

PARAPSYCHOLOGY'S CONTRIBUTION TO PSYCHOLOGY: A VIEW FROM THE FRONT LINE¹

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ABSTRACT: Parapsychology can build bridges to many different scientific disciplines. Demonstrating that it can make valuable contributions to mainstream science will help establish parapsychology's relevance and credibility. Taking psychology as an example, the article gives cases from parapsychology's past and present in which the study of apparent anomalous communication or influence may lead to developments that are of mainstream benefit. First, at a time when experimental psychology was beginning to focus on measuring simple perceptual, cognitive, and motor functions, early psychical researchers helped develop ideas of the mind in psychology. Second, the methodological challenges facing those investigating paranormal claims have led to important developments, such as the use of blind methods that have become widely adopted by the mainstream. Constructive engagement with critics can help identify methodological improvements that have the potential to benefit parapsychology as well as other mainstream areas that are dealing with similar problems such as difficult-to-replicate effects. Last, to build a more persuasive case for psi, parapsychologists need to work together to systematically investigate promising methodologies rather than hopping from one method to another. Preregistering studies as pivotal or exploratory would help to avoid the current problem of controversy over interpretation of meta-analyses conducted with knowledge of study results.

Many of us have happy memories of the 2004 PA Convention in Vienna, where Bob Morris was his usual sociable self. No one could have guessed then, as Nancy Zingrone handed over the Presidency to me, that Bob would tragically die less than a week after the convention ended and exactly a year ago from the date of this address, August 12. I never imagined that he would not be sitting proudly in the audience as I gave my first Presidential Address.

It is a tribute to Bob Morris's leadership that parapsychology will continue to be integrated into the psychology department at Edinburgh. I think that one of the reasons that Morris was so successful was that he was particularly good at seeing the contribution that parapsychology could make to many different areas, such as medicine, physics, and philosophy. I'm going to speak to that theme in this address, focusing on what parapsychology has to offer psychology. I will draw on examples from our

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past and our present, and from my own experience in the “front line”—working as a parapsychologist within a psychology department at a leading UK university. Along the way I will also touch on what I think are some of the weaknesses of our field, and I will suggest how we can become stronger.

MENTAL PHENOMENA AND ANOMALOUS EXPERIENCES

My first theme is that psychical research and parapsychology have an important role to play in keeping mental phenomena and anomalous experiences on the mainstream research agenda. By “mental phenomena” I mean considerations of consciousness and volition as well as allegedly paranormal phenomena such as extrasensory perception (ESP) and the influence of mind over matter. The history of psychology and parapsychology—or psychical research as it was then known—is closely intertwined. The two shared common areas of interest and common problems and couldn’t easily be distinguished from one another. In tackling these problems, frequently it was the psychical researchers who were the pioneers.

Experimental psychology began with the founding of Wilhelm Wundt’s psychology laboratory in Leipzig in 1879. The emphasis was on understanding people’s perceptual, cognitive, and motor functions, using statistical analysis of experimental data. Both in the US and on the European continent, many early experimental psychologists worked within a scientific worldview that nature was understandable through careful observation and discovery of mechanistic laws. In Britain, however, a dissident group of thinkers felt that the prevailing mechanistic model had wrongly demoted the role of *mind* in nature. Historians such as Oppenheim (1985) and Plas (2000) have argued that this group exerted a strong influence on the development of psychology.

Frederick Myers, Henry Sidgwick, and Edmund Gurney were prominent and respectable academic figures who attempted to apply scientific method to the study of a wide variety of mental phenomena. For example, they studied the survival of human personality after death, anomalous phenomena associated with mesmerism, and the strange physical manifestations reported to occur during séances with spiritualist mediums. These phenomena are today associated with parapsychology but the earliest researchers considered these topics to have a rightful place in mainstream psychology (Oppenheim, 1985). This group of thinkers challenged the reductionistic and mechanistic agenda that was taking hold in psychology.

