PARAPSYCHOLOGY IN THE 21ST CENTURY

By Robert L. Morris1

ABSTRACT: Ten years ago the author identified ten areas of potential difficulty facing parapsychology as it approached the last decade of the 20th century: (1) Parapsychology is linked to problematic metaphysical origins; (2) Parapsychology is linked with concepts that have been exploited and misused in the past; (3) Parapsychology can be easily linked with delusional systems; (4) Parapsychology threatens the tidiness of our scientific methodology; (5) Parapsychology forces us to look at some theoretical concepts that science has found problematic in the past; (6) Parapsychology threatens fixed beliefs about how the world works; (7) Parapsychology's most obvious potential research projects often raise ethical issues; (8) Parapsychology involves the study of complex, open systems; (9) Parapsychology has difficulty in generating and testing theory-based hypotheses; (10) Parapsychology has often been labeled a pseudoscience by philosophers and sociologists of science. This paper revisits each of these ten areas and offers six strategies for parapsychology to adopt as it enters the 21st Century: (1) We need to evaluate more completely what we have learned; (2) We need to learn more from our negative results; (3) We should focus on measures that have a good track record in terms of effect sizes and consistency; (4) We need to break down the divisions between "skeptic" and "researcher"; (5) As we attract more interest from experts in other areas, we need to integrate more effectively with them and their expertise; (6) We need as individuals and as groups to be more effective at interacting with the media.

What might the future hold for us, or rather, what could the future hold for us if we are adequately proactive? Arbitrary temporal divisions such as millennia always provide a convenient excuse for planning ahead. In fact, at the beginning of this decade I published an editorial essay in the European Journal of Parapsychology entitled "Parapsychology in the 1990's: Addressing the Challenge" (Morris, 1990-1). It discussed several problematic aspects of parapsychology and how we at the Koestler Chair were planning to deal with them. I will start by summarizing them, followed by commentary, as by some criteria we have had some successes during the past decade. We have had thirteen people complete Ph.D.s specializing in parapsychology, and there are now related parapsychology units at several additional British universities: Hertfordshire, Coventry, Liverpool Hope, and University College, Northampton. All have programs started by former Edinburgh students, in addition to The

¹ This paper is based on an invited address presented in absentia at the 42nd Annual Convention of the Parapsychological Association at Stanford University, California, August, 1999. The author would like to thank Prof. Deborah Delanoy for presenting the paper in his absence.

University of the South Pacific, in Fiji. Each of these universities is encouraging the development of potential centers of excellence in psychology/anomalistic psychology. In fact, there are two staff at Liverpool Hope and three at University College, Northampton, with strong parapsychology backgrounds; Deborah Delanoy was recently appointed a professor of psychology at UCN. Several additional British universities also have active parapsychology research. It is increasingly seen as a legitimate topic for academic research; several more include the topic in coursework, and recently I was honored to serve as President of the Psychology Section of the British Association for the Advancement of Science. A new Open University textbook (Hayes, 1999) devotes half a chapter (seventeen pages) to parapsychology. The point is that we appear to be regarded as doing something worthwhile by our own academic peers who know us well, for example, those in Britain.

At the start of this decade, my essay identified ten problematic aspects of parapsychology which I felt needed to be addressed, if our field was to advance. It then presented strategies which we hoped to use in addressing each of them. The first six are conceptual, the last four linked more with methodological issues.

TEN PROBLEMATIC ASPECTS OF PARAPSYCHOLOGY

Problem 1: Parapsychology Is Linked to Problematic Metaphysical Origins

One of the problems parapsychology faces is that it is generally identified with the spiritualist aspects of psychical research, in which it had its roots, and with occultism, with which it is indirectly associated; the public tends to regard parapsychology as an attempt to use the tools of science to prove the existence of a nonphysical soul or to prove that we all have special occult powers. Parapsychologists are seen as people who have already made up their minds, who are now attempting to use the tools of science to persuade others that parapsychologists' view of the world is correct (e.g., Alcock, 1987). Thus, we acquire enemies that we haven't earned and don't deserve. Some are from a neoreductionist, rationalist, secular humanist tradition, perhaps exemplified by many of the formal skeptical groups that now also have organizations in most major countries (Hansen, 1992).

