of weird stuff. Roddenberry has an idea that people are psychic and, in several of the episodes of the original *Star Trek*, he had put in the idea that people can have an ESP rating and can actually be tested for psi. Science fiction fans in general do not see psi as special or normal even though science fiction writers often create that kind of image for films. There is a problem, I think with Hollywood; that producer you talked to was probably right.

HARARY: You have already mentioned him, so that might shock you.

AUERBACH: The attitude is there in Hollywood certainly with the people who back the films. My father is in television and he has had lots of discussions with writers. Right now he distributes to foreign

television a variety of different kinds of TV series. The people putting up the money see that this stuff sells if it is destructive, because people like fearful stuff. Aside from creating a TV soap opera where people are normal but psychic or psychic but normal, it would be very difficult for them. They are not ready for a person-centered film that basically has psi in the background.

HARARY: There was a soap opera kind of series called "Seeing Things" out of Canada.

AUERBACH: That was an excellent show.

HARARY: It was an excellent show. But don't forget that the fellow who had the psi experiences would fall into an altered state and get disoriented whenever he had one of his visions. They overpowered him. In *Star Wars*, don't forget, it was "A long time ago in a galaxy far far away." These folks are all aliens.

AUERBACH: To go back to the comic books and the cartoons, last April I was at a convention here in Northern California, the Northern California Comic Book Dealers Association. This is now a big business for those of you who have not been reading *Newsweek* and *Time*. The average age of the readers of most comic books is now 25. The people that were at this convention were not youngsters.

HARARY: Which explains the current state of the American economy.

AUERBACH: They are all buying comic books, myself included. I've got a really bad weekly habit. I talked to the major publishers and also some of the editors and the independents who are now getting a corner of the market. Actually what I was doing was a little bit of promotion for myself. I gave them all copies of my book and ended up talking to them about their attitudes. There has been a different attitude from one company to another in the way they look at psychics. Marvel comics, which has got most of the market (they are the ones that do Spider Man and all those other wonderful characters who fight all the time), have for a number of years been appealing to a younger audience, an audience that knows all our jargon. I have talked to comic book fans. I have no problem using any term in this field including some talk about statistical material because they know it all, the writers have actually been putting it in. Some writers actually read our journals interestingly enough.

HARARY: Isn't Dan Ackroyd, the actor, a member of the American Society for Psychical Research?

AUERBACH: Ackroyd is a member of the ASPR, that is right. So was Jackie Gleason and Lew Ayres and a couple of other people.

KRIPPNER: Not that they have donated all that much money.

AUERBACH: I was talking to Scott Rogo yesterday trying to figure

out where Jackie Gleason's library went after he died, because he had a really good library.

Marvel has an idea that all psychics are mutants. That has been the idea that they have been putting out. Whereas DC Comics, the people that bring you Superman, had the idea that psychics are normal. But typically when you are a normal person who has psychic ability, if you get any sort of control you become either a super-hero or a super-villain. That is just what happens to sell comic books.

HARARY: So you have Luke Skywalker versus Darth Vader.

AUERBACH: That's right. Essentially, basically that is what you have got. I had a discussion with Stan Lee about what is going on with the Marvel Mutants and this whole idea of the psychic. What has been happening there is that all the normal people in the society have decided to take a vendetta—almost like Nazi Germany—against the mutants. Someone else made a comment about "Isn't this getting too old and aren't people more psychic than this on a normal basis?" There were about 400 people in the room, average age 25, and when Stan Lee asked "Are we going too far?" everybody said "Yes." They have since changed their tactics because of that one meeting. They are starting to put more normals into their comic books. They are planning on making films with more psychics as normals or normal people being psychic.

HARARY: I will be interested to see if it works out that way. Usually what happens is that somebody gets hold of the film along the way and distorts it. For example with *Star Trek*, on the new series, you have got a lady on the bridge who is psychic and half-alien. How about if she is a complete human being for a change? How about if psi has been recognized as a normal human ability? Instead we are still out there dealing with strange alien folks who can not get it quite right. Usually it is the women who have the real permission to function psychically. While we are being amused about the ways in which psi is portrayed in films and in comic books, I think it is important to remember the real impact that this has, not only clinically but on those of us doing research in the field. The next time someone says to you "You work in psi research, are you psychic?" remember that what they are really asking is, "Are you like Spock? Are you like Carrie? Are you like Bill Murray in *Ghostbusters*? Are you going to go off the deep end here? Are you connected with the devil? Are you an outsider? Should I be afraid of you? Are you some kind of nut?" They do not ask if your ability is psi integrated with the rest of your psyche and your consciousness. In saying you are psychic that implies that the rest of us are not, that you have a special ability. Once we do that, then we have to explain why a particular

group of people is different and we get into the kind of images that we see in the mass media.

AUERBACH: What do you think we should do besides trying to get Woody Allen to make a movie?

HARARY: Woody Allen wrote a piece in *Without Feathers* where he talked about spiritualism and two twins one of whom took a bath and the other who mysteriously got clean. There was the fellow who's body left him and ran up a tab all over town and another who left his body and played in the string section of the Philadelphia Orchestra for nine years before anyone noticed. But seriously, to answer your question, I am not naive. I went to Hollywood and I will continue to do that sort of thing. I do not believe that it is going to change overnight or that it is necessarily our role to go out there and try to change it. But when you are in a clinical setting or in a laboratory setting or when you are in a situation in which people are going to come to you because they feel they have had certain experiences, one thing you can do is to recognize what is affecting them, recognize their cultural context. You can make it explicit in therapy, even make it explicit in the laboratory that by participating in this experiment a person will not grow horns and a tail. In fact, at the Institute for Advanced Psychology, we tell people that exactly. We say, "We would like you to participate. You will learn some interesting things. We will, too, but you will not grow horns and a tail as a result of participating in this." Treat it with a little bit of humor, too. If anyone wants to try to write some positive television episodes or films that would be fine. I would love for other people to work on that. You can have a very slow, gentle, time-consuming positive effect which may never get noticed out there because it is just one episode. The main thing you can do apart from trying to change the world is to deal with it one person at a time with the people with whom you personally come into contact.

CASE STUDIES, FOLKLORE AND PERSONAL
EXPERIENCES OF INVESTIGATORS: THEIR ROLES
IN EXPERIMENTAL RESEARCH

REX G. STANFORD

The central concern in this paper is how studies of ostensible spontaneous ESP and PK (anomalous interaction), of the paranormal in folklore, and of unexplained interaction in the laboratory can be mutually enriching.

Alternative Conceptions of the Role and Methodology of Case Studies

Historically, there have been several schools of thought about the role of case studies of anomalous interaction.

Authentication of Case Reports (Proof Orientation). Early psychical researchers often wished to use case reports to provide direct evidence of anomalous interaction. This approach is characterized by discussion in *Phantasms of the Living* (Gurney, Myers, & Podmore, 1886). The method here was to carefully investigate accounts of apparitions of the living in order to ascertain the validity and reliability of the facts as recounted. The hope was that by eliminating normal explanations of the reported events the paranormal explanation could be more clearly indicated. Among the normal explanations that Gurney, in particular, wished to rule out in this publication was that of chance or coincidence, and he, accordingly, supplied some census data on the base rate of hallucinations (including hallucinations of persons known to oneself, such as appear in most crisis apparitions). These data he used in combination with a death-rate statistic in order to establish the chance likelihood of a hallucination occurring either 12 hours before or after a death. He could thus estimate the likelihood of the actual, observed veridical apparition rate by comparing it with that expected by chance. Gurney's argumentation here was criticized by the philosopher C. S. Peirce (as discussed in Gauld, 1968, pp. 173-174), in part on two grounds: (1) that the likelihood of a hallucination of a person known to oneself was probably underestimated because persons tend to forget

hallucinations not coincidental with deaths, but to remember those that are coincidental and (2) that the size of the sample actually studied might have been considerably larger than Gurney had estimated (on grounds we need not consider here) and that this would have resulted in the computation of a misleadingly small probability value.

Following Gurney's untimely death (1888), and partly in response to such criticisms, leading members of the Society for Psychical Research conducted a much larger census of hallucinations than had Gurney—a project he had long favored. The report (H. Sidgwick, Johnson, Myers, Podmore, & E. M. Sidgwick, 1894) included a correction for the selective memory problem just discussed. The investigators also carefully screened the data for factors that might introduce other forms of artifact. (My discussion of this early work follows Gauld, 1968.)

The above examples reflect the belief among many of the early psychical researchers that spontaneous cases, properly studied and evaluated, could constitute important evidence for anomalous interaction. That belief accounted, in large part, for their rigor in documenting and evaluating such cases.

The opinion that spontaneous cases can provide evidence of anomalous interaction continues to have advocates. Ian Stevenson (1970a, 1970b) is one investigator who feels that such cases, properly screened and evaluated, provide evidence on the psi-reality issue, over and above that contained in experimental reports. He, for example, chides parapsychologists for denying such cases the status of evidentiality and thereby making the evidence rest entirely upon the experimental reports (1970a, p. 143). He also appears to feel that such cases have potentially important things to tell us about process-related questions (1970a, p. 143; 1970b, Chapter V). I do not gain the impression that Stevenson wishes to use terms such as "conclusive" or "proof" in connection with case-related evidence, but neither do I gain the impression that he would use them with regard to experimental evidence. He seems to see great importance in such cases as providing evidence on conceptual or process issues that cannot be addressed in the parapsychology laboratory (1970a, p. 148) or that can only be addressed there with great difficulty. He insists, however, that each individual case report must be carefully studied to ascertain the facts before it can be considered as meaningful evidence of paranormal communication or of processes related thereto. He has, therefore, emphasized the importance of ascertaining the authenticity of each report (e.g., Stevenson, Palmer, & Stanford, 1977). By authenticity Stevenson means correspondence between the written report and the events it is claimed to

describe. (Authenticity is, then, necessary, but not sufficient, for a claim that a case report represents a plausible case of anomalous interaction.)

I strongly concur with this emphasis on case studies as providing evidence on process-related questions, but I insist that such evidence always has considerable ambiguity. It cannot, therefore, constitute the basis of final process-related conclusions. They must be developed on the basis of experimentation. I would also note that the very process of filtering out cases that have low evidentiality might bias the data in a way that could conceivably mislead in relation to process-oriented conclusions. For example, it might bias the investigator toward the conclusion that anomalous interaction always favors the development of conscious perceptions and cognitions in the "percipient" (whom I had rather call the "respondent"), that something less than this constitutes degraded or "blocked" information (see below). Such filtering helps to select cases that have the appearance of paranormality, but it may also help guarantee that the cases are atypical indicators of what usually occurs during anomalous interaction.

Spontaneous Cases as Providing Process-Related Hypotheses that Require Experimental Validation (Heuristic Orientation). The interest in spontaneous cases as providing evidence on process was shared by the late Louisa E. Rhine (1981), though she felt that the role of spontaneous case studies was to provide a unique source of hypotheses that could broaden the base of conceptualization and research. She insisted, however, that the suggestions or hypotheses derived from case studies require experimental work if final conclusions are to be drawn. Only experimental work could definitively confirm, disconfirm or correct the ideas developed from case studies (1970, pp. 150–151). She saw spontaneous cases as an important, even essential, supplement to experimental work, but the relationship between the two was seen as serial, not parallel, in terms of providing the basis of final conclusions. Findings in the case-study domain could guide laboratory investigations and even strengthen their conclusions, but they could not stand in their stead or on an equal footing in terms of evidentiality.

Perhaps because Rhine differed from Stevenson on these accounts, she also differed from him on choice of methods. Because Stevenson wishes to support relatively strong conclusions on the basis of case studies, he understandably elects to use the stringent approach to case-study evaluation that his predecessors in early psychical research had employed. Rhine, on the other hand, placed less of a burden upon her evidence because it was regarded as supplying information for the development of hypotheses for experimental testing or as providing supplementary, rather than primary, evidence. It, therefore, could be

gathered without subjecting each individual case to the rigorous validation and analysis process preferred by Stevenson. The pooled cases seeming *prima facie* to represent psi processes could be examined for types of events and patterns of relationships with the intention of developing suggestions about the processes of paranormal communication. Indeed, from this perspective it seemed to Rhine that her method was superior to that of Stevenson because it was less selective. It cast its net wider in order to insure that no type of anomalous interaction was excluded. Rhine did not subscribe to the idea that meaningful cases involving anomalous interaction had, individually, to provide solid evidence of such interaction, so long as they seemed to carry a suggestion of its presence. They could still contribute to pattern analyses of process in anomalous interaction. The requirement of strong authenticity for each case that was advocated in the proof orientation would in Rhine's view serve only to exclude some types of cases that involve psi, but that are not convincing when taken alone. The proof orientation was seen as potentially blinding the investigator to many of the manifestations and facets of psi function—an important point to which discussion will turn later. It was seen as too narrowly selective (Rhine, 1970) and as predicated upon the fatuous belief that such case studies can independently demonstrate the reality of anomalous communication.