As a concrete example, let us consider the Second International Congress of Experimental Psychology. This was held in London in 1892, ten years after the founding of the Society for Psychical Research (SPR). The President of the Congress was also the President of the SPR, Henry Sidgwick. The majority of the English members attending the congress

were either SPR members or were openly sympathetic to its aims (Sidgwick & Myers, 1892). In his opening address, "The Future of Psychology," the eminent Parisian physiologist Charles Richet gave an important place to *psychologie transcendente*, by which he meant the study of those mental phenomena of particular interest to psychical researchers. Presenters at the Congress included Henry Sidgwick on apparitional experiences, Myers on hallucinations, and Eleanor Sidgwick on experiments in thought transference. At that time the distinction between "normal" and "paranormal" was quite blurred. Psychical researchers tackled questions such as the mechanisms and phenomena of hypnosis that were unknown to psychology too.

Several historians have persuasively demonstrated the influence of psychical researchers on the development of concepts in what would become mainstream psychology. Gurney and Myers's studies of hypnosis and mediums assisted in establishing the concepts of dissociation and the subconscious mind (Alvarado, 2002, 2004; Kelly, 2001). And in his work *The Discovery of the Unconscious*, Ellenberger (1970) argued that interest in psi phenomena and spiritism were influential in developing ideas of the mind in psychology (see also Alvarado, 2003a).

Carlos Alvarado has published a number of papers that bring parapsychology's contribution in these areas to the attention of mainstream scientists. His publications in the *American Journal of Psychiatry* (Kelly & Alvarado, 2005), the *Journal of Trauma & Dissociation* (Alvarado, 2002), and *American Psychologist* (Alvarado, 1987) explicitly point out the contribution of psychical research to the development of concepts in psychology and psychiatry. This is an important strategy into which parapsychologists need to put more effort. Encouraging our mainstream colleagues to be aware of our contribution to their disciplines makes it more difficult for them to dismiss parapsychology as an irrelevant or fringe area.

From these intertwined beginnings, then, perhaps the first way in which parapsychology contributed to psychology was to challenge the restricted agenda of early experimental psychology, and to advocate tackling difficult concepts such as free will, consciousness, and mind-matter interactions.

As Emily Kelly put it, "If psychical research does nothing more than continually shake complacent assumptions about fundamental questions concerning mind, consciousness, volition, that alone is a significant contribution to science" (Kelly, 2001, p. 86).

In more recent times, there has been an upsurge of interest in consciousness and parapsychology, as Dean Radin showed in his book *The Conscious Universe*. Radin (1997) gave the results of a survey of books published with *consciousness* in their titles between 1800 and 1990. Fifty percent of all books published on this subject have appeared since the 1980s. Similarly, interest in parapsychology has grown dramatically in the last few decades. More than 50% of all books with *parapsychology* in their

titles have appeared since the 1970s. There has been a general increase in the number of books published, but the growth in a comparable area such as psychology is much less dramatic. These figures suggest that publishers are happy to commission books on consciousness and parapsychology, and that the public has a great interest in these topics. These should be fertile times for parapsychologists because people want to hear what we have to say.

Nowadays there again seems to be a tendency for psychology to move toward a reductionist approach. From the front line, I can see this trend in UK psychology. It's almost as if history is repeating itself. Subjects such as psycholinguistics and cognitive neuroscience are thriving—what might be called “single head psychology,” in which the focus is on relatively simple cognitive processes that are going on within the head of one individual. In contrast, social psychology, with its focus on complex interpersonal interactions, seems to be winning less support and to have lower status. Modern parapsychologists, like their nineteenth-century forefathers, can help to balance this trend by reminding psychologists of the wider aspects of human experience that are often neglected but that are necessary to gain a full understanding of psychology's subject matter. Surveys show that a sizeable percentage of individuals report paranormal experiences and beliefs. This is no fringe area of human experience—it's quite central. It is incumbent on researchers to investigate and understand these experiences and beliefs, and parapsychology has a very important role to play here.