Others come from more orthodox religious traditions, readily linking parapsychology with its heterodox metaphysical precursors (e.g., Lindsay, 1972; Logan, 1988). Both views are fed by the present-day linkages that the practitioners of various current, spiritualist, occult, New Age traditions often make with parapsychology. The findings of psychical research and parapsychology are frequently cited in support of various beliefs and practices of these traditions and often incorporated in a host of bogus claims as evidence for their scientific validation.

How did we attempt to deal with this problem? According to the terms of the Koestler bequest, parapsychology is taken to mean, "the scientific study of paranormal phenomena, in particular the capacity attributed to some individuals to interact with their environments by means other than the recognised sensory and motor channels." This definition makes no metaphysical presumptions.

We take a bottom-up approach, oriented toward building a more complete understanding of the phenomena, experiences, and experimental data that suggest that psi exists. It is not wedded to a specific theoretical approach, but is data-driven, seeking to develop models that will, we hope, come to link our empirical data with the various partly-developed theoretical systems that currently exist. In turn, such systems may eventually enable a firmer linkage with some of the main metaphysical questions that fostered the origins of psychical research (Gauld, 1968), but such links will only form gradually, in good time. That linkage, once made, may serve to confirm, modify, or completely disconfirm.

Problem 2: Parapsychology Is Linked with Concepts that Have Been Exploited and Misused in the Past

A central tenet of parapsychology is that we humans (and perhaps animals as well) appear to have access to certain mental abilities above and beyond those presently acknowledged by orthodox bodies of scientific knowledge. Unfortunately, special mental powers are surprisingly easy to fake (e.g., Morris, 1986). They have been incorporated into exploitative practices both by individual frauds, who seek financial, personal or political gains, and by fraudulent groups such as religious cults, whose leaders "demonstrate" special powers to validate the cult's philosophy and practices (e.g., Keene, 1976; Mills, 1979). If a particular anomalous event does not readily admit to an orthodox explanation, then those wishing to be regarded as good scientists have long since learned that it is safe to label the event a likely fraud, albeit a clever one. Such assertions may be a safety net for the researcher's (or commentator's) reputation, but unless a viable fraudulent scenario is offered, these attitudes do little to advance our understanding.

We attempt to confront this problem directly by studying the techniques of exploitation (Wiseman & Morris, 1995a) and their social context (Lamont, 1999), to build as detailed an understanding of them as possible. This information can then be used both to design and conduct better research on claimants of the sort that may be involved in public exploitation, and to help people who may have been exploited in the past, or are currently at risk (Wiseman & Morris, 1995b). There are several aspects to this investigation as it is conducted at Edinburgh: (a) Understanding physical effects and their means of production; (b) Understanding mental effects and the strategies for manifesting them; (c) Understanding the roles the observer may play; (d) Developing models

for the social context of the claim and its negotiated acceptance, in the interactions among claimants and their evaluations; (e) The evaluation of written or audio-visual archival material bearing on claims; (f) Understanding the techniques of the verbal reading; (g) Understanding pseudopsychics as confidence artists and the techniques they employ to inspire confidence in their legitimacy; (h) Developing models for the overall psychosocial context of such exploitation; (i) Developing a general model of deception.

Problem 3: Parapsychology Can Be Easily Linked with Delusional Systems

The possibility that we ourselves may have special mental powers, or may be influenced by the special powers of others, can lead us to develop problematic belief systems about how we interact with the world around us. Many counselors and mental health specialists find the existence of parapsychology very inconvenient. To the extent that we succeed in verifying the existence of psychic ability, even to a limited extent, we appear to give credence to dysfunctional beliefs. If people are confused about their own mental activities, and know of parapsychology's positive findings, they can readily form beliefs based on some of the more exaggerated or speculative interpretations of psychic functioning. The task of the mental health specialist who accepts our evidence as valid can be made still more complicated by the need to tease out the legitimate from the bogus psychic events that their clients may present. In 1989, the Parapsychology Foundation devoted an entire conference to these topics (Coly & McMahon, 1993).