Stevenson, however, faulted the Rhineian approach to case studies on the grounds that it had been used for purposes for which it was not originally intended and for which it is unsuited (1970a, p. 145), namely, to draw conclusions about process in spontaneous psi (and, presumably, in psi function generally). For example, Rhine on the basis of her case-work reached some very negative and forcefully stated conclusions about the lack of evidence for any active role of the agent in telepathy (e.g., 1981). Stevenson believes that the case selection in this instance was likely biased by the very fact that Rhine did not investigate her cases in the traditional, proof-oriented way—an interesting turning of the tables on Rhine's arguments about selection bias in traditionally evaluated cases. Specifically, he noted that because her cases were probably almost all submitted by percipients, as is typical, it is not surprising that she would know little about the experiences of agents in the cases. Obviously, she would have no contact with agents in the investigative process and no access to their unique perspective. It seems to me that Rhine never adequately addressed this criticism in her response (1970), though Stevenson's specific point here should not be construed as undermining Rhine's potentially important, broader point concerning the great selectivity of the traditional screening process

that is intended to insure the anomalistic or paranormal character of cases. There is no *a priori* reason to think that the underlying process(es) in anomalous interaction function only in situations wherein they would produce clear-cut evidence of their anomalistic character.

On the other hand, the Rhineian approach has the potential liability—broached but not discussed at length by Stevenson—that it might produce definite, but spurious, patterns in the data precisely because the data themselves provide little assurance that unexplained processes are likely to be involved. Rhine thought that even if some cases did not involve genuine psi events, the patterns of interest that she hoped to extract from the case data should emerge unharmed by the pseudo-psi cases. This hope was built around the assumption that, given the large sample studied, the spurious elements introduced by the non-psi cases would cancel each other out (i.e., that they were non-systematic in character), but that the elements introduced by the psi cases would reinforce each other. Thus, real information about psi function could be extracted or, at least, tentative suggestions concerning it could be developed.

The soundness of this assumption has been questioned (e.g., West, 1970) because the use of a large sample guarantees only that any consistencies in the data will be detected, but guarantees nothing about the nature of those consistencies. Data patterns might, for example, reflect what subjects are inclined to believe about anomalous interaction, rather than factors intrinsically related to such interaction. Cross-temporal or cross-cultural studies might help to resolve some of these problems because beliefs are often culturally founded or historically conditioned (see, e.g., Schouten, 1983).

It might be argued in reply that if case-study researchers really use their findings simply as raw material for the development of hypotheses that are subsequently subjected to experimental test, then any effects of cultural-historical conditioning upon the research findings could be minimized or actually eliminated (because we would assuredly be studying psi function). This argument has some validity but, on the other hand, reality might not be quite this simple. Culturally-historically conditioned beliefs might themselves influence actual psi performance or function and this might occur both inside and outside the laboratory. What can be said is that if case-study findings are culturally-historically conditioned but, nonetheless, lead to hypotheses that are confirmed in laboratory psi results, we can, in any event, be sure that these are valid patterns in that they relate to psi function. However, the boundary conditions for the findings would still be unclear. We would still not know whether the psi-related findings are historically or culturally

bound. Once again, cross-cultural work might have value in eliminating such ambiguities.

Let us return, however, to Stevenson's point that important case material—such as that related to the role of the agent—can be missed in the Rhineian approach to case studies because each case is not individually investigated in the tradition of the proof orientation, but is taken at face value, provided it meets very minimal criteria. There is a point here, but, in my judgment, it is a bit misguided. What may be needed is not the authentication- or proof-oriented approach to following up initial cases, but follow-ups designed to answer specific questions in which the investigator has a process-related interest (e.g., the mental activity of the agent as a factor in the percipient's experience or behavior). This process-oriented follow-up can help to eliminate ambiguities in case details that are important to process. For example, Rhine assumed that action being taken by the percipient in a spontaneous case of ostensible ESP automatically means that conviction was present, and she combined action taking and stated conviction as equivalent criteria of conviction. However, some persons may take action precisely in order to find out whether their impression is valid. They may be quite puzzled by their experience, but, also, quite unsure that something paranormal is happening or what is involved. Special queries carefully worded to obviate response biases might help to elucidate these and many other process-relevant matters that arise in case studies. Case investigators need to subject their own assumptions to empirical examination and sometimes follow-up queries can aid in this. [Sometimes, too, answers regarding the validity of those assumptions are available in the data already at hand, but investigators do not always make full use of those data. Haight (1979), by separating out the issues of "taking action" and of "conviction" in her own collection of cases, showed that taking action relates differently to her various case forms—intuitions, realistic dreams and unrealistic dreams—than does the sense of conviction, despite Rhine's having unquestioningly combined these two criteria for analyses of "conviction."]

Quantitative Testing of Competing Hypotheses Using Spontaneous-Case Collections with No A Priori Assumptions that "Psi" is Present (The Pragmatic Approach). What may be the most detailed, quantitative (statistical) and, in many ways, sophisticated of the contemporary case studies are those conducted by Sybo A. Schouten of the Parapsychology Laboratory, University of Utrecht, The Netherlands (1979a, 1979b, 1981, 1982, 1983). Schouten analyzes case patterns to learn whether they better match the implications of one or another hypothesis, whether that hypothesis uses nonparapsychological or parapsychological constructs.

One of his major concerns is whether the patterns in his data support or tend to falsify a specific hypothesis. Ruling out alternative interpretations is an important feature of his methodological approach, which is highly falsificationist in philosophy.

Unlike Rhine, he does not begin by simply assuming that genuinely anomalous interaction is reflected in the data. (In this sense, his approach has a kinship with the proof-oriented one, but it leads to a very different methodology because of its different philosophical underpinnings and objectives.) He considers competing hypotheses (including psi and non-psi hypotheses) for their implications for the data at hand and then examines the data themselves to see how well their patterns match those implications.

Schouten scores the data of each case according to values assigned within 32 categories (e.g., categories concerned with age of target person, percipient action, percipient conviction, etc.), and he attempts to reduce the subjectivity (and inter-judge error) involved in case-material categorizations through adherence to an explicit set of rules for assigning values within categories to each case. This is a significant improvement over Rhine's work wherein scoring criteria were, in some instances, not made clear (Weiner & Haight, 1983, pp. 315–316).

Schouten statistically examines all possible interrelationships in his data, but emphasis is placed upon replication across case collections. He has examined the cases of *Phantasms of the Living* (1979b), the Sannwald collection (1981) and the Rhine collection (1982) in an effort to discover patterns in each and to learn which patterns are and are not robust across such changes in time, sampling methods and culture as they represent. One of the advantages of this approach is that it allows examination of the cultural hypothesis, which asserts that what appears in case collections is a function of culturally conditioned expectations, beliefs, etc. Schouten appropriately decries the tendency of parapsychologists to leave the investigation of psychological, social and cultural influences upon cases (or case reports) in the hands of nonparapsychologists. His approach examines a wide array of hypotheses that might have implications for the data at hand.

Schouten has clearly and eloquently explained the rationale and pre-suppositions of his approach (e.g., 1983). He recognizes that the only assumption needed to justify his methodology is that the data are not random, that consistent, meaningful patterns of some kind—parapsychological or not—are present. That assumption can be tested by examining for consistent patterns. The approach is intended to assay the applicability of specific *a priori* hypotheses and to provide new hypotheses for later testing. Schouten has found some remarkable and

potentially very important patterns of findings, even across the different samples, and many of his major findings are summarized in a recent paper (1983). The consistency of his findings across the three samples mentioned above caused him to reject the cultural hypothesis, and he reports that the only meaningful variation across samples is in terms of the patterns of ways in which the target-related information emerges in consciousness. A potentially important finding here is that Rhine's unauthenticated cases exhibit the same patterns as the carefully authenticated *Phantasms* cases. This finding, taken in combination with other data discussed by Schouten, tends to validate Rhine's belief that the examination of unauthenticated cases is a meaningful way to learn about ostensible anomalous interaction. It tends to bring into question the Stevensonian claim that the lack of authentication by the investigator in the Rhineian approach is very dangerous and can lead to serious error. One possibility for explaining the convergence of the Rhineian and the proof-oriented outcomes is that Rhine's data involved a type of filtering, not by the investigator, but by the persons reporting the cases. People may wish to be precise and cautious in what they report because they do not wish to appear foolish or be revealed as unreliable if anyone should scrutinize their claims. Indeed, Haight, Kanthamani and Kennedy (1979) found that when persons reporting spontaneous cases on a questionnaire were interviewed by telephone and their cases were on that basis reclassified according to the likelihood that they involved psi, equal proportions "improved" and "deteriorated" in terms of evidentiality. Here, then, is evidence that the quality of a spontaneous case report that has not received first-hand investigation need not always deteriorate upon closer scrutiny.

In any event, the generalizability of Schouten's conclusion that investigator filtering does not produce different patterns in the data than were found by Rhine is further strengthened by the results of a small-sample study on high-school students conducted by Haight (1979). She did preliminary screening for quality of cases beyond that done by Rhine, but, as in Schouten's analyses, the patterns in the data were generally very similar to those in Rhine's essentially unscreened cases. Unfortunately, Haight, unlike Schouten, did not report the use of statistical inference in contrasting patterns across studies. Nevertheless, the above findings and additional ones discussed by Weiner and Haight (1983) support Schouten's conclusion about no real difference being made by stringent case filtering and point toward a possible reason why unscreened reports are not highly misleading in the patterns they reveal to investigators. There is probably no reason to think that there are consistent biases in unscreened cases due to factors such as a desire

on the part of the reporter to make a case look better than it actually is, at least if the findings of Haight, Kanthamani and Kennedy (1979, discussed above) can be generalized beyond the high-school students studied. Conclusions about a lack of effect of case screening or a lack of consistent reporter bias toward initial overstatements of their case should not, however, be generalized unquestioningly beyond the sampling methods used in these studies, the populations of individuals studied, or the types of cases involved.

Schouten's application of his method has proven very productive and it is the best exemplar of researching case collections that we have at present. On the basis of that work, he has also provided alternative conceptual interpretations to those proposed by Rhine for some of the central findings from such cases. He acknowledges that his interpretations go beyond the data at hand—they are intended to have heuristic value—but they seem to me to be simpler and more elegant than those involved in the Rhineian model.

What Constitutes an Acceptable Spontaneous Case of Possible Anomalous Interaction? A New Look at Old Assumptions (The Psi-Mediated Instrumental Response or PMIR Model). Despite Rhine's laudable desire that her case collection be broad enough to encompass all forms of ESP and PK cases and her consequent choice of a methodology that eliminated all screening except a very cursory one, it is obvious that she, like previous case researchers, did not include an entire range of cases that might involve the receptive form of anomalous interaction (traditionally called ESP). These are the cases that involve what might be considered the subtle, nonintentional or "unconscious" use of extrasensory information in the service of needs (Stanford, 1974a). An example from my own case files (Stanford, 1974a) is of an individual forgetting to exit a subway train at the proper station, exiting, instead, at the next one, and thereby being able to meet, entirely unexpectedly, the very persons he had been traveling to see. These cases often have features of the following kinds: someone forgets something or makes a mistake that turns out to have unanticipatedly fortunate consequences; one takes an action at a time—when there were options available as to timing—that results in unexpectedly favorable consequences; one decides to do something that one does not usually do, but this results in some wonderful consequence that could not have been anticipated in advance. All of the above kinds of precipitating behaviors can, alternatively, eventuate in the avoidance of some unfavorable event rather than in the encountering of a favorable one.