Perhaps in reaction to this apparent reductionist trend, an increasing number of modern psychologists are arguing that psychology is incomplete if it does not include the full range of human experiences, including anomalous experiences (e.g., Cardena, Lynn, & Krippner, 2000). In addition to the question of psi—and I'm going to be saying more about psi later—there are a wide variety of anomalous human experiences, such as near-death experiences (NDEs) and out-of-body experiences (OBEs), that have long been of interest to parapsychologists and that can make an important contribution to psychology.

One recent example is provided by English researcher Craig Murray, who has presented at the PA and SPR conferences. Murray's work is on OBE and body-image, and his research in this area has been published in reputable mainstream forums such as the *Journal of Nervous and Mental Disease* (Murray & Fox, 2005a) and the *British Journal of Psychology* (Murray & Fox, 2005b). Murray has found differences in OBE experiences and nonexperiences in terms of body image. Compared to nonexperiences, experiences were more dissatisfied with their bodies, reported more social-physique anxiety, and scored lower on physical self-presentation. The results suggest a social dimension to OBE experiences. This is an important contribution to the psychological literature on OBEs, which previously has focused on perceptual dissociation interpretations of OBEs.

Another young researcher, Anneli Goulding, has recently gained her PhD from the University of Gothenburg. Her thesis was on mental health aspects of paranormal and psi-related experiences, focusing on the concept of healthy schizotypy. Goulding already has two publications based on her thesis work in the mainstream journal *Personality and Individual Differences* (Goulding, 2004; Goulding, 2005). Her work is important because it challenges the frequent assumption that paranormal experiences are necessarily pathological.

Another recent development is the appointment of Etzel Cardeña to the new Chair of Parapsychology at Lund University in Sweden. This has the potential to benefit parapsychology by showing how the study of spontaneous paranormal and anomalous experiences can contribute to developments in the psychological mainstream and by raising the profile of parapsychology and the psychology of anomalous experiences within influential institutions such as the American Psychological Association (APA). I am impressed that the APA has published a book on *The Variety of Anomalous Experiences* (Cardeña, Lynn, & Krippner, 2000), and I think this is good news for parapsychology. The book's coeditor, Stan Krippner, has told me that their volume is a best seller for the APA and has already been reprinted several times. The book includes chapters on OBEs, NDEs, alien abduction experiences, past-life experiences, and spontaneous psi experiences, and it is really exciting to have such topics brought to the attention of a wide mainstream audience.

CRITICS

My second theme is critics. Armchair critics, who have a knee-jerk reaction to the idea of psi and who publicly criticise parapsychology without being informed of the experimental literature, are not worthy of our attention. The kinds of critics I want to talk about are those who challenge the evidence in favour of psi, and that means internal critics as well as informed critics outside of our field. I think there is sometimes a tendency to demonise these individuals and to use them as scapegoats—not the original usage of the term *goat* in a parapsychological context!

My experience of being the sole parapsychologist presenting at a couple of skeptical congresses is that actually parapsychologists and their critics have a great deal to agree about. They are both trying to find out whether there is evidence to support the psi hypothesis.

That is what Ray Hyman and Charles Honorton found with reference to the ganzfeld ESP studies. They had each separately published meta-analyses of the ganzfeld studies that came to different conclusions. Hyman found over half of the studies he reviewed to have significant results (Hyman, 1985) but argued that there were methodological and statistical flaws present that might account for these results. Honorton's (1985) meta-analysis found similar psi results to Hyman's, but he argued that these

results could not be accounted for by Hyman's flaws. The two could have gone on with a protracted exchange of written articles and rebuttals, and in fact these were already in preparation. However, they met at the 1986 PA Convention in Sonoma, California, and had a conversation over lunch (Hyman & Honorton, 1986).