We are addressing this responsibility in both general and specific ways. The deception work described earlier includes the study of self-deception. The models we are developing are useful for describing human error and can be readily linked with models from other areas, such as social attribution theory and human factors research in industry and technology. At a more specific level, we are working to build concrete links to the public and professional communities, pacing ourselves as best we can, bearing in mind our limited resources.

Although we are just in the very early stages, we are beginning to relate our work to existing models of mental dysfunction, including delusion formation, that have been developed within the psychiatric and clinical psychology communities (such as Bentall, 1990; Oltmanns & Maher, 1988), and it is our hope to contribute productive, fresh insights into these areas. Such contributions may involve helping counselors assess the likelihood of genuine psychic functioning in their clients. If the likelihood is high, counselors need to know how to help their clients deal with the possibility that the client will occasionally have experiences about which we know very little at present.

Finally, we need to help counselors assess the likelihood that they themselves may be using psychic functioning, intentionally or unintentionally, in the process of providing therapy. This may show up in interactions between therapist and client, as many have argued, or in the process of achieving clinical insight itself (Ehrenwald, 1955; Eisenbud, 1970).

Problem 4: Parapsychology Threatens the Tidiness of Our Scientific Methodology

If scientists in various disciplines take seriously the possibility of an indefinite set of additional means by which organisms are capable of interacting with their environments, then they would see that much of their experimental methodology appears to need modification and improvement. Sciences that study organisms generally need to control the range of influences between organism and environment (including investigators/experimenters) that transpire during the course of an investigation. Otherwise, interpretation of their results is rendered uncertain, due to the possibility of unmonitored, unwanted environmental influences. Some scientists feel that the apparent absence of detectable psi in their nonpsi experiments counts as evidence against psi's existence (Gregory, 1986). At the same time, they are likely to have some emotional resistance to the idea of developing psychic functioning in the public as a whole, because that would make the business of conducting controlled scientific experiments extremely problematic.

One specific way we are attempting to deal with these issues is to apply the general concept of systems theory to our work, regarding spontaneous cases, field investigations, and experimental studies as complex systems, themselves part of larger systems and yet having many subsystems as well (Morris, 1999).

By its nature, parapsychology compels us to regard individual researchers, as well as larger segments of the research community, to be part of the overall system in which our work is done. This can be seen both in dealing with experimenter effects (e.g., Palmer, 1997; Schmeidler, 1997) and in coming to grips with the nature of replication attempts (e.g., Morris, 1980).

A systems approach may help us understand why psychic functioning isn't more manifest in nonpsi experimental studies. Psi-liberal systems models would posit that psi functioning may be present in such studies but not detected, especially by researchers not oriented toward looking for it. Psi-conservative systems models would posit that psi functioning occurs relatively rarely, because sufficient convergence of psi-conducive factors would rarely occur; when they did, their effects would tend to be discarded as bad data or anomalies to be ignored, if they were nonrecurrent (Morris, 1981).

Problem 5: Parapsychology Forces us to Look at some Theoretical Concepts that Science Has Found Problematic in the Past

By its very nature, parapsychology focuses on the nature of consciousness and experience, through its involvement with imagery, a variety of altered states, volitional mentation, and so on. The last includes both free-choice behavior in the apparent absence of biasing information, as done in restricted-choice ESP tests, and conation or striving as is done in PK tests. Volition is also intimately involved in any attempt to distinguish between spontaneous, unintended events in daily life, versus deliberate attempts to "be psychic" by the research participant or professional psychic (Morris, 1993).

Because these topics have been difficult to conceptualize and research experimentally in the past, little is known about them. It is only relatively recently that experiential topics such as imagery have become actively researched. Volition has largely disappeared, replaced by motivation and, in a handful of studies, simple intentional acts (but see Kuhl & Beckmann, 1994, for an example of its partial re-emergence).

Much of our work explores aspects of consciousness as they relate to psychic functioning; thus, our efforts may contribute to our general understanding of these elements of experience and how to study them. Imagery, in visual as well as other modalities, is an important part of several lines of research. An additional area of exploration is in the area of volitional mentation, and we are currently incorporating the research of Kuhl and associates into our own studies.