Louisa Rhine's lack of consideration of such cases apparently derived from (a) her assumption, based upon the prior history of such inves-

tigation and which she certainly communicated to potential contributors of cases, that receptive anomalous communication involves *consciously* knowing about something without the aid of the known senses (or the ability to have rationally anticipated it); and (b) her requirement that cases to be considered must seem *prima facie* to be outside the realm of coincidence. (The latter requirement is understandable, but we should recognize that there is no intrinsic reason why actual psi function should always result in highly improbable circumstances.)

The traditionally excluded adaptive coincidence cases certainly do not reveal conscious knowledge of any target circumstance to which the individual is responding. Instead, they might involve what I would prefer to call implicit knowledge of it that occasions appropriate (instrumental) response. The excluded cases also do not generally provide convincing evidence that something extraordinary occurred, precisely because they look like odd, favorable coincidences that do not involve the detailed, conscious knowledge of an external circumstance that is usually the basis of ruling out coincidence. However, that is not to say that a substantial number of these cases do not involve very improbable circumstances, for many surely do. It is to say that researchers have wanted to base their intuitive likelihood estimates upon conscious knowledge of a circumstance by a so-called percipient rather than upon the improbability of the respondent's behavior that results in the unanticipated adaptive consequences.

Behind every major case study—and almost all parapsychological discussion anywhere—there has been the assumption that the intrinsic nature of extrasensory response is that of information acquired through non-sensory means that struggles for conscious expression as a perception-like image or cognition concerning the target circumstances. I shall refer to this as the perceptual-cognitive view of extrasensory response. It has, indeed, long been assumed that if extrasensory response exists it must take this form as, really, the only conceivable one. Explicit or conscious knowledge of circumstances has been seen as the objective of extrasensory function—or “extrasensory perception,” as the traditional conceptually biased term would have it. This assumption is nowhere more clear than in the writings of Louisa Rhine on spontaneous “ESP” (e.g., 1981). Intuitive cases of ESP are, for example, seen as instances in which the extrasensory information is obviously “blocked” from arriving at its conscious destination, such that an individual gets only an urge to act and/or a feeling about something, often not even knowing who it involves and rarely knowing anything about the circumstances involved. She writes at length about the struggle of extrasensory information to enter consciousness and how it is

often blocked from full access to consciousness while persons are in the waking state.

What is implied in all this is that extrasensory functioning is organized such that the implicit objective is *always* to communicate to consciousness information about the target situation. The reason I have long been interested in the neglected cases discussed above is that the aforesaid implication of the traditional perceptual-cognitive assumption is an unreasonable and arbitrary one from the perspective of evolution, adaptation and the survival of the organism. Presumably, the advocates of the traditional position would admit that anomalous receptive communication subserves the adaptation of the organism. What seems unreasonable in the traditional position is the assumption that psi-mediated access to sensorially unknown information will have maximally adaptive effects only when information about the target circumstance to which one must respond enters full conscious awareness. (It also seems, generally, to be assumed that that target circumstance tends to enter consciousness in rather full, rich detail that, however, may be degraded by the vagaries of the percipient's psychology at the time.) Contrary to that assumption, it seems obvious that maximally adaptive response to an extrasensorially apprehended circumstance will often consist simply of a particular instrumental response, one that allows one to do what is important in relation to that circumstance. Sometimes that response is one of simple avoidance of it because of its threat or of contact with it because that would have positive consequences. If, as discussed in detail elsewhere (Stanford, 1974a), appropriate ready responses within the organism can be primed and released (through the psi function), the organism can make adaptive response without the target information having to be communicated to consciousness and being processed there.

Indeed, for many adaptive purposes the route through conscious awareness would be terribly inefficient, absolutely unnecessary and disruptive. It could even block adaptive response, as when the individual does not know what to make of the information in consciousness or what to do about it. I will not elaborate on these matters here, for they have been discussed in earlier publications (Stanford, 1974a, 1977a, 1982). I will, however, note that adaptive response to target circumstances may require conscious knowledge of even the basics of those circumstances only on special occasions and detailed knowledge of them more rarely yet. [Interestingly, in this respect, Schouten (1983) concludes—even on the basis of work with traditional cases—that the actual extrasensory information consciously processed is very minimal and considerably less than has often been believed to be the case.] One of

the circumstances that actually requires conscious knowledge may be the blockage of simpler forms of adaptive psi-mediated instrumental response. When simpler, more efficient adaptation to important extra-sensorially accessed circumstances is blocked by circumstances such as the preoccupations of the organism (see Stanford, 1974a, 1977a, and 1982 for detailed discussion), then adaptation may require more conscious processing of target relevant information. Under those circumstances conscious processing of the psi-mediated information may be more likely to occur. (There may also be types of target circumstances for which adaptive response requires some conscious processing of the target information; for example, the death of a loved one may favor conscious access to that information precisely because only in this way can there be adaptive emotional preparation for a real-world encounter with that fact.)

In summary, the traditional perceptual-cognitive view of anomalous interaction is not a highly reasonable one from the perspective of such interaction fulfilling a minimally disruptive, adaptive function for the organism, and it certainly does not accord with the possibility that this function developed in organisms at an evolutionary stage in which consciousness was presumably rudimentary.

In this light, ignoring cases of interesting, adaptationally relevant "coincidences" is short-sighted and reflects a conceptual bias that was probably inevitable, given the history of the field. That is, however, not a good reason for perpetuating what may have been a very serious mistake that impeded scientific understanding of anomalous interaction. The major mistake, of course, consisted in unquestioned allegiance to what was an implicit assumption. Minimally, what is required now is that individuals advocating the traditional perceptual-cognitive view of psi function and those who advocate another be fully aware of the assumptions they are making and that they subject them to both empirical and conceptual examination. Empirical examination of such assumptions can be pursued both through case studies and experimentation, though the latter is definitely required for final conclusions.

The PMIR model that I developed on the basis of (a) the "renegade" cases earlier rejected, (b) findings in traditional psi research and (c) considerations from ordinary psychology consists of a series of very explicit, experimentally testable assumptions about circumstances both favoring and deterring adaptive psi-mediated response. I will not detail the assumptions of the PMIR model here (see, e.g., Stanford, 1982), but I would note that any theory proposing an adaptive and subtle, but potentially very powerful, role for psi (ESP and PK) function must also propose specific circumstances that limit the effectiveness of such

response or that block it altogether. This is necessary because, otherwise, the theory would affront the fact that we have misfortunes in life. In the PMIR model there are a number of specific such assumptions about boundary conditions for psi function. There are even assumptions about circumstances that can cause psi to function in ways that are normatively regarded as maladaptive. The model has also been extended to psychokinetic function (Stanford, 1974b).

While the PMIR model is an intriguing departure from the traditional perceptual-cognitive view, it should be obvious that its credibility must depend upon more than the fact that it consists of a plausible theoretical alternative and a highly specific, testable set of assumptions. Experimental testing of its assumptions is required to know (a) whether the heretofore excluded cases of adaptive coincidence that are subsumed by the theory can realistically be regarded as sometimes reflecting anomalous interaction and (b) whether the specific assumptions of the theory represent valid assessments of functional characteristics of anomalous interaction generally.

The PMIR model has generated considerable experimental research and, additionally, there are numerous studies in the literature that might not have been inspired by the model, but that have relevance to its specific assumptions. Stanford (1977a) reviewed the available relevant research, but there has been considerable subsequent work that is relevant. The latter is still awaiting systematic review, which I hope to undertake in an upcoming chapter for Volume 6, *Advances in Parapsychological Research* (S. Krippner, Editor). Experimental research in the PMIR domain has already provided considerable support for the underlying assumption of the model that adaptive psi-mediated function can occur without the subject having to develop target-relevant cognitions. It thus suggests that the odd, favorable coincidences of daily life are sometimes mediated by anomalous communication. Very important, there is already experimental support for some of the assumptions of the PMIR model concerning how and under what circumstances PMIR occurs in life situations. However, much more experimental work is needed on the assumptions of the model, and some have not been directly addressed by experimentation. The experimental support for the PMIR model to date is exciting because it has much relevance to understanding psi-mediated response outside the laboratory as well as within it. Each of the assumptions of the PMIR model has clear relevance to understanding anomalous interaction in life settings, and each can be tested experimentally because the model is highly specific and has concrete implications. This is probably why the model has attracted much interest and has received considerable experimental

attention. The combination of explicit, testable hypotheses and obvious relevance to life situations is something new in parapsychology, but it is something that may be required for case studies to influence experimental work and for experimental work to have relevance for case studies.

One hopes that when specific assumptions of the PMIR model have been subjected to experimental test and have been supported or modified, these insights can, in turn, guide further conceptual and empirical analyses of cases or even the types of cases collected for study and the questions asked of persons who contribute them. In turn, data gathered from these experimentally enriched case studies can suggest new hypotheses for experimental testing, and the process can go forward. Here is the possibility for a genuinely synergistic relationship between case studies and experimentation, each enriching the other and both contributing meaningfully to the understanding of the relevant processes. In truth, the only way to gain a sound understanding of spontaneous-case events is to undertake experimentation that examines concepts derived from them. This is precisely what Louisa Rhine originally had in mind and it is what has already occurred in the PMIR domain. Nonetheless, the success of the PMIR effort in generating substantial, systematic experimental research is unique. This has not happened in any appreciable way on the basis of analyses of traditional cases by Rhine or anyone else. This raises an important question to which we now turn.

How Can Case Studies Be Made More Useful for Experimentalists' Purposes?

The systematic study of spontaneous cases has so far failed to generate systematic experimentation. It has, indeed, rarely spawned any experimentation at all. The PMIR model has inspired considerable systematic work, but the model did not derive from the systematic study of traditional spontaneous cases—or even from the *systematic* study of non-traditional ones. It occurred to me that both traditional and non-traditional cases could be understood by considering psi function in light of considerations from biological evolution and behavioral science. I would suggest that one reason for the failure of traditional case studies to have eventuated in hypotheses that inspired systematic research is that case investigators have not usually examined their cases in light of any form of broader conceptual integration—from within or from outside of parapsychology. In short, one of the problems might have been a continuation of the rather heuristically sterile bare-bones em-

piricism that tended to characterize the thinking of both J. B. and Louisa Rhine. It is rarely just findings that inspire research, but the ideas within which they can be framed!

Be that as it may, the authors of case-study reports have not discussed their findings in ways that would seem to point clearly toward any experimental work. Since many experimentalists seem disinclined toward examining case-study reports to aid them in developing experimentally testable hypotheses, case-study authors might do well to spell out in their reports the experimentally testable propositions that they feel are inherent in their data. Part of the problem might be in the difficulty experimentalists must have in translating case-study findings into concepts, hypotheses and, ultimately, predictions that invite laboratory investigation. How, for example, do case-study findings on taking action by the percipient or the reports of a sense of conviction in spontaneous cases translate into concerns of the laboratory researcher? These are not easy questions and it now seems important that case-report workers who wish to inspire experimental research come to the aid of experimentalists in these regards. Not all experimentalists are theoreticians and translating findings from a nonexperimental area into concepts and hypotheses with implications for experimentation cannot be expected to come easily. The problem is compounded by the fact that case-study researchers are also not always theoreticians. Theoretical constructs are, however, precisely what is needed to bridge the gap from one area of empirical investigation to another (see below).

If the laboratory is to be a testing ground for "hypotheses" developed from case studies, then considerable care must be exercised to actually develop true hypotheses. The hypothesis to be thus tested must, if it is to be serviceable, consist of or be based upon a proposed tentative explanation of a case-study finding or of a set of such findings. (A hypothesis is, after all, a tentative explanation of an empirical finding.) This hypothesis must be much more than just the attempt to generalize an empirical finding to a laboratory situation, for in the absence of a tentative explanation for the case-study finding, it is impossible to know whether or not the finding will generalize to the laboratory or in what form or circumstance. In short, the investigator must not simply try to generalize a finding from case studies to the laboratory, but must create a true tentative explanation of that finding and then deduce predictions from it that can be tested in the laboratory. Only a "hypothesis" that is a tentative explanation of a case-study finding can indicate under what circumstances an effect should be observed in the laboratory. Only such a hypothesis can indicate what laboratory cir-

cumstances will be comparable to the nonlaboratory settings in which the finding was originally observed. In the absence of a tentative explanation of a case-study finding, efforts to "generalize" that finding to the laboratory are naive. Indeed, once a true hypothesis of this kind is created, the laboratory researcher can move beyond merely trying to generalize the finding to the laboratory and can explore its implications there. Those implications derive from the tentative explanation as applied to particular laboratory situations. It might well be that the absence of such attempted hypotheses on the part of case-study authors (or experimentalists interested in their work) has been what has deterred case-study-based laboratory work.