As Hyman and Honorton describe it, "During the discussion we realized that each of us had not fully and accurately understood the other's position on some of the major issues dividing us" (Hyman & Honorton, 1986, p. 351). They went on to conclude:

Parapsychologists and their critics share many common objectives. *These commonalities rarely are noticed in the debates, which focus on the differences.* Yet such commonalities hold the key for how the parapsychologist and the critic can join forces to achieve the ends to which they both aspire. (p. 363, my italics)

Most critics are as keen as parapsychologists to see good quality psi research. Hardly any of the papers presented at the skeptical conventions that I've attended have been attacking parapsychology. Rather, they have been critical of a broad range of pseudoscientific practices, such as the teaching of creationism in schools in a way that doesn't encourage critical thinking, and alleged psychic surgery being practised through sleight of hand. These are practices of which many parapsychologists would also be critical. Perhaps it is a measure of our success as scientists that the sceptical community today gives relatively *little* attention to parapsychology.

We need to look to our own body of researchers and communicators to do a professional job of rebutting criticisms that appear both in scientific and popular forums. As Bob Morris has argued, we could be far more effective at presenting our research findings to the media and to the scientific community (Morris, 2000). It is a task that requires great skill, but we need to find a way to make our findings relevant to the public and to science journalists, and to communicate our research clearly and in an engaging way.

In fact, I would go a step further and say not only that we have much the same aims as critics—to find the answer to questions about the paranormal—but that we *need* critics. Where would we be without being open to a wide variety of viewpoints about psi? What if Ray Hyman and Charles Honorton hadn't had that face-to-face conversation at the PA?

This brings me back to the main theme of my paper—how parapsychology can contribute to psychology. One way we can contribute is through the evolution of improved research methods that, although developed in response to a parapsychological problem, later spread to the mainstream. I'm going to be giving some concrete examples of this later. Critical scrutiny can assist in making these methodological developments,

and that is one reason why we need critics. The conversation between Charles Honorton and Ray Hyman led to improved procedures in the ganzfeld and ultimately to the publication in a leading psychology journal of a landmark paper demonstrating evidence for psi (Bem & Honorton, 1994).

If we don't have a variety of points of view represented, then our gatherings and our journals become more akin to religious than to scientific forums. I for one don't want to be a member of the church of parapsychology.

I know some parapsychologists agree with me—Marilyn Schlitz, for instance, made similar arguments in her presidential address at the Freiburg PA in 2000 (Schlitz, 2001). And of course Bob Morris always laid a great emphasis on the importance of communicating with critics, of understanding the psychology of magic and deception, and of studying what he called “what's not psychic but looks like it.” The pseudo-psi hypothesis needs to be investigated in order to facilitate progress with the genuine psi hypothesis. Morris understood the practical and rhetorical value of taking what he called the “counter-advocate” position on board, and he always led off his talks with this point. Furthermore, those of us who have been on the receiving end of Morris's questions at conferences, and of his reviews of our papers, will know how good he was at ferreting out weaknesses in research. We need to identify these weaknesses, and informed critics can help us do this.

Psi

Parapsychology involves the study of anomalous experiences, such as OBEs, that may be primarily due to quite normal psychological processes, as well as the study of what we might call the “core phenomena” of parapsychology—phenomena such as ESP, PK, and DMILS, which may suggest the operation of processes that are beyond what science and psychology currently understand. Clearly it is the existence of psi that is central to the concerns of many parapsychologists, and that is most revolutionary in its implications for psychology and for science more widely. If psi genuinely exists, this means psychology's understanding is far from complete. People may influence and interact with one another in ways that psychologists do not currently recognise. And of course the ramifications go way beyond psychology.

Despite some compelling landmark papers supporting the psi hypothesis, such as Bem and Honorton's ganzfeld meta-analysis (Bem & Honorton, 1994), I feel we have yet to provide evidence that persuades the scientific community beyond parapsychologists themselves. If we take the ganzfeld as an example, there are so many questions still to be answered. Is white noise better than pink? Would the sound of waves or drumming also work? Does ganzfeld stimulation really induce an altered state of

consciousness, and if so, what state is it? Do participants need to wear eye shields or would closed eyelids work just as well? Is a prior relaxation exercise necessary? Can we have musical targets? What are the characteristics of a "standard" ganzfeld? What is the role of the sender in the ganzfeld? Does making a simultaneous verbal mentation report disrupt the participant's altered state, and how does this compare to having participants keep quiet and recall their mentation later? If we go to such lengths to immerse ganzfeld participants in a sensorially homogeneous environment, why is this not necessary for other ESP methods such as remote viewing? We have so much to learn about what specific features of the ganzfeld technique are psi-conductive, and why.