It seems evident to us that parapsychology should not be seen as problematic for psychology and psychobiology just because it compels us to re-examine concepts, such as consciousness and volition, that have been difficult and perplexing in the past. Instead, we should strive to be seen as colleagues, offering additional avenues for pursuing such questions. After all, part of the public's seeming indifference or antagonism to psychology may well stem from its refuctance to address the many aspects of human experience that are truly of most interest to the lay community.

Problem 6: Parapsychology Threatens Fixed Beliefs about how the World Works

By suggesting that we may interact with our environments through some unspecified new means, parapsychology threatens to reintroduce uncertainty for those who have come to espouse very specific worldviews. For those holding a reductionist, materialistic, secular humanist interpretation of the world, we appear to raise the possibility of some sort of direct nonphysical influence, perhaps even a spiritual one, of the sort advocated by various religions and held in disdain by many proponents of traditional science. Some critics have clearly sought in their writings to identify parapsychologists as researchers in search of the soul (e.g., Alcock, 1987).

On the other hand, many theologians are also troubled by parapsychology and its implications. Some regard us as secularizing sacred experiences, as raising the possibility that religious experiences, including supplicatory prayer, visions, ecstasy, and so on, will all be explainable as a combination of known psychobiology plus some additional mental force that is not necessarily spiritual in nature. As a result, such people hope we will fail or, if their faith is quite firm, they know we will fail and regard us

as temporarily dangerously misleading. Of course, some of them assume that we will succeed in verifying their own view and are thus more friendly, regarding us as buttressing their own arguments. This latter group are often disappointed to learn that we ourselves still debate the meaning of our results. Finally, of course, are those religious advocates who regard us as at best profaning the sacred, or at worst promoting the work of Satan (Lindsay, 1972).

As noted earlier, we do not ally ourselves with any specific metaphysical view or theoretical system, and prefer a bottom-up approach. Although we don't completely ignore metaphysical concerns, we do maintain that none of the present worldview seems acceptable as it is; some modification is inevitably needed. It seems important to reaffirm that parapsychologists as a group are not engaged in some major spiritual quest, just as we are not dedicated to debunking spiritual interpretations. Secular humanism, on the other hand, can itself be seen as a major world religion in many respects, with its own set of metaphysical positions and rituals (Hansen, 1992). As with other religions, we neither support nor disavow its main tenets.

Problem 7: Parapsychology's Most Obvious Potential Research Projects often Raise Ethical Issues

Much of parapsychological research as currently done seems bland and not to the point. If we take as our starting point the patterns that seem to run throughout the most striking spontaneous cases, we should be doing much more of our ESP research with participants in altered states of consciousness, including some fairly extreme ones; our target material should be highly arousing, emphasizing strong emotions and realistic emotional environments for agents; and our entire experimental milieu should be consistent with the first two points. Our PK research should follow analogous patterns, involving circumstances of strong need for our agents, and target material dramatically relevant to those needs. Many of our studies should involve strongly emotionally charged situations, with outcomes that are truly important for our participants and perhaps even dangerous. But such circumstances may raise strong ethical concerns for the physical and psychological well-being of our participants, researchers as well as subjects. Procedures for altering states may have side effects, both during the study and outside the experimental situation.

Many metaphysical and spiritual development traditions offer specific warnings about the use and misuse of psychic ability, and caution that participants who are not sufficiently spiritually advanced should not embark upon the path of psychic development (Mishlove, 1988). Another set of ethical issues arises when working with claimants who may be motivated to cheat or exploit connections with respected researchers. Such researchers need to ensure that any procedures in a study are sufficiently fraud-proof that a claimant who attempts fraud will not succeed and will, ideally, be

detected. This is necessary both to prevent or at least minimize fraud, as well as to protect both the researcher's reputation and the reputation of any successful claimant (Morris, 1987a).

