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- Toward a panpsychistic foundation of paranormal phenomena **Ilja Maso**
- 27 Self-concept and body investment in out-of-body experients Craig D. Murray, David Wilde & Jezz Fox
- Does psi exist and can we prove It? Belief and disbelief in parapsychological research

 Eckhard Etzold
- 58 Historical notes on psychic phenomena in specialised journals

 Carlos S. Alvarado, Massimo Biondi & Wim Kramer
- 88 Erratum

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Toward a Panpsychistic Foundation of Paranormal Phenomena

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Abstract

Depending on what we know of ourselves or the world, paranormal phenomena can be seen (constructed) as normal, abnormal or inconceivable. If we assume that we and the world are based on the materialistic principle that everything, ultimately, is based on observable physical processes, paranormal phenomena are inconceivable and will be ignored, denied, derided or normalized. Contrary to this, followers of dualism and panexperientialism claim that their principles render it possible to consider paranormal phenomena as normal or, at least, as a normal abnormality. Dualists do this by regarding the mind, in addition to matter and energy, as another kind of existence; panexperientialists do this by seeing matter as having both physical and mental aspects. In this paper, the first section starts with describing some of the ways in which those who see the materialistic principle as inviolable deal with paranormal phenomena. How unjust this materialistic attitude is, given the quality of contemporary research into paranormal phenomena will be shown in the next section. However, this does not mean that even parapsychologists are convinced of the existence of all paranormal phenomena. Precognition, especially, is regarded as impossible by some of them. Contrary to this, the possibility that this phenomenon is real will be discussed. In the third and fourth sections the claim will be examined that, contrary to materialism, dualism and panexperientialism can function as underpinnings of paranormal phenomena. Because, as is shown, they cannot fulfil this function, the fifth section describes an interpretation of panpsychism that can in fact do so.

Introduction

"If at first the idea is not absurd, then there is no hope for it." Albert Einstein.

Ethnomethodology has shown us that normality is not something that either exists or does not exist, but instead is something we are constantly creating. We do this by trying to see everything we are confronted with as "according to some rule". When we see someone standing at a bus stop, we assume that this person is waiting for a bus. The rule is that somebody standing somewhere is there for identifiable purpose. Standing at a bus stop therefore generally implies waiting for a bus. These everyday, normality-making practices themselves also serve a purpose. Because the world is not orderly in itself, we need to make it orderly to be able to survive. We need to have a sense of what to expect, what makes the world go round, how to behave towards each other, and what our status or position is. We need the appearance of normality to reduce our anxiety about unknown phenomena, events and persons. Above all, we need it to reduce our anxiety about who we really are.

This is why, by bringing everything we perceive and show into conformity with our view of the world, we convince ourselves and others time and time again that everything is and will be more or less as it was.¹ This implies that this practice is based on continuity, repeatability and predictability. Because people standing at a bus stop nearly always board the bus when it arrives or are waiting for someone to get off the bus, we assume that they are waiting for a bus.

Contrary to what may be expected, our construction of abnormality is not the outcome of our confrontation with phenomena, events of behaviours that we cannot bring into conformity with what we know of ourselves or the world. When we look upon something as abnormal, we see it also as "according to some rule", *viz.* the rules of what we consider to be abnormal. In this sense, abnormality is a special form of normality. As with normality, it is based on continuity, repeatability and predictability and therefore able to reduce our anxiety. But abnormality deviates from normality insofar as it is infrequently perceived or not very well known. When we see someone on the street who from

¹Expressed a little more precisely, the normal is something in a reality that we are able to bring into conformity with an accepted model of that reality. For example, in everyday life we consider behaviour normal that we can reconcile with our common sense, in science we consider research methods and results normal that we can reconcile with our standard model of science (see for instance Wilber, 1984: p. 12-14), in traffic we consider behaviour normal that we can reconcile with the traffic rules.

time to time swears and abuses people, we make that person into a normal abnormality by seeing him as an idiot, a fool or a drunk, because that person is behaving according to rules that point to those kind of categories, or we can look upon his behaviour as a manifestation of the Gilles de la Tourette syndrome, because, as a rule, swearing and abusing are manifestations of this syndrome.