Parapsychologists need to be *far* more systematic in how they tackle these questions. Bem and Honorton's (1994) meta-analysis reported internal patterning that could give us important information on the psi process. But few of the more recent studies report on whether their participants were novices, what their extraversion and paranormal belief scores were, and whether they matched the warm social ambiance created in Honorton's studies (Milton & Wiseman, 1999). Systematic follow-up is an essential prerequisite for demonstrating a replicable effect. As a rough count, this year's PA conference has about 3 papers on the ganzfeld out of a total of 30 papers—only 10%. More of us need to focus on our leading methodologies, and we need to be cautious about introducing innovative variations to these methods. Innovation is not a bad thing, of course, but it is something that needs to grow from a solid foundation, and I think we need a more solid understanding of the factors that may facilitate psi in the ganzfeld.

We need to find the "recipe" for demonstrating psi in our experiments, and we can't do this by hopping from one methodology to another—something I'm afraid we have a tendency to do. For example, the landmark 1987 *Behavioural and Brain Sciences* paper by Ramakrishna Rao and John Palmer cited the differential effect—the tendency of individual participants to score differentially in successive ESP tests when these have two contrasting conditions—as one of the three major areas of psi research demonstrating a replicable effect (Rao & Palmer, 1987). But where are the studies of the differential effect now? My guess is that some younger parapsychologists won't even have heard of the differential effect.

Yes, exploratory studies are important. But it will be difficult to provide replicable evidence for psi without having a clear understanding of the conditions needed for its occurrence, and without systematically following up on our most promising lines of research. You don't need me to tell you that in terms of numbers we are a *tiny* field compared to other disciplines. Sybo Schouten (1993) once estimated that the total human and financial resources devoted to parapsychology since 1882 were equivalent to the resources devoted to less than *two months* of research in

mainstream psychology in the United States. Furthermore, many of us have few resources to conduct research. But that makes it even more important that we focus our limited resources on key questions and methodologies in parapsychology.

Some of the ramifications of the existence of psi are unwelcome to science. For instance, experimenters' attempts to remove themselves entirely from the system under study would seem to be doomed to failure. In classical physics and chemistry, there was never any consideration that the person doing the measuring might be affecting the measurements themselves. Psychology has sought scientific respectability by following the same kinds of experimental methods as the hard sciences—attempting to measure and observe the samples under study. But psychologists have found that it's not so straightforward when their "samples" are human participants. Even without the problem of psi, the elements in the experimental system are already overlapping to some extent in psychological studies, as demonstrated in Rosenthal's landmark work on expectancy effects (Rosenthal, 1976) and self-fulfilling prophecies.

The participants in psychological studies are thinking beings. They are thinking about the role they are playing and what the experimenter might expect them to do, and they are consciously and unconsciously responding to cues from the experimenter, and vice versa.

This is a place where parapsychology can lead the way for psychology. Parapsychology has the potential to extend our understanding of research with complex and overlapping systems. We can develop strategies to tackle such complexities. Not only do we deal with human participants, but we also take seriously the possibility of psi, which may further dissolve the apparent boundaries between individuals involved in a research project. We are grappling with the problem of experimenter effects, and we know that a large number of different factors may play a role in these effects, including experimenter psi. We can suggest ways to lessen the influence of the experimenter in our research, such as having a person otherwise uninvolved in the research do the target randomisation, or having the participant initiate the computer program to start a session (Stanford, 1981).