To make this discussion more concrete, let us consider the case of the researcher who wishes to do an experiment based upon the finding that *persons* are more likely to be the targets of ostensible spontaneous cases than are *material objects* (Schouten, 1983, p. 331). Let us assume that the case-study finding represents a clue to process in actual spontaneous-case ESP, that it is not merely an artifact unrelated to anomalous communication. What kind of experiment should be used to follow up this finding would depend upon how the case-study finding is interpreted. If one's hypothesis (tentative explanation) for the case-study finding is that persons are simply built by evolution to be particularly sensitive to cues about other persons (perhaps because other persons are active sources of both rewards and threats), whereas sensitivity to cues about material objects is less important (perhaps because such objects are more passive in character), then the finding can be pretty directly generalized to any free-response setting with the expectation of better success with human targets than with those representing material objects. This is because the organism is presumed to be built by evolution to respond more sensitively to information concerning others. If, on the other hand, one merely assumes that the case-study finding is a manifestation of the greater importance for the percipient of particular persons and their fates, the hypothesis is very different. Its test would likewise be very different. In the case of this last hypothesis there are various predictions that could be generated, and a number of them would be divergent from those deriving from the hypothesis of greater evolutionary sensitivity. A good study of either hypothesis should involve more than just an attempt to obtain confirmatory findings. It should ideally include circumstances that would lead to divergent predictions from the two competing hypotheses, so that the powerful strategy of falsification and the weaker strategy of confirmation could stand the chance of working together to reduce conceptual uncertainty and to suggest conceptual resolution.

A final caveat is in order. Case study researchers sometimes rather strongly espouse interpretations of their data that are minimally, if at all, supported by the data. (Of course, this happens with experimentalists, too, but I think the temptations may be even greater in case work because of the ambiguities intrinsic to it.) Sometimes the favored hypotheses are claimed to have support simply because certain rather feeble alternative hypotheses have been dismissed (and sometimes with less than adequate testing). What would appear to be equally plausible alternative hypotheses to those favored by the investigator are simply dismissed or ignored. If there is a single general shortcoming in the theoretical thinking underlying most case studies, it is to pay too little attention to viable alternative parapsychological hypotheses than those preferred by the author(s) even while considerable discussion is sometimes justifiably given to non-parapsychological hypotheses. (This is not to say that no attention is given to alternative psi-related hypotheses; it is only to say that they are often given too little consideration.) The moral of this story is that experimentalists wishing to test hypotheses built around case studies already in the literature would do well to consider, in searching for possibilities, not only the conclusions and interpretations favored by the case-study authors, but to go back to the authors' data and methods in order to examine the soundness of their conclusions and to unearth alternative hypotheses that might have been prematurely dismissed. In an area that supplies as little in the way of unambiguous data as do case studies it is tempting to find ways to dismiss alternative interpretations even when they should not be dismissed. The very uncertainty present in the data invites premature closure. Readers of case-study reports need to be continually aware of this frequent problem. In my opinion, two examples in which case-study authors have frequently opted for an unsupported interpretation and prematurely dismissed very viable alternatives are in trying to understand the finding that, across several different studies, women far more frequently report spontaneous cases than do men and in tending to dismiss the hypothesis of active-agent telepathy on inadequate grounds by imagining that an active-percipient model can comfortably account for almost everything.

Inputs from case studies might become more valuable to experimentalists than they have in the past if the basis of such studies were broadened to include the traditionally excluded adaptive coincidence cases subsumed by the PMIR model. Such cases would have to be solicited because few, if any, persons spontaneously report them to laboratories. This is probably because of at least two factors: (1) The public may have come to share investigators' widespread assumption

that extrasensory response is intrinsically perceptual-cognitive in nature, and they may therefore believe that these cases do not represent extrasensory response. (2) They may not share that assumption, but feel that investigators will dismiss such cases as mere coincidences. The best way to gather useful, relevant case material of this kind might be to solicit volunteers and then to circulate questionnaires to them that cover a wide range of events of interest to parapsychologists, including both adaptive coincidence events and more traditional events. Opportunity should be provided for giving detailed descriptions of events. It would be useful to learn about the range and frequency of various experiences within individuals. This could aid the development of process-relevant hypotheses and might aid in understanding whether personal styles influence experience types and, if so, in what manner this occurs. Such surveys might also profit by the inclusion of various psychological inventories or scales. Exactly what would be involved would depend upon the specific purpose of the survey.

What is being suggested here is that case studies might become more serviceable to experimental researchers if surveys were tailored to addressing particular questions of interest to experimentalists and to creators of experimentally testable models or theories.

The Role of Other Nonlaboratory Inputs in Laboratory Work

The directions of laboratory experimentation have been affected by nonlaboratory inputs of other kinds than systematic case studies and this has happened in other areas than just research inspired by the concept of PMIR. Examples are found in much of the work on internal attention states and ESP performance, including studies involving ganzfeld, relaxation procedures, hypnosis and nocturnal dreaming as a setting for telepathy. Folklore or personal experiences of investigators, rather than the results of systematic case studies, have often served as the impetus for the work in such areas. It should be noted, though, that here the work has been largely that of exploring possible settings for successful ESP performance rather than that of testing hypotheses concerning the reasons for the success in such settings (Stanford, 1987).

As a specific example, consider the dramatic and important work on telepathy during stage-REM sleep spearheaded by Montague Ullman, a psychiatrist, working in collaboration with Stanley Krippner. (For a review of dream-ESP work see Child, 1985.) This work seems to have been inspired largely by clinicians' observations of apparent patient-therapist telepathy occurring in dreams discussed during therapy. Ullman's own experiences as a therapist apparently played a role here

(Ullman & Krippner, 1970, Chapter 1). [See, also, the nontechnical book on this work (Ullman, Krippner, & Vaughan, 1973) wherein there is only a brief mention of Louisa Rhine's systematic case studies and no mention of her discovery that dream case reports tend to contain exceptional detail of the target circumstances as contrasted with most waking experiences (Rhine, 1962); indeed, Ullman's dream-telepathy work was underway in a very preliminary way before the Rhine publication just cited.] This is not to deny that the interest in telepathic dreams that derived from clinical experience was not supported in some degree by knowledge of the case studies involving ostensible dream ESP. Nevertheless, when the case material that emerged from therapy sessions was subjected to clinical analysis, it provided exciting suggestions of dream telepathy driven by dynamics that were often interpersonal and involved the therapist. Here was ostensible extra-sensory communication that became evident during therapy, that was expressed in patients' (or, sometimes, therapists') dreams, that had apparent relevance to the events of therapy (including interpersonal ones) and that left vivid impressions upon the therapists because of its conceptual and pragmatic implications for both the individual case and therapy in general.

Systematic studies of large bodies of traditional spontaneous case data could hardly have provided this kind of incentive for the difficult systematic experimentation concerning dream telepathy. I must respectfully disagree with Haight's suggestion (1979, p. 180) that traditional case collections provided major impetus for the experimental study of dream *telepathy*. A reading of the original monograph in this area (Ullman & Krippner, 1970) gives a different impression. There is little question that as the dream-telepathy program developed historically it was inspired predominantly by the many observations of ostensible patient-therapist dream telepathy and by the intriguing and potentially important patterns of its apparent interpersonal dynamics. These were undoubtedly what grabbed and held the interest and motivated this difficult work, even if that interest received some support from historical case collections. Note, however, that even had the systematic case studies been the primary inspiration for the dream-telepathy work, this would have been a case of their having inspired the setting of laboratory research, not of their having provided specific, process-oriented hypotheses to be tested.

It seems clear, however, that Louisa Rhine's systematic case studies did play a significant role in inspiring the laboratory study of dream *precognition* (Krippner, Ullman, & Honorton, 1971; Krippner, Honorton, & Ullman, 1972), because her finding (1954) that the dream

cases predominantly involved precognition, rather than telepathy or clairvoyance, is mentioned by these authors in discussing the rationale for that work. It is also clear that the finding of a seemingly talented ESP subject, Malcolm Bessent, who had had many ostensibly precognitive spontaneous experiences, played a major role in the decision to do a precognition study.

As regards ESP testing in the hypnosis and ganzfeld settings, it appears that systematic case work played, essentially, no role. Neither circumstance is one that we usually think of as a naturally occurring one and little has been made in case-collection studies of borderline cases between wakefulness and sleep, a state sometimes occurring during ganzfeld. Instead, ESP work with hypnosis and ganzfeld was undoubtedly inspired by folklore and by ethnological observations of shamans, seers and prophets who often work in apparently altered states of consciousness. In the case of hypnosis, influence came also from accounts of the experiences of Mesmerists and early hypnotists (Dingwall, 1967-1968).

One important example of the influence of folklore on parapsychological research planning is found in the work of Robert Morris and his students. They have examined popular psychic development literature for testable hints about circumstances and regimens favoring successful psi-task performance (Morris, 1977). Popular writings about conditions and regimens believed to favor ESP or PK allow relatively easy translation into experimentally testable propositions and they therefore foster actual laboratory work. Later I will briefly discuss an example of laboratory PK research that came out of this search of the popular literature (Morris, Nanko, & Phillips, 1982).

As a further example of the influence of folklore, Honorton, who is a central figure in the ganzfeld-ESP work, notes that his initial ganzfeld work was influenced in part by the ancient yoga aphorisms of Patanjali, as was his conceptualization of the role of psychophysical noise reduction in psi-conductive states (Honorton, 1981). Patanjali's ancient, but remarkably psychological and conceptually conservative, treatise on yoga contains ideas that can quite straightforwardly be translated into hypotheses about psi-conductive internal states. Honorton was able to make use of the yoga aphorisms (and related commentary) in building a research program precisely because Patanjali had written about these matters in a way that could easily translate into scientifically tractable concepts and testable hypotheses.

The influence of the folklore of yoga and the related writings of Patanjali upon Honorton's conceptualization and research on psi-conductive internal attention states again illustrates the principle discussed

earlier that sources of information that influence the experimentalist (or the theoretician wishing to inspire research) must provide easy translation into some fairly straightforward propositions that can be put to experimental test.

It is not surprising on still another account that personal experiences of potential investigators, vivid anecdotes and colorful folklore would influence even experimentalists more strongly than would outcomes from systematic case studies that are left in a relatively abstract form (see above) that does not immediately suggest testable hypotheses. The former are presumably more dramatic and memorable than abstractions. We are unlikely to think about or act upon things not remembered!

Broadening the Bases of Hypothesis Building and Conceptualization

Earlier discussion showed that researchers' personal experiences, folklore and, occasionally, systematic case studies have influenced experimental research. They have sometimes influenced the process-oriented hypotheses that have been tested, but more often they have influenced the settings that laboratory investigators have provided in the hope of eliciting psi performance from their subjects. Stated in more general terms, they have mainly influenced ideas about the psychological circumstances in which anomalous interaction is likely to occur. Researchers might also profit by allowing them to influence in a tentative, testable, way their thinking about the underlying nature of the events studied. Of course, such ideas would require experimental testing.

In accord with the idea of letting nonlaboratory inputs influence the underlying concepts that we plan to test, let us turn now to some folklore of the allegedly paranormal that might have relevance for parapsychological theorization. We shall see that it suggests concepts that, if valid, would have considerable importance for understanding the events that interest parapsychologists.

Faith. Mainstream parapsychologists sometimes seem reluctant to give serious attention to concepts that appear in traditional religions. It is almost as if such concepts are beneath notice because they are seen as reeking with superstition and supernaturalism.

Closer examination of ideas from religious sources might enrich the theoretical armamentarium of parapsychology by providing very useful, testable ideas even if those ideas may sometimes require translation into a more scientific framework. Indeed, such nonlaboratory sources might provide unique suggestions that would not arise from laboratory

investigations because of the limited scope of the latter. Some of these ideas from folklore are neither empirically intractable nor wedded indissolubly to a supernaturalistic world view. One such construct from religious tradition and folklore that may challenge contemporary theorization is that of faith.