We are working to develop research procedures that will allow us to explore unusual experiences that have strong, meaningful messages and also allow us to explore potential psychic training procedures (e.g., Delanoy, Morris & Watt, 1991). At Edinburgh, this process starts in our initial participant recruitment stage; we recruit through word of mouth, courses and lectures, as well as through screening the various people who contact us. Each candidate is sent a Participant Information Form, which helps us to identify those who are clearly goats, have had mental difficulty with psi in the past, are uncomfortable with the notion of exploring internal events or displaying psychic functioning, or would be otherwise unsuitable for a scientific study. Researchers needing participants can select potential candidates based on their responses, contact them, explain the study to them, and let them decide whether or not to participate.

In the experimental settings themselves, we try to spend extra time so that we get to know our participants, their preferences, how they are reacting to their participation, and so on, and can take this into account in our interactions with them (see Delanoy, 1997, for good examples of this).

There are additional ethical issues that need to be considered, by different labs in their own ways. It is important to have research procedures that are adequately safeguarded, to enable researchers to feel positive regarding successes without becoming concerned about whether good results are simply indicators of fraud or a flaw in design (Dalton et al., 1996). The participant also deserves to be protected, by having the procedures sufficiently well controlled, so that any legitimate successes cannot be easily dismissed (Wiseman & Morris, 1995b).

Problem 8: Parapsychology Involves the Study of Complex, Open Systems

It seems appropriate to regard parapsychology settings, be they the natural ones of spontaneous cases or the controlled environment of experiments, as complex, open systems. A system is a set of interactive parts; an open system is a system whose boundaries of influence cannot be precisely delineated.

In parapsychology, our studies become more artificial and sterile as we try to simplify and close off the systems under scrutiny, and it is difficult, if not impossible, to place the researchers guaranteeably outside the system of study. Such considerations can be especially germane when attempting to evaluate the importance of a failed replication attempt.

We are still proceeding gradually in this area, because it represents a more complex, and in some respects a less precise way of doing research. The usual strategies of controlled experimentation, with independent and dependent variables, may often be quite inappropriate. We may need to focus more on strategies for evaluating the output of definable

psi-conducive systems, foregoing at least at the start the systematic exploration of specific causal linkages. This is especially true of studies done in other cultures, or in evaluating training techniques, or in testing individual claimants with idiosyncratic procedures, and so on. We cannot then attempt to treat the outcomes of such studies as though they were in fact controlled studies, e.g., by prematurely inferring causation.

Problem 9: Parapsychology Has Difficulty in Generating and Testing Theory-Based Hypotheses

Largely as a consequence of the above factors, parapsychology has not been able to reach a strong consensus about its domain of inquiry: the range of phenomena, genuine events, and experiences it studies. As a result, it has been unable to specify with any precision the range and strength of phenomena that any theoretical system is obliged to explain. This makes theory construction difficult. Need we account for macro-PK phenomena, or can we settle for explaining information-based effects, disturbances in randomicity of large sets of events? Must we explain ghosts, poltergeists, reincarnation, and the healing power of crystals? Also, as a result in part of the factors discussed in earlier sections, we have had difficulty in producing any psi phenomena under adequately controlled conditions consistently enough to allow for effective, systematic hypothesis testing.

There are several aspects to the problem of improving the construction and testing of theory in parapsychology. First, it is important to define our domain of inquiry. Ultimately, we all strive toward a "theory of everything," but to arrive at that stage we must first do business in more manageable areas of inquiry (Atmanspacher, 1999).

Second, we need to generate more complete descriptions of the phenomena that do seem genuinely parapsychological. Clarification is also needed of the patterns of experimental findings that have shown up with reasonable consistency under adequately controlled conditions. We are now in a much better position to do this than ever before, thanks to recent advances in meta-analysis techniques (Utts, 1991).

Once we have a picture of the patterns in our data, we can: (a) compare them with existing models as well as existing theoretical systems, where those systems are sufficiently refined to generate predictions; and (b) develop new models based on the patterns observed. Such new models can then be compared with existing theoretical systems and can be tested by new data.

A colleague once noted how boring it was to read original research reports that simply looked for evidence of psychic ability but that made no attempt to test any hypothesis derived from theoretical considerations. This observation is important, because far too much research has been done in a theoretical vacuum, aimed solely at obtaining evidence of psychic functioning, to persuade oneself and others that it actually exists.