We also can lead the way by taking into account the experimenter, as is already being done to some extent. It is not unusual in the methodology section of parapsychology articles to include a description of the experimenters—for example, their age, sex, and beliefs about psi. This could be extended in the future to include details of the experimenters' personality, or whatever other factors we find interact in important ways with the experimental system. This is a practice that psychology could benefit from taking up in the future.

However, we shouldn't allow our "physics envy" (Watt, 1996) to blind us to the possibility that the traditional methods might *not* be best suited for psi research. At the very least, traditional methods may need to

be complemented by techniques that recognise the role of the investigator and the reflexive nature of research, particularly with human participants. For example, Rhea White (1997a, 1997b), Marilyn Schlitz (Locke & Schlitz, 1983; Schlitz, 1987), and William Braud (Braud & Anderson, 1998), are recognising the limitations of the traditional experimental method for research into psi and exceptional human experiences. Some of these complementary techniques, such as transpersonal and ethnographic approaches and the study of narrative and discourse, may be advocated as ways to develop a deeper understanding of the phenomena and experiences with which parapsychologists are concerned. Parapsychologists may have a future role to play in reminding psychologists of the limitations of their research methods and in suggesting strategies to help overcome these limitations. These methods are not unknown to psychology, of course, but parapsychology may provide a fruitful and informative case study for psychology. To some extent parapsychology's problems resemble those of psychology but are more extreme and therefore are more demanding of methodological solutions.

METHODOLOGICAL ADVANCES

The activities of the founding fathers of psychical research were influential in developing concepts of the mind in psychology. But parapsychology's contribution goes beyond this. There are many examples of how the subject matter of parapsychology—claims of anomalous information transfer or influence—has demanded, and produced, methodological advances. These methodological advances have then spread from the fringe to the mainstream, and this is the final theme that I want to speak to.

Although blind methods had first been used to test mesmerists' claims in the late eighteenth century (Kaptchuk, 1998), their use did not spread to the mainstream at that time. Historians such as Ian Hacking and Ted Kaptchuk have argued that in fact the origins of blind methodology in psychology can be traced to psychical research (Hacking, 1988; Kaptchuk, 1998). As early as 1884, Charles Richet was conducting card-guessing experiments. He used a screen to separate the participant who was attempting to guess the card's identity from the person who was looking at the card and trying to communicate its identity telepathically.

Although Charles Peirce and Joseph Jastrow are widely credited with introducing blind methods to psychology in their pioneering experiments in psychophysics, there is in fact an earlier link to psychical research. As founding members of the American Society for Psychical Research, Peirce and Jastrow were well aware of Richet's use of blind methods in card guessing, which predated their own use of blind methods by a couple of years. So it has been argued that the introduction of blind methods in psychology can be traced back from ensuring accurate observation in mainstream

psychophysics to testing claims of thought transference (Hacking, 1988; Kaptchuk, 1998).

Parapsychologists have always been faced with a particular problem: there is as yet no known mechanism for psi abilities. It would be an exaggeration to say that there are *no* theories—there are *many* theories of psi (e.g., Stokes, 1987). However, no theory has been widely accepted by parapsychologists, and many conduct their research without explicit reference to any theoretical framework. This rather impoverished theoretical context has forced parapsychologists right from the outset to ask often completely *empirical* questions, such as, “Can a person correctly guess the identity of a concealed card more often than would be expected by chance?”

Historians have argued that the origins of the use of randomisation in experimental design can be traced to the early card-guessing experiments of the SPR (Hacking, 1988; Kaptchuk, 1998). Richet suggested that if psychic ability were weakly present in the general population, then if a number of people were tested with long sequences of *randomly drawn* playing cards, a greater than expected number of successful guesses would indicate psychic ability. Probability modeling *was* used in psychophysics at that time, but not for drawing inferences. Richet's work was a pioneering application of randomization.