This term has several meanings in religious and theological discussions. I shall focus here upon a meaning that has supposed relevance to the occurrence of paranormal events. In New Testament literature faith is defined and discussed at length in the eleventh chapter of the letter to the Hebrews. I will paraphrase, rather than quote, the defining statements and will do so in a way that I hope will provide clarification of the concept in light of examples supplied later in that letter. The author of the letter says, in effect, that faith is the internal sense of realness of things that are not evident through the senses; it is what makes real things for which one has no sensory (or logical) evidence. It is the kind of realness or sense of reality of things unseen or unsensed that causes or allows the individual to take action with full conviction that the assumed basis of the action is valid. This definition eschews theological concepts and might be applied outside strictly religious contexts—even though the author of the letter is obviously using it to refer to a sense of reality of things said or promised by God that allows or causes persons to take decisive action and even to sacrifice their lives.

The central concept here is clearly one of conviction, an inner certainty in the absence of any concrete evidence, and a readiness to act upon that conviction, despite appearances. The letter's author writes of faith as wholly within the context of action, a very Jewish idea that is restated and reiterated in the New Testament letter of James, which has been regarded by certain scholars as too Jewish to be Christian, if such irony is possible (see introductory remarks to this letter in the Oxford Study Edition of the *New English Bible with the Apocrypha*, Oxford University Press, 1976). In the letter of James, action is said to be the test of faith (Chapter 2, verses 17–18).

Faith, as it is viewed in the New Testament, is evident in action upon an inner conviction in the absence of objective evidence supporting that conviction (and, sometimes, in the presence of seemingly contradictory evidence). In a sense, faith is said both to make that action possible and to be demonstrated by such action. Faith in the absence of the action is, however, seen as a meaningless abstraction. Faith is, then, shown in the commitment one makes through action. In Biblical illustrations of faith, action is the very way in which the outer evidence of the inner conviction is realized or, sometimes, encountered, as in

examples given in the eleventh chapter of the letter to the Hebrews. Faith in Biblical terms is decidedly not just a means of bringing about miracles; it is seen as a condition for realizing anything at all in a relationship with God (Hebrews 11:6). The scriptural reference just cited also shows that faith is seen as intimately linked with trust—a belief in the goodness of character or dependability of someone or something—a combination that helps inspire action. (In Biblical settings this trust is always trust in the nature of God. Believers must both believe in God's reality and trust in his character.) A fuller discussion of this sense of faith and trust as it relates more broadly to parapsychology and to outcomes of PK research can be found in earlier papers (Stanford, 1974b, 1977b).

In circumstances of alleged miracles described in scripture (both Old and New Testaments) faith is often seen as a bold, action-based assertion of the inner sense of reality of something desired or believed to be accessible through God. An example is found in Acts 9:36–42. Peter, as described in the account of raising Tabitha from the dead, first prays and then turns toward the body and just simply tells her to get up. Likewise, Jesus in raising Lazarus (John 11:1–44) boldly ordered people to remove the stone in front of the tomb and shouted for Lazarus to come forth. The account gives no sense at all of a “Let's pray and see what happens” mentality. There is, instead, a feeling of authoritative action. There is a sense in such accounts that the very boldness involved in acting upon faith is, somehow, itself very central to the realization of miraculous outcomes. It is as though the boldness of faith, which involves some form of action, is important in bringing about events that would not otherwise occur, including paranormal events. It seems a bit like leaping into an abyss with the assurance that a friend will see to it that there is a net below! There is, indeed, a sense that the very act of doing so is what assures that the reality will be there, that the act of leaping in belief and trust insures that the net will be there.

A New Testament story that seems to exemplify this perspective is reported in Luke 17:11–19. Jesus while on a trip encountered ten lepers who asked him to have pity on them—in other words, to heal them. His reply was very interesting, for he told them to go and show themselves to the priests (perhaps so that they could be certified or officially recognized as cleansed of leprosy?). Then the account is very explicit that while they were going on their way in obedience to his authoritative command, they were healed. Healing is thus intimately linked to action on faith in the face of contrary evidence.

Even if we do not place any credence in the historical truth or accuracy of such accounts, we can perhaps accept that they reflect genuine

folk beliefs about paranormal events and that they might, therefore, also reflect conditions favoring paranormal events. Folklore often contains considerable wisdom, even if it is sometimes wrapped up in mythological ideas, and it has even pointed us toward drugs commonly used in modern medicine.

What might be the connection between acting on faith and the psi-mediated realization of some objective, assuming there is some validity in such folklore? Two hypotheses immediately suggest themselves.

If we assume that conviction is at the heart of the matter—as is suggested in a remark attributed to Jesus (Mark 11:22–24) to the effect that when one gives a command with no inward doubts about its being efficacious, but believes that it is happening, it will in truth happen—then whatever will increase that belief or conviction should aid the process. Social psychologists have demonstrated repeatedly that if persons act contrary to what they believe to be true, they will tend to adjust their beliefs or attitudes to accord with their action, provided that they are acting with a sense of responsibility for their actions and do not feel too externally forced (for theory, see Festinger, 1957; for an early study, Festinger & Carlsmith, 1959). If an undesirable circumstance exists, but someone prays and believes that there is the possibility of its being changed, action in accord with the idea of its being changed (even in the face of contrary evidence) may actually strengthen the faith that it has changed. The strengthened belief might, in turn, favor paranormal change in the direction of the belief. I have read statements by Christians who believe in the efficacy of prayer who urge those who pray not only to believe that they have received the object of their request, but to act as though they have received it (e.g., to stop spending time worrying and even to lay plans in accord with a belief that the prayer has been answered). But if there is paranormal efficacy in faith-related action, the explanation of such efficacy in terms of faith enhancement is not the only possible explanation.

Another possible explanation is based upon the concept that the incentive value of the paranormally-mediated event can be enhanced through faith-related action. (The term *incentive value* refers to the degree to which a given event can be satisfying to the organism who stands to benefit by it. The incentive value of an event is therefore a function both of the strength of the need and of the capacity of that event to satisfy that need. An event has the greatest incentive value when a need is great that can be satisfied by that particular event.) If the probability of occurrence of a paranormal event is positively related to the incentive value of that event, as the PMIR model suggests (Stanford, 1974a), then the paranormally mediated event should be more

likely as a result of the commitment created by faith-related action. This is because the incentive value of that event is presumably enhanced by faith-related action commitments. When one has engaged in actions that assume the event has occurred or is occurring, the event itself becomes more important or meaningful. This is my own preferred explanation for the folkloric belief that faith-related action is efficacious, but it is not antithetical to the faith-enhancement explanation discussed earlier. Both could work together. In any event, action that is not backed up by some degree of conviction should not be efficacious, according to the folklore of faith.

If any credence is given to the folklore of the paranormal, the faith concept is worthy of serious attention on several accounts: (1) It is very widespread and central in folklore of the paranormal; (2) there are laboratory PK findings that suggest that the concept has usefulness (see below); and (3) the concept itself hints at inadequacy in at least some contemporary theorization because several theories, in my judgment, do not seem easily able to encompass effects that might be related to faith (although there is not the opportunity here to explain why that is the case). Fortunately, the so-called observational theories are at last being expanded such that psychological considerations play a role (e.g., Millar, 1986; von Lucadou, 1987), but I am not yet sure that they are ready to encompass the seeming implications of the faith construct.

The discussion above concerns the possible role of faith in what is traditionally called PK. Discussion of the possible relevance of the faith concept to extrasensory response must await another occasion.

There is a considerable literature on laboratory PK that has relevance to the topic of faith, that suggests that the construct has potential value within parapsychology, and that may suggest the need for incorporating related constructs into parapsychological theorization. (For a comprehensive, albeit now somewhat dated, review of PK research, including work with relevance to the faith concept, see Stanford, 1977b.) More recently, the research of Morris and colleagues on the relative efficacy of non-striving (as contrasted with striving) sets and goal-directed (as contrasted with process-oriented) imagery in PK tasks may have relevance here (Debes & Morris, 1982; Morris, Nanko, & Phillips, 1982). Faith is certainly a mind-set that would favor both of the factors indicated as being effective in the studies just cited, namely a non-striving attitude and a clear mental picture of the expected end result. (Faith would certainly not favor a sense of striving or a desire to effect the end result through process-oriented means!) If the folklore of faith is correct, it would not be the goal-relevant imagery *per se* that is important, but the sense of realness of the desired goal that is favored by

such imagery. That is a matter that has not, to my knowledge, been properly explored in the experimental PK literature.

In sum, there are sufficient indications from both folklore and from laboratory PK research to suggest that the concept of faith, pretty much as it is conceived in religious folklore, should be given more serious consideration by parapsychological theorists and should be the topic of further laboratory investigation.

Expressiveness in Psi Function. There are allegedly paranormal events reported from outside the laboratory context that would seem to challenge in yet another way the contemporary conceptualizations of psi function. Some investigators of poltergeists (Roll, 1972, Chapter 13) regard the allegedly paranormal events of such cases as expressing the inner state of the personality of the poltergeist agent, for example, his or her anger and frustration. Poltergeist events are, however, not the only allegedly parapsychological events of an unplanned, unsolicited, nonintentional nature that might exhibit this characteristic of expressiveness. (I say "might" because this interpretation of the psychology of poltergeist agents is controversial within parapsychology; see, e.g., Alvarado, 1984).

The reader of literature on the physical phenomena reported to be associated, at times, with mystics can hardly fail to notice that many of the puzzling events appear to have a highly expressive character. [For an excellent introduction to this topic one can do no better than to examine *The Physical Phenomena of Mysticism* by Herbert Thurston, S.J. (1951).] This expressive character is true both of supposed events presently lacking a cogent scientific explanation (e.g., levitations) and of those potentially having one (e.g., stigmata and "tokens of espousal" that include a flesh-like ring appearing on a finger of a person who has experienced mystical union with Christ). Here I will consider only the case of alleged levitation. There is no opportunity here to discuss the evidential status of such cases, though Thurston (1951) considers it at length. The evidence seems at least sufficiently interesting to warrant preliminary consideration of its potential theoretical meaning for parapsychology. (In my view, preliminary theorization is meant to suggest hypotheses for future empirical examination. It can, therefore, legitimately examine facets of alleged psi experience that are not demonstrated with great rigor.)

It is worth elaborating here in what sense levitation among mystics generally seems to be expressive in character.

First, expressiveness is often essentially an involuntary or automatic function, as when facial pallor reflects inner fear. It is clear that levitation among mystics is generally not deliberately initiated by the lev-

iator. (This is true of the best documented cases, even if there are undocumented claims that persons have sometimes apparently levitated for practical purposes, e.g., levitation by a yogi in order to cross a river.) An example of the involuntary—indeed, sometimes, counter-volitional—character of levitation is found in the life of St. Theresa. She sometimes resisted both the physical event of the levitation and the spiritual ecstasy (rapture) that seemed to induce it because of fear of too much adulation being heaped upon her or because of a desire not to distract others, etc. She even reported that she prayed for public manifestations of this sort to cease (and they did, in fact, allegedly occur with less frequency). She sometimes grasped onto objects to try to prevent the levitation, generally to no avail according to her statements. (See Thurston, 1951, Chapter I, which also includes discussion of similar attempts at resistance by other Christian mystics.) A reading of the mystics' own accounts of their levitations creates the impression that they were ambivalent about them. From a worldly perspective they wished to resist them in public settings and often tried to do that, but they also reported a burning desire and an ecstasy that seemed to draw them upward, first in "spirit" and then in body. It is, however, quite clear that the alleged physical levitation occurred involuntarily and, sometimes, contrary to mundane concerns of the levitator.

Second, such levitations are expressive not only in that they are automatic or involuntary, but because they reflect the mystic's emotional or spiritual impulse, much as bodily gestures reveal one's inner feelings. Any reading of the accounts of typical instances of levitation should convince the reader that these events generally occur in a state of spiritual "rapture" (ecstasy) in which the levitator's whole being seems overcome and lifted beyond earthly confines in an overwhelming sense of love and heavenly joy. The spontaneous movement of the body seems to reflect this joy. [Obviously, such emotional states would sometimes favor hallucinations of being levitated and Thurston (1951) notes cases in which such hallucinations definitely occurred.]