If we are confronted with phenomena, events or behaviours that are inconceivable, i.e. that we cannot bring into conformity with what we know of ourselves or the world, we are generally able to keep our anxiety at bay by ignoring, denying or deriding it, or by changing it into something that can be constructed as normal. But, as American ethnomethodologist Harold Garfinkel has demonstrated, if people are confronted with a disruption of "what they know and what they know that others know as well" without being given the opportunity to ignore, deny or change it, or to see it as being according to some rule, they are astonished, bewildered, shocked, anxious, embarrassed and angered, and attempt to isolate, retaliate and denunciate what or whom they see as responsible for this disruption (Garfinkel, 1967: p. 47-48). Depending on what we know of ourselves or the world, paranormal phenomena can be seen (constructed) as normal, abnormal or inconceivable. If we assume that we and the world are based on the materialistic principle that everything, ultimately, is based on observable physical processes, paranormal phenomena are inconceivable and will be ignored, denied, derided or normalized. Contrary to this, followers of dualism and panexperientialism claim that their principles render it possible to consider paranormal phenomena as normal or, at least, as a normal abnormality. Dualists do this by regarding the mind, in addition to matter and energy, as another kind of existence; panexperientialists do this by seeing matter as having both physical and mental aspects.

In this paper, the first section, "Materialism and the paranormal", starts with describing some of the ways in which those who see the materialistic principle as inviolable deal with paranormal phenomena. In the second section, "The acceptability of the results of research into the paranormal", I then argue how unjust this materialistic attitude is, given the quality of contemporary research into paranormal phenomena. In the same section I show that this does not mean that even parapsychologists are convinced of the existence of all paranormal phenomena. Precognition, especially, is regarded as impossible by some of them. Contrary to this, I argue that there really is a possibility that this

phenomenon is real. In the third and fourth sections, "Dualism" and "Panexperientialism", I examine the claim that, contrary to materialism, these principles can function as underpinnings of paranormal phenomena. Because, as is shown, they cannot fulfil this function, the fifth section, "Panpsychism", describes an interpretation of panpsychism that can in fact do so.

Scientists, who are supposed to be sceptical as well as open-minded, are often only sceptical (or worse) when confronted with paranormality. Perhaps the most important reason is that most scientists are practitioners of what American historian of science Thomas S. Kuhn has called "normal science". Such scientists base themselves on a paradigm, a network of commitments that "provide rules that tell the practitioner of a mature speciality what both the world and his science are like. What then personally challenges him is how to bring the residual puzzle to a solution." (Kuhn, 1973: p. 42). "No part of the aim of normal science is to call forth new sorts of phenomena; indeed, those do not fit are often not seen at all. Nor do scientists normally aim to invent new theories, and they are often intolerant of those invented by others" (Ibid: p. 24). Because paranormality is no part of the dominant materialistic paradigm scientists base their activities on, it is often ignored or dismissed as nonsense.

However, sometimes scientists have practical reasons for this kind of behaviour: they are afraid that overt acceptance of some of the results of research into the paranormal could damage their status or position, the discipline in which they are active, science in general or even the social order. When, despite all this, some types of paranormality are accepted, this is often because they can be explained materialistically at present or, as is expected, in the near future. Because Freud, for instance, saw telepathy as theoretically perceptible thought waves, he could accept it; similarly, some scientists accept consciousness because they can see it as a spin-off of the brain.

However, in the case of phenomena that seem to defy all efforts to explain them this way, there is a serious problem. Materialistic scientists and philosophers tend to deny them or to accuse those who take them seriously of gullibility or fraud. Especially those who use materialism as a belief often operate in this fashion. A well-known example of such intolerance of paranormality by a materialistic scientist is the way in which Sigmund Freud — in a conversation with C.G. Jung — spoke out against what he called "the black tide of mud of occultism" (Jung, 1963:

p. 144 — translated from the Dutch text by I. Maso) and how a possible manifestation of this "occultism" appeared to arouse his distrust of Jung (Jung, 1963: p. 148-149 — translated from the Dutch text by I. Maso). Freud was, however, more open to the paranormal than his conversation with Jung leads us to suspect. In 1899 and 1904, he wrote about precognitive dreams, and from 1919 about 'the uncanny', telepathy, demonical possession, and the relation between the occult and dreams. "He was member of both the Society for Psychical Research (London) and the American Society for Psychical Research. ... Freud was mystified by the occult and kept records of his own, personal experiences, which appear to include clair-audience and premonitory dreams. On at least one occasion, he visited a psychic ... and was startled by the personal information about him the psychic picked up." (Guiley, 1991: p. 221-222). Nevertheless, in his writings he tried to explain the paranormal away or to dismiss it as superstition, adhering the materialistic worldview. One of his reasons was that he was afraid that a possible relation between the paranormal and psychoanalysis would damage the latter. It seems, however, that he was unable to get around telepathy. As we have seen, it is likely that he could explain it in a materialistic, physiological way, viz. that telepathy works by the transference of thought waves that are theoretically perceptible (Guiley, 1991: p. 221-222).