But it took until the 1930s, with the work of Fisher, for randomisation and statistical inference to become adopted by mainstream psychologists. Normally students of psychology are taught that Fisher developed his methods for randomisation and statistical inference from his work on agricultural field trials. However, a decade before his landmark publication on the design of experiments, Fisher published methods of dealing with the problem of statistical inference in card guessing (Fisher, 1924). Fisher was intimately aware of the empirical questions that parapsychologists were dealing with, and he helped to develop methods to tackle these questions. Clearly the emergence of randomisation for statistical inference was in part stimulated by challenges facing parapsychologists.

My examples so far have come from the early days of psychology and psychical research. However, the fact that parapsychologists seem to be dealing with a difficult-to-replicate effect has more recently stimulated methodological growth. I think it is fair to claim that parapsychologists were ahead of the game, compared to psychologists, in using meta-analysis to assess the outcomes of groups of studies.

When trying to assess the replicability of our findings, parapsychologists were quick to realise the limitations of *p* values and the utility of uniform effect-size indicators for statistically comparing groups of studies. Even back in 1986, Robert Rosenthal, in his commentary on the ganzfeld debate, noted that it did a service to science in general by raising many important issues about meta-analysis and the nature of replication (Rosenthal, 1986).

Meta-analysis is not a panacea, and parapsychology provides an excellent test case for meta-analysis. The fact that different analysts working on the same body of studies can come up with contrasting conclusions points to ways in which meta-analysis can be improved, for instance by using multiple independent and blind coders (Steinkamp, 1998). Also, it is clear that in a small field like parapsychology, it is not possible to set the coding criteria for meta-analysis blind to the outcome of studies.

If we carry on as at present, there will be no end to the arguments over the outcomes of meta-analyses in parapsychology. The criteria for inclusion and for coding need to be set *in advance* of the studies actually being done (Akers, 1985; Kennedy, 2004; Milton, 1999) rather than as happens at present, with the benefit of hindsight. Jim Kennedy's *Proposal and Challenge for Proponents and Skeptics of Psi*, published in the Spring 2004 *Journal of Parapsychology*, perhaps goes furthest to recognise this problem and to suggest a solution (Kennedy, 2004). Drawing on his experiences in pharmaceutical research, Kennedy recommends that proposed pivotal studies be identified and planned in advance. A committee of experienced parapsychologists, moderate skeptics, and a statistician could review and comment on the proposed protocols so that methodological issues would be dealt with *before* the data are collected. Exploratory studies would continue, of course, but would be so designated in advance of the results being known, and excluded in advance from future proof-oriented meta-analyses.

Although Kennedy's proposal is the most recent of its kind, it is certainly not the first. For example, in the joint communiqué on psi ganzfeld research that Ray Hyman and Charles Honorton published almost 20 years ago (Hyman & Honorton, 1986), they stated:

Many of the problems we encountered in evaluating the ganzfeld psi experiments could be avoided in future experiments if the reviewers could be sure that they were dealing with the entire population of relevant studies and could insure the internal validity of these studies. Ideally, the best way to achieve this would be to sponsor a systematic replication series under the auspices of a neutral agency such as the National Science Foundation. (p. 363)

And they go on to outline a scheme involving parapsychologists and knowledgeable critics much like that suggested by Kennedy.

Similar problems are likely to be experienced in areas of psychology that are also dealing with weak, unreliable, or controversial effects. The repeatability problems faced by parapsychology and the strategies we develop to overcome them could help mainstream psychology too.

Parapsychology also has much to offer psychology in the study of deception and self-deception, as argued by Irwin Child (1984). Bob

Morris recognised the importance of developing expertise in this area. It was not unusual in his public talks for him to spend so long discussing "what's not psychic but looks like it" that he ran out of time before getting to the "genuine psi" part. Some have argued that Morris's success in establishing parapsychology in UK universities was to some extent due to his demonstrable awareness of the pitfalls in behavioural research as well as in parapsychology (Alvarado, 2003b).