Third, the movement is upward, contrary to the effect of earth's gravity. Christian mystics, among whom levitation during a state of rapture seems to me to be especially common (relative to mystics of other religions), believe in some sense that heaven is "above" and earth, "below" and that Christ, toward whom the rapture is felt, is "up in heaven." The desire to commune with Christ and the feeling of its consummation might, therefore, find expression in a specifically upward movement of the body. It should be understood that these mystics do not report any effort to get the physical body to ascend into heaven. It would seem that the effect, if real, might be an expression of the

mystic's intense experience of self in relationship to Christ (or God) at that time, which is an experience of the self being lifted up, figuratively, if not literally.

Although a literal interpretation of such experiences is surely a difficult one for most parapsychologists, myself included, to accept, we should perhaps not dismiss such evidence out of hand or give it no consideration. To do so would mean that we would not consider its potentially profound implications for our conceptualizations of both the paranormal and of the world. Those are worthy of consideration, for we should not want to miss anything that might provide fundamental and important clues, even though we should not accept undocumented, fanciful tales. The ideas that would seem to flow out of acceptance of these levitation accounts are radical and perhaps frightening, but we must not close our minds to such possibilities just because they are not dictated by our present understanding of the events we study in the laboratory or might be unpopular in this day of a seemingly boundless fear of what certain skeptics might think. While no conclusions may be warranted by the levitation data presently available, perhaps they can help us to avoid theoretical complacency by remaining alert for cracks in the hulls of our conceptual vessels.

There are also suggestions of expressiveness (or perhaps of the effect of expectations) in some laboratory PK studies. These are studies whose findings can be interpreted as suggesting that when psychological conditions favor PK (as when the subject is not engaged in egocentric effort with regard to the desired objective), the direction of the deviation from mean chance expectation will accord with the feelings of the subject about the likelihood of psi-mediated hits occurring under the circumstances at hand (see several studies by Cox, 1951, and one by Stanford, 1981). The specific suggestion here is that when conditions are otherwise favorable to PK, conditions that make subjects doubt the likelihood of success will eventuate in psi missing. While this interpretation (discussed in Stanford, 1981) of the studies cited just above is an *ad hoc* one and while direct experimentation is required for definitive interpretation of such findings, these data, like those from the nonlaboratory settings discussed above, suggest the potential importance of expressiveness in psi function.

To what degree any "expressiveness" effects are mediated by expectation is a theoretically important, but unexplored, question. The expressiveness topic may have been given too little consideration by contemporary researchers, myself included. Certain interpretations of the expressiveness phenomenon would give it great theoretical import, and it is for that reason that it is broached here. The first step would

be to see whether substantial evidence of it can be found in laboratory work.

Vicarious Suffering. To say that something is *vicarious* means that it is done, endured, or suffered by one person in the place of another. Many of us are familiar with the concept, held by many Christians, of the vicarious atonement. According to that doctrine, Christ's agonies that ended his earthly life were suffered in order to spare us the agonies associated with what would otherwise be the consequences of our sins. What is probably much less well known is that the concept of vicariousness—and of vicarious suffering, in particular—is widespread in religious quarters other than Christianity (even if it has been conceived in the latter on a grander scale). It is common to read in books on major yogic teachers of the belief by their disciples that these teachers have deliberately taken upon themselves the suffering (karmic consequences) that their disciples would otherwise have encountered because of their selfish or sinful actions. It is often believed by disciples that this vicariousness is the cause of their teacher's severe illness or death. This vicarious suffering is believed to spare the disciple much suffering and to aid him or her in spiritual progress due to the removal of impediments (since improper reaction to our own karmas or action consequences is supposed itself to create dire consequences). One of many examples that might be cited is the belief of Sri Ramakrishna's disciples that his prolonged suffering prior to his death served just such purposes (Isherwood, 1965). (Sri Ramakrishna was a widely esteemed teacher within the Vedantic yoga tradition.) This is more than just an abstract belief, for the disciples typically report what they believe to be direct, concrete consequences of such suffering for themselves individually. The idea in all such cases is that the unselfish love of these spiritual preceptors is manifest in their willingness to suffer in order to spare others suffering.

The surprisingly widespread concept of vicarious suffering has found its way even into musical theater. The dramatic and successful modern opera *Dialogues of the Carmelites* by Francois Poulenc is the story of ill-fated Carmelite nuns who were the victims of political paranoia occasioned by the French Revolution and who were consequently guillotined. The story is built upon a historical incident, though details are fictionalized. The central figure, Blanche, is a withdrawn, rather fearful soul who nonetheless, in the end, comes willingly to die a martyr's death—an uncharacteristic act of boldness and heroism. The dialogue of the opera suggests that she was able to do so because a mother superior, who had earlier died, had suffered a hard, very agonizing death in order that someone else in the order (Blanche) would be able

to die in simplicity and dignity. Blanche's heroism is deeply touching, not just because it would be admired under any circumstances, but because in order for it to happen her habitual character had to be transcended. But it would appear that she had paranormal help in terms of the vicarious suffering of the earlier mother superior. The story is, in this respect, apparently fiction, a fascinating device for allowing dramatically satisfying self-transcendence by an otherwise unheroic individual. Fiction or not, it reflects a concern about vicarious suffering that exists in both Christian and non-Christian religious quarters throughout the contemporary world.

One example of what might be interpreted as a form of vicarious suffering is the spontaneously developed agonizing prayer of "travail" that unexpectedly falls upon some "Spirit-filled" Christians at times during "prayer in the Spirit." At that time, it is believed, intercession for particular others is made whereby they are spared awful fates of various kinds or relieved of burdens (see, e.g., Hagin, 1980). Some have compared such travail to that of childbirth with its pains and labor, although this seems usually to be intended as a metaphor. There is often much "groaning in the Spirit" and crying by the intercessor during these periods. The person who is the alleged target of such ostensible intercession is almost invariably not present and is often far away. Sometimes the target person is wholly unknown to the person praying, and it is claimed that only later, if at all, does the intercessor learn of the predicament of the target person that was miraculously alleviated at the time the "spirit of travail" lifted from the intercessor. The reports of such events are, taken at face value, sometimes of potential parapsychological interest, but careful scientific investigation is needed for any conclusions.

Although vicarious suffering is a widespread idea that appears in a number of cross-cultural settings, it is easy to think of a very conventional explanation for many of its most common manifestations. In cases wherein an esteemed spiritual teacher is seen to take on the suffering or karmas of others through his or her own suffering and/or death, it is conceivable that such beliefs develop in order to add meaning to perplexing events and to protect against the feeling that the world is a senseless or unjust place. The follower of a spiritual teacher often regards that teacher as worthy of veneration and of wonderful character. For such a righteous person to suffer greatly through disease or other harm is very unsettling. It potentially creates the feeling that the world is an unjust place, one that can at best be described as uncaring and cruel, a place of reckless fate.

Melvin Lerner (1980), a social psychologist, has along with others

investigated the "just world hypothesis," the hypothesis that we all want to believe that the world is intrinsically just despite obvious appearances to the contrary. The world is just only if people get what they deserve or, at least, what they allow to happen. Lerner asserts that if we do not believe in a just world in this sense, our fates seem potentially very much out of control. That would be a threatening circumstance, indeed. Thus, as has been shown in numerous experimental studies, we will do things like disparage victims of misfortune in order to make the world seem a more just, comfortable place in which to live—they must, after all, have deserved it or stupidly allowed it to happen. Lerner alleges that religious concepts of justice after this lifetime, as in the ideas of reincarnation and karma, derive from this protective inclination to believe in a just world.

Let us consider in more detail how the just world hypothesis might be used to explain the situation in which vicarious suffering is attributed to spiritual teachers. If terrible things happen to such an upright, esteemed individual, there must be an explanation for it that perpetuates a sense of justice in the world. If not, it would seem horribly unjust and threatening. A simple, comfortable way to reinterpret such suffering by beloved innocents is to believe that they must have been willing to take on suffering in order to spare others affliction who were less able to live with it in spiritual equanimity. Therefore, the suffering of these esteemed persons is seen as both volitional and meaningful. Thus, belief in vicarious suffering under these circumstances might represent only a way of maintaining our belief in a just world.

That is one way of understanding at least a portion of the claims related to vicarious suffering, but it does not comfortably account for other claims such as the prayer of intercessory travail. Nor need it be the whole story in the case of alleged intercession by suffering spiritual teachers—though it is hard to escape the feeling that it does play some role in that. The fact that we can find a way to understand persons' desires for belief in vicarious suffering by spiritual teachers does not necessarily mean that there is no paranormal phenomenon involved. By analogy, it is easy to think of credible reasons why persons might wish to believe in extrasensory communication, reasons why it would make them feel more comfortable. That, however, tells us nothing about whether such communication actually exists. That is a question for direct scientific examination. Likewise, only scientific investigation could in principle resolve the issue of whether paranormal vicarious suffering actually exists.

Perhaps the widespread belief in vicarious suffering is based upon something that is genuinely paranormal. There are hints in some re-

ligious accounts that genuinely paranormal vicarious suffering might actually occur, but at present those stories are more tantalizing than satisfying to the scientific mind. If such events are real, they seemingly have importance for understanding the wider meaning of scientifically unexplained interactions. All that is clear at present is the need for research on this matter.

The study of nonlaboratory events that may be of this kind should be relatively easy since many events with possible relevance here are said to emerge during the travailing, intercessory type of "prayer in the Spirit" that sometimes occurs in Pentecostal, neo-Pentecostal and Roman Catholic charismatic Christianity. I have myself read some extremely interesting—that is not to say well documented—reports from such quarters and have personally interviewed participants in one such case. Claims in this area should be investigated in the same ways that investigators have examined spontaneous cases of various kinds for authenticity and validity. If evidence should be found that such intercessory-prayer cases contain an anomalous element, there would still be the possibility that they do not truly represent vicarious suffering. Those reporting such experiences do not always claim that their travail is truly a burden-sharing phenomenon. Nor do they claim that their experiences during such intercession always resemble those of the person on whose behalf the intercession is occurring, though that not infrequently appears to be the case. They see such intercession as one of intense, agonizing struggle with something that is harming or threatening another person. The struggle is ended when the burden or threat is lifted off of or moved away from the other individual.

I wonder, however, if paranormal vicarious suffering is a real phenomenon, whether its occurrence might be more widespread outside traditionally religious contexts than one might at first imagine. It is possible that it occurs under various circumstances in which individuals are bonded by love and affection.

If that is the case, the first step toward providing evidence of it might be to learn whether one individual in a close and loving relationship with another sometimes experiences, through paranormal mediation, the suffering of the other. That would not demonstrate that such experience represents a paranormal sharing of the actual burden, but it would be a first step in the direction of investigating vicarious suffering. Fortunately, research is already available that addresses this preliminary objective.

Louisa Rhine (1967) amassed a sizeable collection of cases in which the ostensible anomalous communication between individuals—almost always persons emotionally very close—consisted of pain and physical

suffering occurring to one person that were in some important ways shared experientially by another person at, apparently, the same time. In the vast majority of such cases there was, in Rhine's view, *prima facie* reason to believe that the information thus shared would have had to be paranormal in character. She concluded that the specificity of shared symptoms as to location, type, etc. was very suggestive of genuinely paranormal communication. Although her interpretation of such events was that of extrasensory communication that somehow went awry and did not emerge as an intuition of what was really happening and to whom, she remarks that such cases appear, in a way, to be sympathetic responses, as evidenced by similarity of experiences by the target person and the experiencing individual. She notes that a considerable majority of such cases did not successfully serve the communicative function that occurs in intuition cases, and for this reason she compares them to hallucination cases, which rarely convey the information that is carried by intuitions.

I wonder whether the obviously sympathetic form of the experience might not indicate a willingness of the person experiencing the paranormally communicated symptoms to share the burden of the experience, a kind of nurturant reaction. We have no definitive information in Rhine's report on whether such a willingness and the development of related symptoms led to a lessening of the pain or suffering of the target person. However, in some of her cases there are tantalizing hints of this that are not discussed by her with regard to this possibility. Specifically, in five of her childbirth cases the person who seemed to paranormally experience vicarious pain felt it as very severe, whereas the person actually giving birth experienced an easy delivery (Rhine, 1967, p. 118). Rhine indicated that the former individual had herself previously given birth to one or more children and suggested that she must have, following paranormal prompting, experienced the pain as she thought it would be, rather than as it actually was. That is one possibility, but it is not the only one. The possibility of vicarious, paranormal burden sharing should in such instances also be considered. There was no cogent reason at this stage to ignore it as a possibility, although it is easy to understand why Rhine did so, given her unswerving commitment to a perceptual-cognitive view of anomalous interaction. It is interesting that the persons in such cases who seemingly suffered vicariously were individuals who were well equipped for doing so because they had themselves gone through childbirth. If paranormal vicarious suffering exists, it might be more effective when the individual doing the vicarious suffering understands the type of experience the other would normally have.