It is equally boring, however, to read a study based on elegant, theory-driven hypothesis testing, incorporating a clever research design, that pays little attention to previous successful testing techniques for psi, so that it obtains little evidence for any psychic functioning whatever; we learn nothing at all about the theory in question. An effective research program incorporates research procedures likely to produce effect sizes sufficiently strong that serious testing of models, of theory-driven hypotheses, can be done.

Problem 10: Parapsychology Has Often Been Labeled a Pseudoscience by Philosophers and Sociologists of Science

This problem stems in part from the other problems, and is addressed in the same ways. However, it can have advantages as well as disadvantages. As students of science have attempted to separate science and pseudoscience, good and bad science, they have proposed demarcation criteria to distinguish them. Such criteria can be helpful to us, as indicators of the criteria by which we may be able to judge our own progress. Some criteria may be misapplied to academic parapsychology, the result of misinformation about us, in which case we have become aware of a misconception that needs to be corrected. Often this may be a matter of distinguishing in the public eye between serious parapsychological research and frivolous or exploitative occult practitioners. Other criteria may have some partial validity, such that awareness of them provides us with useful guidelines for where we need improvement, how we can best proceed beyond being a proto-science (Morris, 1987b).

Some Strategies for the Future

The above statements are all drawn fairly directly from the essay noted at the beginning, although considerably condensed and minus the descriptions of our specific lines of research and practices specifically designed to address these problems. Looking back, there is little that I would now regard as incorrect, although much is incomplete and most of it has gone unaccomplished. Our general bottom-up approach appears to have served us well, as has the emphasis on "what is not psychic but looks like it," including work on deception by self and others and belief formation and maintenance. It is evident that much more must be done in the way of model construction and testing but that those activities need to be tied in intimately to methods of observation; measurement theory and measurement are inevitably linked and must also be taken into account. Biases cannot be avoided, but we could be better at recognizing and acknowledging them. In general, we must develop richer means of observation, description, and measurement, and should avail ourselves more of the expertise that already exists in the physical, biological, and

social sciences. Regardless of whether we are doing field- or lab-based studies, we still have major ethical issues to solve, if we have any hope at all of doing ecologically valid research. If we are to apply a systems approach to our work, we must learn much more about how to think in terms of complicated, open systems; otherwise we will never come to grips with experimenter effects, replicability issues, and the apparently elusive nature of psi itself.

Regarding these issues, some progress has been made, within our own unit and in many other locations. Nothing that has been said or is about to be said is original to myself; it all emerges from considerations of the rich phenomena and experiences we study. I would, however, like to conclude with a few comments about some additional strategies that might be useful to us in the next century.

- 1. We need to evaluate more completely what we have already learned. It seems clear that the formal techniques of meta-analysis currently in use have considerable potential if deployed intelligently. They are, however, still evolving and can be misused. There is less consensus about their use than we might hope, and the techniques of formal meta-analysis still need to be refined. Many of the same issues of replicability that affect experimental studies also can affect meta-analysis (see Utts, 1991 and the ensuing commentaries for a discussion of many of these issues). We need to be at the cutting edge of meta-analysis research itself if it is to become a useful tool. This has been so painfully evident in the recent debates over meta-analytic practice in evaluating the ganzfeld data (Milton, 1999; Schmeidler & Edge, 1999). Used well, they can help us extract richer patterns from our databases. Used poorly, they can induce both false positive and false negative inferences. Unfortunately, most of our databases are very small compared to those in other disciplines in which meta-analyses have become more successful.
- 2. We need to learn more from our negative results. Much of what we now appear to know is how not to conduct research. We should examine those procedures that have very small effect sizes and identify their common characteristics so that we can learn what we can from them and stop attempting to use them as measures of psi. Numbers were largely abandoned as targets a long time ago because of the nonrandom responses they tended to elicit (Rhine, 1935/1973). Recent meta-analyses seem to indicate that group testing, especially large-scale public testing, produces very weak effects if any (Honorton & Ferrari, 1989; Milton, 1994). Should we not then avoid using such methods in formal research unless we have very good reason to retain them?
- 3. We should focus on measures that have a good track record in terms of effect sizes and consistency, and work to improve them so that they can serve as useful tools for theory evaluation. Often, we publish studies which devise new measures and attempt to use them in process-orientated research, without presenting any justification for the

measurement used. It would seem best to do extensive pre-testing on any new measures, before treating them as though they were both valid and reliable. Method development can be informed by theory and observation. Naive methods do no great service to theories and models if used to test them. Other disciplines make better use of exploratory research and do not feel the same need to report each exploratory session in the literature. Such sessions can be (and generally are) designated in advance and not presented in the literature. This is one of the main issues raised by Milton & Wiseman (1999) in their recent meta-analysis.