From my own point of view on the front line, British academics spend much of their time working to gain credit in the Research Assessment Exercise (RAE). This is a system of judging the quality of the research output of university staff, primarily based on the international status of the journals in which they publish. The higher the rating, the more funding the department is awarded from the government. Members of staff are judged on their four "best" publications.

So, one indicator of the contribution of parapsychology within my university is to look at the role Koestler Unit researchers played in the last RAE, which was in 2001. There were 20 psychology department staff "returned" in the 2001 RAE. Four of these, that's 20% of the entire psychology return, were parapsychologists—myself, Fiona Steinkamp, Paul Stevens, and Bob Morris. The RAE rating that our department won increased dramatically. I think this was one of Morris's greatest achievements as Koestler Professor because it showed a true integration of parapsychology within the academic life of the university and made a genuinely positive contribution to the national and international standing of the department. Many of our RAE publications were on psi research and were published in specialist publications, such as the *Journal of Parapsychology*.

Aside from the scrutiny some of us enjoy—or endure—as part of bureaucratic procedures like the Research Assessment Exercise, we cannot expect mainstream scientists to seek out our research in specialist parapsychology journals. Therefore, we should not complain if we feel that our research is being ignored. While we must continue to support our journals with technical research reports, we should also work hard to represent our work in more mainstream publications. There are several examples, particularly of meta-analytic reviews of psi research, that *have* won publication in some of the best quality psychology journals (Bem & Honorton, 1994; Bösch, Steinkamp, & Boller, 2006; Milton & Wiseman, 1999; Schmidt, Schneider, Utts, & Walach, 2004)

Publishing our research in quality mainstream journals will help to establish the academic credentials of parapsychology, and an ability to publish in the mainstream will demonstrate to a wide audience the methodological quality and theoretical relevance of our research. If we can pull our weight with the "big boys," we will be noticed and taken seriously.

Parapsychologists can be proud of the methodological quality of their research. We are aware of the need to provide compelling evidence to support the extraordinary claims we are making, and we do our utmost to

rule out artifacts in our research. From my position on the front line, this is something that I know is greatly appreciated by my psychologist peers. I believe that the quality of parapsychologists' methodology is as good as, and often *better than*, that of psychologists. Undergraduate psychology students who attend Edinburgh's courses on parapsychology have often commented to me that they have learned a tremendous amount about scientific methodology in these courses.

CONCLUSIONS

To sum up, I have argued that parapsychology has an important contribution to make to psychology in the present and future, as it has done in the past. From my position on the front line, I feel valued by my psychologist colleagues and proud of parapsychology's past achievements and future potential.

In the past, psychical researchers encouraged psychology to pay attention to difficult-to-study concepts such as the unconscious mind. We have seen how statistical developments in randomisation and the use of probability testing to make inferences were stimulated by challenges facing early parapsychologists. Developments in the use of blind methods also originated in response to such challenges, in an attempt to rule out potential sensory leakage artifacts.

In the present, we are investigating topics of interest to psychologists, such as anomalous experiences, experimenter effects, and the psychology of deception and self-deception. Parapsychology's experimental literature also provides a thorough test for statistical tools such as meta-analysis and can stimulate improvements in the use of such tools. Psi itself has an obvious impact on psychology and beyond, but I don't think we can expect other academics to share our interest in psi until we can persuasively demonstrate to them that we have a replicable effect. To do this we need to be far more systematic in our approach and not hop about from one methodology to another.

In the future, I hope that we can increase our profile in the mainstream. But we cannot do this by being a defensive organisation. We *can* do this by being aware of the strengths of our scientific discipline. We can bring to the attention of the mainstream the many contributions that parapsychology has made in the past, is making in the present, and can make in the future. By having the ability to publish in mainstream journals, we can demonstrate to our more skeptical peers the quality of our methodology and the practical and theoretical importance of our subject.

We are fortunate that our subject excites and attracts young investigators. We should do our utmost to support and encourage them in a responsible way. We are a small community facing a big task. But by being rigorous and systematic in our efforts and professional in our communications with the media and other scientists, we *will* make progress.

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