While Freud at least did not ignore the paranormal or dismiss it completely as nonsensical, there are materialistic scientists who try to debunk everything with the merest hint of the paranormal, i.e. every time that there seems to be a question of paranormality, they use scientific and rhetorical means to show that this is an impossibility. These 'skeptics' as they call themselves, can — according to someone who is also critical to paranormality, the sociologist Marcello Truzzi — be subdivided into three categories, namely empirical, conceptual and methodological skeptics.

Empirical skeptics think that any parapsychological data are obtained either by fraud of subject or experiments or both or by experimenter incompetence or malobservation. Conceptual skeptics deny the idea of extrasensory perception and other paranormal phenomena on *a priori* grounds. They "call into question definitional congruence between ideas like psi, precognition, and clairvoyance" (Truzzi in Berger &

 $^{^2}$ With a 'k' to distinguish them from the real sceptics who doubt everything, including themselves and their own convictions. Skeptics with a 'k' only doubt everything that is not compatible with their materialistic, normal scientific standpoint.

Berger 1991: p. 442) and regard these phenomena as antecedent impossibilities that cannot fit into scientific theories and picture of the world. Methodological skeptics "take issue with the operational and procedural aspects of research." (Ibid: p. 442). They repeatedly point out the painful fact that parapsychology has not solved the problem of the repeatable experiment and so fails to meet the fundamental requirement of repeatability that applies to all experiments in science. Skeptics also harp on the failure to establish any sort of theoretical framework for paranormal phenomena (Ibid: p. 378). The loathing that skeptics have of the paranormal sometimes goes so far that they do not only admit it openly, but are even proud of it. Perhaps the most bellicose among them is the psychologist Professor Charles E.M. Hansel, who recently made a sort of last-ditch stand on the conspiracy of fraud theory. He "believes that if he is able to conceive of any hypothetical way in which fraud *could* account for the results of a parapsychology experiment, then this 'rational reconstruction' constitutes proof that the experiment was faked." (Milton, 1994: p. 153). Another psychologist wrote in the American journal Science that "not a thousand experiments with ten million trials and by a hundred separate investigators" could make him accept extra-sensory perception. In a similar vein the Professor of Psychology at McGill University, D. O. Hebb, a leading behaviourists, frankly declared that he rejected the evidence for telepathy, strong though it was, "because the idea does not make sense" — admitting that this rejection was "in the literal sense just prejudice" (Koestler, 1972: p. 19).

This would not be terribly important, if not for the fact that science and, in its wake, the mass media have a enormous influence on our culture. In our time, science and the mass media have the greatest rhetorical power to designate something as normal, abnormal or inconceivable (and thus non-existent). Because science has the highest status, there is hardly ever a critical note in the mass media about the methods and outcomes of materialistic normal scientific research, whereas, if — from time to time — they report about scientific research that deviates from what is considered to be normal, this often happens in a dismissive, ridiculing way, with a minimal use of arguments. That is why the mass media, and especially the daily and weekly papers, may be called the watchdogs of science (Maso, 1987).

It is not my purpose to attack materialism as such; besides its many ill services, it has also rendered us many good ones. What I oppose is *the belief in materialism* and the concomitant denunciation of everything

that is not compatible with it. As a belief, materialism is seen as the only way to the truth. If, on the other hand, we could see materialism as a reasonable basic assumption that we can use for our research to see what it yields,³ we are able to leave it partly or totally if, either in generally or in specific cases, its yields too little or when its costs become too high (Griffin, 1997a: 117-119). This agrees, in my opinion, with the scientific attitude of scepticism and openness. I think we have arrived at a point in history where the materialistic basic assumption is in some respects not satisfactory anymore and where its scientific and societal costs, at the least, are too heavy. It is at least not satisfactory insofar as it concerns 'anomalies' like paranormal phenomena and capacities, certain qualities of consciousness, certain interpretations of quantum mechanics and findings in quantum mechanics, and probably much more. With regard to society, the fundamental separation of subject and object and of subject and objects mutually has alienated us from each other and from our environment, with all its consequences. That is why it seems all-important to start from a basic assumption that leaves space for matter and energy (possibly with a materialistic tint), for the types of paranormality discussed in the next section, and for the possibility of the interconnectedness of subjects and objects.