4. We need to break down the divisions between "skeptic" and "researcher." Regardless of our views, most if not all of us have a tendency to critique any research we dislike, until we find flaws, and only minimally critique research having outcomes we prefer. The playing field needs to be leveled; some very poor methodology has appeared in print when the outcomes have been agreeable to editors. Given the extensive monitoring of our own research, it seems very appropriate to monitor as well the research and writings of members of the formal skeptical community. Just as we may have much to learn from informed, intelligent criticism, so do they, as certain of them increasingly acknowledge. With time, divisions may break down rather than become exaggerated, and we can all go on with our work. Ideally, of course, serious researchers always should be prepared to adopt a skeptical stance toward their own research and that which appears confirmatory.

5. As we attract more interest from experts in other areas, we need to integrate more effectively with them and their expertise, by consulting with them, working in teams, and making sure that our own research is not seen as less than competent by their standards. We should also offer aspects or our own expertise as they relate to others' work. This benefits all concerned in many ways and enriches our own research literature as

well as allowing us to contribute to theirs. 6. One way or another, we need as individuals and as groups to be more effective at interacting with the media. Otherwise, in today's world, our entire field is judged on the output of a select few who may or may not be representative. It is also judged on the output of the counter-advocacy groups who actively raise money through the promise that it will be used in part to combat media coverage favorable to psi and "other pseudosciences"; yet there is no provision for "policing the police."

Although they are general, as strategies, the tactics for implementing them are often specific to the individual. I am more optimistic now than ever before that in the years to come we can practice an integrative parapsychology, rather than the divisive one we have often had in the past. Of course, before long the term parapsychology will naturally evolve into at least one, and probably several, more precise terms, as we develop the knowledge to inform that evolution.

REFERENCES

- ALCOCK, J. E. (1987). Parapsychology: Science of the anomalous or a search for the soul? Behavioural and Brain Sciences. 10, 553-565.
- ATMANSPACHER, H. (1999). Replication and meta-analysis in parapsychology. Statistical Science, 6, 363-382.
- BENTALL, R. (1990). Reconstructing schizophrenia. New York: Routledge.
- COLY, L., & MCMAHON, J. (Eds.). (1993). Proceedings of an international conference: Psi and clinical practice. New York: Parapsychology Foundation. Inc.
- DALTON, K. S., MORRIS, R. L., DELANOY, D. L., RADIN, D. I., TAYLOR, R., & WISEMAN, R. (1996). Security measures in an automated ganzfeld system. *Journal of Parapsychology*, 60, 129-148.
- DELANOY, D. L. (1997). Important psi conductive practices and issues: Impressions from six parapsychological laboratories. European Journal of Parapsychology, 13, 63-70.
- DELANOY, D. L., MORRIS R. L., & WATT, C. (1991). A study of free response ESP performance and mental training techniques. Proceedings of Presented Papers: The Parapsychological Association 34th Annual Convention, 101-115.
- EHRENWALD, J. (1955). New dimensions of deep analysis. New York: Grune & Stratton
- EISENBUD, J. (1970). Psi and psychoanalysis. New York: Grune & Stratton.
- GAULD, A. (1968). The founders of psychical research. London: Routledge & Kegan Paul.
- GREGORY, R. J. (1986). Odd perceptions. New York: Methuen.
- HANSEN, G. P. (1992). CSICOP and the sceptics: An overview. Journal of the American Society of Psychical Research, 86, 19-64.
- HAYES, N. (1999). Foundations of psychology: An introductory text (2nd. Ed.). London: Nelson.
- HONORTON, C., & FERRARI, D. (1989). "Future telling": A meta-analysis of forced choice precognition experiments, 1935-1987. *Journal of Parapsychology*, 53, 281-308.
- KEENE, M. L. (1976). The psychic mafia. New York: Dell.
- Kuhl, J., & Beckmann, J. (1994). Volition and personality: Action versus state orientation. Seattle: Hogrefe & Huber.
- LAMONT, P. (1999). How convincing is the evidence for D. D. Hume? Proceedings of Presented Papers: The Parapsychological Association 42rd Annual Convention, 166-179.
- LINDSAY, H. (1972). Satan is alive and well on planet earth. Grand Rapids:
- LOGAN, K. (1988). Paganism and the occult. Eastbourne: Kingsway.
- MILLS, J. (1979). Six years with God. New York: A & W Publications.