Such cases prove nothing at this stage, but it is important to allow them to foster investigations that might bring into question our most cherished assumptions about anomalous interaction, if for no other reasons than that the perceptual-cognitive view is showing serious shortcomings (see above) and that the consistent failures to convincingly explain the phenomena we study might derive from wearing conceptual blinders.

It is interesting to note that Rhine indicates a very great preponderance of women as the experiencing person in such cases, a feature that is entirely in line with the emerging evidence (Hall, 1984) that females may be more empathic than males (at least by certain indices that are used). At any rate, if women are more likely—due to biology, culture, or both—to provide nurturant response than men, this, too, would fit with Rhine's findings. If there is paranormality in her "psychosomatic psi" cases, its meaning is presently unclear. They do encourage further inquiry into the question of whether such experiences are, at least in some instances, a reflection of vicarious suffering, an interpersonal adaptive function by which one person lessens the burden of another.

Though there is presently no way of knowing whether paranormal vicarious suffering is a reality, I wonder whether our instinctive reaction of empathic response to the pain of others—especially those we love—might play such a role on at least a small scale. (I also recognize that it probably plays a number of other, non-paranormal roles!) If paranormal vicarious suffering exists in any of the settings discussed above, it would have fundamental implications for understanding anomalous interaction. As remarkable or even radical as the suggestion of paranormal vicarious suffering may seem, it attracts our attention because of its perennial presence within the folklore of the paranormal. It deserves empirical investigation because of its potential theoretical and pragmatic implications.

Perspective

The earlier speculations and suggestions about the roles of faith, expressiveness, and vicarious suffering in anomalous interaction are intended mainly to show that a closer linkage of empirical research with some prevalent ideas in the folklore of the paranormal could potentially yield insights that would challenge our present rather laboratory-bound and constricted theories. Such challenges are important because we have so few indications at present that contemporary theories in parapsychology have taken us to the heart of the phenomena

we wish to understand. At the same time, there is nothing in the discussion of these three topics above that refutes or even decisively challenges contemporary theorization. This is because constructs derived from folklore that are supported, at best, by minimal laboratory research are not equivalent to constructs derived from controlled research. They are simply wedges that, if used, might open a door to shed a clearer, fuller light upon the events parapsychologists study or upon the fallacies that can evolve within folklore. Either way, knowledge would have moved ahead. And the specific topics discussed here are only three of many possible thrusts into the darkness of our ignorance that might be suggested on the basis of the folklore of the paranormal.

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DISCUSSION

NEPPE: Rex, I must admire somebody who is capable of being so punctilious within himself as to keep to his time when he has got a wonderful 36 page manuscript. I thank you for that. What I would like to ask you about are the three areas you were alluding to and implying you really wanted to mention a little bit more about.

STANFORD: Well, I just mentioned the areas, but I did not get into them. If you will invite me to get into some of the other ramifications . . .

NEPPE: This is what I am inviting you to do.

STANFORD: Let's take faith for example. Here is one instance. There is a fascinating story in the scripture in which Jesus was touring around the countryside and ran across ten lepers. They knew his reputation and asked him to heal them and he said, "Well I'll tell you what you do. I want you to go to the chief priest and tell him that you have been healed." They took off. They still had leprosy. The story says that they were cured as they went. Now we do not have to believe anything about the historicity of these types of accounts. We can properly be very skeptical about these things. But this and many other stories in the folklore suggest that action can be an integral part of faith. We get stories from ministers and from Christian books, for example that tell us that once we pray for something we should act as though it were true. How do you account for that? I would suggest that one possibility is that psi or whatever is involved is responsive to needs. When an

individual goes out on a limb on faith something has happened. He has stuck his neck out. He, made a commitment. Action is a commitment, isn't it? Once a commitment is made it is hard to go back on it. So the need that could be subserved by the event actually happening is enhanced under those circumstances. This may be one possible explanation. I like that because it fits in with my own theory that an incentive value is an important factor in terms of the probability of psi actually happening. It also fits in with a lot of psychic folklore that says psychics give better readings when people have real needs. My brother used to say that if someone had a real need he would give him or her a bang-up reading. I do not know if that is true or not, but there is a lot of folklore here about this kind of thing. That is about faith.

I want to say a little more about expressiveness. It is interesting. Let us take levitation claims first. Certainly there was not conscious motivation involved but St. Teresa hated levitation to happen because she feared greatly that there would be too much adulation. She knew within the church how people could be worshipped and mobbed when miracles started happening. If you do not believe that happens, by the way, read a good biography of Padre Pio. It could get to be a very bad scene, and she did not want to be a part of it. So, she would sometimes hold herself down. Such levitation seems expressive in the sense that it is automatic, much in the sense that you would express emotion without trying to. Maybe even though you try to resist it, you may express it. It seems expressive in the sense that the body lifts up or the person's consciousness in a phenomenological sense moves upward. They believe Christ is on high, in heaven. There are a number of other elements you could get into. This all assumes that levitation happens. Maybe it does not. But I think we also have some PK literature that tends to support the notion that at least the form that our results take in terms of affecting random event generators may depend upon things like fears, that our sense of reality gets expressed out there in what the random event generator is doing. Again there is nothing in our contemporary theories that can possibly cope with that. This is my point. I am not trying to say we have any proof of levitation. I am trying to say there are a lot of things hanging around out there that, if they were true, would really rattle the windows of our theoretical buildings and maybe the walls. The one about vicarious suffering to me is extremely interesting. There is a great deal of folklore on this. I think it comes into Shamanism. I think it comes into yoga. It certainly comes into Christianity. It even gets into opera. My favorite modern opera is *Dia-logues of The Carmelites*. The mother superior has a very difficult and uncharacteristic death and it turns out that that was apparently in order

to help the heroine, who is not a heroic figure at all, to die a very heroic martyr's death in the end. But that is of course just fiction. But sometimes fiction derives from folklore which upon occasion might derive from some element of truth. Vicarious suffering is interesting because it almost suggests an economy or an ecology in the psychic world. If one person loves and is concerned about another, the vicarious suffering effect can be expressed by them. It is as though the suffering can be transferred or shared. It may be a way in which conservation of energy in some sense enters into the total picture. Well, it is very challenging. It is also very farfetched, I admit. We do not have any kinds of empirical research on vicarious suffering. I do not know who will ever be heroic enough to start this kind of research. Charley Tart once did an experiment where he suffered a lot on behalf of science. I will not get into the that right now, but he was being shocked to see if his subject could react to it physiologically. But most of us are not quite that heroic. I wanted to say something more about vicarious suffering, though. There is a possible analog to this that we could study in the field. Among so called spirit-filled Christians there is a strong belief in what they call intercessory prayer in which individuals sometimes totally spontaneously believe that they have laid on them a burden for other people. They suffer, they groan, they cry, they agonize, they sometimes experience physical pain. Some say it is almost like childbirth. This is supposed to remove some burdens—sickness, imminent danger, and so forth—from various people. Now, I have heard some very interesting folklore about these things—in books and I have heard people talk about them. I even interviewed both of the participants in one such case. That is one possible area where there might be something like vicarious suffering going on. I would suggest that if this is true, what underlies it in a psychological sense may be a kind of love, a willingness to share the "beingness" of another person. If vicarious suffering really happens, it is a first class mind boggler in terms of the way we have traditionally thought about psi events. I hope that if what I have said today does anything, it helps us to recognize that one thing we have got to be doing all along is to start questioning our own constructs. They are so limited by specialized experience that sometimes we box ourselves in. Theories are largely for throwing open our vision of things and after that for the purpose of finding out whether we can falsify them or not. So take what I am saying as something we need to check into to see whether it will hold up in the light of any kind of reasonable investigation. There are a lot of other areas that could challenge our theorization.

ISAACS: Thanks for a really wonderful paper which I think will stim-

ulate a lot of research. I agree with you that certainly there is evidence for psi being expressive. Water has appeared mysteriously in poltergeist cases where there might have been tears. We have got fire where there might have been anger. We have rock throwing where there might have been anger also. I wanted to challenge your notion that case studies have not provided any hypotheses for testing. I agree with you that there are no formulators of those studies, or clearly put together hypotheses for testing in the way that you have been so careful to provide in your PMIR theory. But I would suggest that the case studies have stimulated areas of research. First of all there is survival research. I think that the case studies carried out by the SPR did encourage further interest in survival which led to mediumistic communication studies. In addition, I think that those surveys also implicated the role of altered states and particularly of dream telepathy and dream precognition as being vehicles of psi. They pointed out the relationship between the emotional significance of the situation surrounding the psi event and by implication motivation as an important aspect of psi. I think that a parallel to that was the emphasis on the emotional closeness of the agent and the percipient. This was tested in some of the "sweet-hearts" work. Also it could be argued that viewing the OBE as a veridical ESP experience rather than as just an interesting dream may have been bolstered by the case studies.

STANFORD: First, there has been a vast tendency to exaggerate. Let me make a distinction first. I am talking about specific conceptual hypotheses that derive from the research that has been attempted in the lab. I am not talking about settings in which we studied whether ESP might occur. I think even their role has been exaggerated vis à vis the influence of systematic case studies. Now, folklore and individual experiences of investigators are cases in which there have been influences on experimental work. Let's take dream telepathy. Read the monograph *Dream studies and telepathy. An experimental approach* that the Parapsychology Foundation published on this and you will find out that evidently the strong interest in that came predominantly from clinical interactions, therapy in which telepathy was occurring as reported in dreams. That was the big emphasis. There was not even a mention, as I recall of the spontaneous case literature. But in the case of precognitive dream studies it is quite different. There is no question at all that Mrs. Rhine's findings that psychic dreams are predominantly precognitive did influence the research. It is mentioned in the introduction to the Malcolm Bessent study on precognition. I do not suggest—and I make it very clear in the paper—that there was support from all the historical case studies with regard to dream telepathy as

well. I am really talking about specific hypotheses that come out of it. Now the "sweethearts" work certainly comes from what I would call the folklore cases. But I do not know of systematic investigations, looking at that in the case literature, that led to a hypothesis. I think that comes out of spontaneous cases for sure, but I do not think it comes that much out of the systematic case studies. By the way I would not want anyone to go out and think that I am saying systematic spontaneous case studies are worthless. Far from it. I think they are potentially extremely valuable. The whole purpose in my saying what I have said is that I hope the people who do that kind of research will be more ready to talk about specific testable hypotheses. I think it was Schouten who found that living targets seemed to be better in spontaneous cases than material things. The specifics do not matter that much. Well, what do you do with that in the lab? Well, you can do many different experiments, but the problem is that you do not know which experiment to do until you create a hypothesis to explain what happens. Why should that be? Is it, for instance, that living targets are more important to use simply because of the fact that they pose potential threats or sources of reward and therefore have survival value so we are simply more vigilant about them? That is one interpretation, one hypothesis. Another interpretation might be that through evolution we have developed structures that more readily receive and process that type of information simply because historically survival depended on it. That would lead you to a very different type of experiment. This is part of the problem. Suppose we just wanted to generalize a case study finding to the laboratory. That does not work too well either. What does generalization mean? When you start to change methodology you've got to have constructs to guide your generalizations, and this is exactly the crux of the problem. I do not mean to suggest that *Phantasms of the Living* has had no impact upon experimental research. What I am talking about is a specific kind of impact. I am sorry I left that impression in my oral presentation.

HARARY: There is a lot of spontaneous material out there that we are not hearing about. I often wondered in investigating alleged poltergeist cases if the really good ones were the ones where people were doing quite well. Where all sorts of interesting things were happening but they were so well adjusted to it that they were not having problems and didn't feel like calling for an investigation. We get called into the ones where the people are having all sorts of psychological disturbances. In the Soviet Union they claim that they are doing quite a lot on empathetic suffering where they are shocking rats or starving mice and then seeing what happens to their fellows some distance away. They

say that they are doing it and that they are getting results. I have been there but I haven't seen the experiments.

STANFORD: That is interesting. I hope my presentation does not inspire any such research.