- MILTON, J. (1994). Mass ESP: A meta-analysis of mass-media recruitment ESP studies. Proceedings of Presented Papers: The Parapsychological Association 37th Annual Convention, 284-292.
- MILTON, J. (1999). Should ganzfeld research continue to be crucial in the search for a replicable psi effect? Part 1. Discussions paper and introduction to an electronic mail discussion. *Journal of Parapsychology*, 63, 309-334.
- MILTON, J., & WISEMAN, R. (1999). Does psi exist? Lack of replication of an anomalous process of information transfer. *Psychological Bulletin*, 125, 387-391.
- MISHLOVE, J. (1988). Psi development systems. New York: Ballantine Books.
- MORRIS, R. L. (1980). Some comments on the assessment of parapsychological studies [review of the book The Psychology of the psychic]. Journal of the American Society for Psychical Research, 74, 425-443.
- MORRIS, R. L. (1981). Developing "extreme case" causal models for synchronistic phenomena. In B. Shapin & L. Coly (Eds.). Concepts and theories of parapsychology (pp. 80-90). New York: Parapsychology Foundation.
- MORRIS, R. L. (1986). What psi is not: The necessity for experiments. In H. Edge, et al. (Eds.), Foundations of parapsychology (pp. 78-110). London: Routledge & Kegan Paul.
- MORRIS, R. L. (1987a). Minimising subject fraud in parapsychology laboratories. European Journal of Parapsychology, 6, 137-149.
- MORRIS, R. L. (1987b). Parapsychology and the demarcation problem. Inquiry, 30, 241-251.
- MORRIS, R. L. (1990-1991). Parapsychology in the 1990's: Addressing the challenge. European Journal of Parapsychology, 8, 1-26.
- MORRIS, R. L. (1993). Psi research and the concept of volition. In L. Coly & B. Shapin (Eds.). Psi research methodology: A re-examination (pp. 255-273). New York: Parapsychology Foundation, Inc.
- MORRIS R. L. (1999). Experimental systems in mind-matter research. Journal of Scientific Exploration, 13, 561-578.
- OLTMANNS, T., & MAHER, B. (Eds.). (1988). Delusional beliefs. New York: Wiley-Interscience.
- PALMER, J. (1997). The challenge of experimenter psi. European Journal of Parapsychology, 13, 110-125.
- RHINE, J. B. (1973). Extra-sensory perception (Rev. ed.). Boston: Bruce Humphries. (Original work published 1935).
- SCHMEIDLER, G. R. (1997). Psi-conductive experimenters and psi-permissive ones. European Journal of Parapsychology, 13, 83-94.
- Schmeidler, G. R., & Edge, H. (1999). Should ganzfeld research continue to be crucial in the search for a replicable psi effect? Part II. Edited ganzfeld debate. *Journal of Parapsychology*, **63**, 335-388.

UTTS, J. (1991). Replication and meta-analysis in parapsychology. Statistical Science, 6, 363-382.

WISEMAN, R., & MORRIS, R. L. (1995a). Recalling pseudo-psychic demonstrations. British Journal of Psychology, 86, 113-126.

WISEMAN, R., & MORRIS, R. L. (1995b). Guidelines for testing psychic claimants. Hatfield, UK: University of Hertfordshire Press.

Department of Psychology University of Edinburgh 7 George Square Edinburgh EH8 9JZ Scotland, U.K. rlmorris@ed.ac.uk