HARARY: But I think one of the reasons why people are resistant to that approach is because of the potential implications that this stuff might be . . .

STANFORD: I think you are right. First, there may be a lot of dramatic events going on that you never hear about because people are not alarmed and they are not running out seeking help. For example, I walked into a physician's office, the very first time I ever visited this doctor and when he asked me what I did and I said parapsychological research, he opened up and got a load off of his mind! He had done his residency in an old city with lots of wonderful big, very old, elegant houses that might look as though they would be haunted. But this seemed to be a very level-headed man. He swore that they had physical phenomena or at least audible phenomena, very mysterious things going on all over the house. All I am suggesting here is that I think there is a lot more of this material around. I found out that people would come into the lab and open up and tell me all kinds of things, not just about their love for animals and things like that, but also about psychic experiences. It has got to be a safe environment. If we can create a safe environment, we can learn quite a bit.

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.

CLOSING REMARKS

STANLEY KRIPPNER: In listening to the papers presented this weekend, I have recalled with great fondness the wisdom of Eileen Garrett and the keen sense of discrimination that permitted her to allocate the Foundation's efforts and finances with such care and precision. I am pleased that this same intuition and intelligence is shared by her daughter, Eileen Coly, and her granddaughter, Lisette Coly, who carry out the Foundation's work and who have planned this 36th conference of the Parapsychology Foundation.

These appear to be the best of times and the worst of times for parapsychology. The forthcoming articles on psi research in the prestigious journal *Behavioral and Brain Sciences* mark a new level of acceptance for the field. The Society for Scientific Exploration, a recently founded professional organization, includes psi research among the anomalous phenomena worthy of discussion at its annual meetings and for publication in its journal. The joint article by Ray Hyman and Charles Honorton in a 1986 issue of the *Journal of Parapsychology* is an example of recent attempts by advocates and critics to find a common ground of agreement, a move also obvious in several features in *The Zetetic Scholar*. The Parapsychological Association's 1985 report, "Terms and Methods in Parapsychological Research," demonstrates a consensus among serious workers in the field not only in regard to definitions of terms, but regarding commitment to scientific methods. The series, *Advances in Parapsychological Research* has received positive reviews in *Contemporary Psychology*, an official journal of the American Psychological Association. Parapsychology now has its own abstract journal, *Parapsychology Abstracts International*, and its own data base of literature, "Psi Linc." The establishment of the Koestler Chair at the University of Edinburgh enhances the status of parapsychology as a topic of academic study at the doctoral level.

On the other hand, the Chair in Parapsychology at the University of Utrecht is endangered due to lack of funds; the parapsychology laboratory at the same university is about to close its doors. An outstanding psi research laboratory in the United States is also in danger of closing unless additional grants can be obtained in the next few months. Within the last several years, more parapsychology laboratories around the world have closed than have opened. More critical books

about parapsychology have been published than ever before: some of them are constructive and useful, but others demonstrate a proclivity to distort and ridicule in order to make their points. Indeed, a report issued in 1987 by the prestigious National Academy of Sciences found "no scientific justification . . . for the existence of parapsychological phenomena."

It is at this pivotal time in the history of our field that this conference has been held and that these excellent papers have been given. For me, the themes of learning, memory and metaphor run through the papers, providing some provocative suggestions as to how future research projects can be designed. I will mention only a few of the salient points developed in each paper to illustrate what I have learned this weekend.

Juagen Keil insisted that we maintain our interest in spontaneous cases as well as in the real life situations in which they are embedded. I endorse his advocacy of initiating additional group sitting projects, following Batchelder's suggestions. A group sitting can take pressure from the individual as well as create a psi-conductive atmosphere. Not all the effects of group sitting are amenable to proper scientific evaluation, but those which can be assessed certainly make the effort worthwhile. The compelling evidence that Dr. Keil feels is needed to gain recognition for the field may well come from sitting groups, at least in part.

Julian Isaacs renders us a service when he describes the complex emotional and intellectual dynamics that make it difficult for researchers to comprehend the lawful nature of psi phenomena. For example, how do we cope with a subject's "performance anxiety"? Sex therapists face similar difficulties with their clients and use such techniques as sensate focus, rehearsal situations, surrogate and imagery to decrease the anxiety. Perhaps parapsychological analogies of these techniques would prove useful, e.g., having a subject rehearse a psi task before an attempt is made that will be record and evaluated. Dr. Isaacs' emphasis on understanding the "lore" of psi (as well as its "laws") could prove extremely useful, even if each laboratory is found to develop its own lore over the years.

Marilyn Schlitz used the cultural independence vs. diffusion controversy to discuss the nature of coincidence and its relationship to psi. By conceptualizing the "collective unconscious" and "morphic resonance" as metaphors instead of as mechanisms, we can begin to study their possible validity and relevance. But neuropsychology's vaunted "memory trace" is also a metaphor, one that still lacks a demonstrable mechanism. The "deep structures" spoken of by some anthropologists

are also metaphorical, and may provide parapsychology with a useful approach to thinking about psi phenomena. Ms. Schlitz' paper demonstrates, once again, the need for anthropology to make a greater impact upon our field.

Ruth-Inge Heinze gave us a vivid experiential account that exemplifies how unusual survival abilities can be learned in a response to stress. But parapsychologists need to heed her warning that naming and labeling anomalous experiences may lead us away from the source of those events. Dr. Heinze uses the "resonance" metaphor to describe a worthy topic of parapsychological investigation, one which can be stifled by any early education that limits and shrinks our perceptions and abilities through fear and non-acceptance.

Arthur Hastings proposed that psi is "value neutral," a judgment with which I agree. It is tiresome to hear people of various metaphysical persuasions insist that psi is "sacred" or "demonic," that it is proof of a "higher consciousness" or a "lower consciousness." However, psi can be used in a variety of ways and Dr. Hastings gives us the first sensible report I have heard of the recent silver commodities experiment as well as a persuasive rationale for its results. Taking a systems approach, he points out how interpersonal relations can be affected by mutual psi at unconscious levels of the human psyche.

Robert Morris used "synchronicity" and "archetype" as metaphors to explore psi as communication. Viewing the archetype as a metaphor for a buildup of overlaid experiences demystifies the term, even though it will not please those who are devoted to the continued mystification of this and other potentially useful Jungian concepts. Dr. Morris' communication model, I believe, can be especially useful in determining whether or not any particular coincidence has a psi component. His application of the model to remote viewing data is especially ingenious.

Vernon Neppe proposed a multi-axial descriptive classification system for studying "subjective paranormal experience." This perspective allows us to examine hallucinations from a non-pathological viewpoint, given that recent data indicate that a significant number of people report perception for which there are no apparent external stimuli. It also demonstrates that there is no single phenomenology of psi; the many variables involved may be one reason for the replication problems parapsychologists have experienced. Dr. Neppe's comments on neuropsychological correlates with subjective paranormal experience reflect considerable case material and need to be the topic of in-depth investigations.

Helen Palmer presented an experiential account of ostensible psi phenomena that occurred during a life crisis she had experienced. One

value of these episodes was the discriminations she began to make between precognition and projection. Psi researchers are aware of this dilemma, and those who work with spontaneous cases regularly encounter cases of deluded people who are convinced that they have insight into the future—a future that, strangely enough, coincides with their own biases and preconceptions. Unfortunately, these projections sometimes take the form of paranoia, with the result that harm is done to oneself as well as to other people.

Keith Harary presented a well-documented list of negative psi stereotypes in films and television programs. His examples are well-selected and accurate. However, it seems to me that the media presentations of shamans have bucked this trend and have actually improved over the past decade, e.g., “Emerald Forest,” “La Bamba,” “Never Cry Wolf.” As for the “Star Trek” films, Dr. Harary correctly observes that Spock is given extraordinary psi powers. I would add that this is unusual in that Spock, in Jungian terms, represents the “thinking” quadrant of the Enterprise team (Kirk is definitely an “intuitive” type, the mechanical Kelly is a “sensing” type and the spacecraft’s physician is a “feeling” type). Associating psi with logic and rationality is a welcome challenge to the prevailing stereotypes; in show business terms, it is “casting against type.”

Rex Stanford pointed out that case studies often provide suggestive evidence that can be explored experimentally. Dr. Stanford extended the search for data to folklore, observing that folktales demonstrate the role played by faith, suffering and affect in psi functioning. He also contrasted the respective advantages of the “proof-oriented” and “pragmatic” approaches to case studies, the former seeking for authenticity and veridical confirmation, the latter searching for common patterns and processes. In addition to the advantages Dr. Stanford listed for the latter approach, I would add Michael Persinger’s pioneering work in identifying the geomagnetic correlates of subjective paranormal experiences. Dr. Persinger has found a common pattern of calm (rather than stormy) geomagnetic activity among collections of readers’ anecdotes in a popular magazine, a case collection in a professional book, a psychical research society’s survey and laboratory dream-target correspondences. These data now need to be replicated by other observers utilizing additional data banks.

These eight papers remind us that there are many ways in which human beings attempt to understand their world. Some rely on dogma—the literal acceptance of dictates from an authority figure or from sacred literature (e.g., the worldview of one’s parent or lover, the statements in the Bible, the Koran, or Karl Marx). Others elevate

their own experience above everything else, e.g., believing only what their senses tell them, only acknowledging insights gained through their emotions or feelings, only accepting knowledge gained by divine revelation. A small number of individuals give primacy to science—an ordered way of making observation, formulating principles and categories based on these observations and testing the formulations with additional observations. Still others are aware of problems that ensue if any one of these ways of knowing is accepted to the exclusion of the others, and take an eclectic position when it comes to deciding what is “true,” “valid,” or “right” for them.

In the case of psi phenomena, parapsychologists are committed to a scientific study of the anomalous experiences that are a part of all cultures’ records, histories and accounts of their world. Parapsychology’s scientific stance stands in contrast to those who dogmatically assert, “Psi can not possibly exist because I have never experienced it” or “because it is not consistent with the doctrine of logical positivism” (or “of dialectical materialism,” or “of the writings of B. F. Skinner”). But it also contradicts those who say there is no need to study psi because “Eastern religions demonstrated its existence millennia ago” (or “because Shirley MacLaine wrote about it in her latest bestseller”), or because “I just *feel* it is true,” or “I have psychic experiences all the time, and don’t need any laboratory data to confirm them.”

The Parapsychological Association’s report on terms and methods in parapsychological research provides a useful approach to the study of psi phenomena. It states:

When an event is classified as a psi phenomenon it is claimed that all known channels for the apparent interaction have been eliminated.

Thus it is clear that labelling an event as a psi phenomenon does not constitute an explanation for that event, but only indicates an event for which a scientific explanation needs to be sought.

It is in this framework that the weekend’s papers have been written and presented. The human sciences have made major advances over the past several years, but there are still gaps in our universe. Our picture of the human being is still incomplete. I am confident that the ideas you have heard and the data that have been presented will bring us a few steps closer to closing these gaps and fathoming the unexplained events, reports and incidents that have provoked the curiosity of parapsychologists over the years.

LISETTE COLY: The Parapsychology Foundation wishes to thank our panelists for their excellent presentations and lively discussions. Thanks are also due to our many observers who made the effort to

join us and who contributed so much to the success of this conference. We have two people we are particularly indebted to. Dr. Julian Isaacs was instrumental in the early days of formulating this conference and I thank you for letting me "pick your brain." Above all, a very special thank you is due our conference moderator, Dr. Stanley Krippner. Stan runs things so smoothly and apparently effortlessly that he makes keeping the conference in line seem easy . . . and I can assure you that this is not the case. Thank you again, Stan.

As we close this conference some additional thoughts of Eileen Garrett seem appropriate. She once wrote "What of the future? In general it seems to me that two branches of science in particular are drawing very close in their subject matter, though they are extremely diverse in many ways: modern physics and modern psychology. Inescapably, they are coming to a place of meeting, and the scene of that meeting will be the area of human personality. Each has much to give to and learn from the other in the study of man. Is it too much to hope and to expect that the great mass of data provided by parapsychology can act as a bridge by which they can be brought together in the study of man himself, incomparably the most interesting and important fact in our universe?"

I expect that the answer to this question will have to await a future time and perhaps a future conference. Until then, Ladies and Gentlemen, the 36th International Conference of the Parapsychology Foundation is adjourned.