The acceptability of the results of research into the paranormal

One must not underestimate the influence that the skeptics, who use science and the mass media to bring forward their position, have on public opinion in every sector of society. However, it seems as if the wind is changing. In our society, the interest in and belief of paranormality, esotericism, etc. is growing, judging by the increase in activities and publication that for the past 25 years have been grouped under the term 'New Age', whereas science seems to be leaving more and more room for books and publications that pay serious attention to the paranormal, etc. In the case of paranormality, this is the result of, among other things, the greatly improved research into paranormal phenomena, which, to a large extent, is in fact a direct result of the skeptical criticism. For no matter how ridiculous their attitude can be, from the point of view of everybody who is not prejudiced against the paranormal,

³Because we have been raised in a mainly materialistic environment and have received a materialistic education, it is certainly not easy to acquire an open scientific attitude towards everything that seems to conflict with materialism.

their criticism has nevertheless had the effect that at present notably the experiments in parapsychology are – according to the standard view of science — generally better designed, executed and controlled than experiments in any other discipline.⁴

This is exemplified by the publication in 1986 in the Journal of Parapsychology of a joint communiqué formulated by the cognitive psychologist and skeptic Ray Hyman and the prominent parapsychologist Charles Honorton (Hyman & Honorton 1986). This communiqué sets out severe criteria for designing, executing and controlling future Ganzfeld experiments — i.e. experiments in which test subjects are brought into such a receptive mood that they can pick up telepathic signals more easily than is generally the case — in order for the results to be accepted. These criteria include regulations to prevent the possibility that the test subjects can acquire the desired information in a normal, non-telepathic way, regulations for testing and documenting the random selection of the images to be presented, etc. This communiqué was used as the basis for subsequent Ganzfeld experiments, and as a result in 1994, for the first time an article about parapsychology was published by an important scientific psychological journal, Psychological Bulletin. This was a review and discussion about the many Ganzfeld experiments that satisfy the criteria formulated by Hyman and Honorton.

Similar procedures have also been developed for experiments to test psychokinesis, clairvoyance and precognition. This is why it is difficult to ignore the positive results of the increasing number of experiments with these kinds of paranormality, especially as we know that the possibility that these results are the effect of chance are generally many times smaller than 1 to one trillion (Radin 1997: p. 88, 114, 140, 105).

Although, on the basis of the evidence of parapsychological research, some people are prepared to accept the existence of telepathy, clairvoyance and psychokinesis, this acceptance is much smaller with regard to precognition, and it generally vanishes completely when it concerns the abilities of mediums, Poltergeist phenomena, kinds of psychokinesis by groups of people, ghosts, memories of past lives, possession and out-of-body experiences. However, if one studies the literature, research into these 'spontaneous instances' of paranormality ap-

 $^{^4}$ Sheldrake found that in 85.2% of the articles about parapsychology "single" or "double blind" experiments are described. In articles in medicine this is only 5.9%, in psychology 4.9%, in biology 0.8% and in physics 0%. (Sheldrake 1998).

pears to be too thorough to dismiss its results easily⁵.

Because of the limitations on the length of this article, it is impossible for me to elaborate on the question of the existence or non-existence of the enumerated spontaneous cases, or on the critical comments that could be made in this respect.⁶ I can only repeat that the results of the studies into the collected data make it highly probable that mediumistic powers, Poltergeist phenomena, psychokinesis by groups, ghosts, memories of former lives, possession and out-of-body experiences are 'real' phenomena⁷. There is, however, one controversy I would like to address, viz. whether or not precognition exists. People like William G. Roll (Roll, 1961), Jule Eisenbud (Eisenbud, 1982; 1983: p. 44-46, 87-98, 137-145), Stephen E. Braude (Braude, 1986: p. 256-277) and David R. Griffin (Griffin, 1997a: p. 90-95) dismiss precognition because its acceptance would mean that the future is the cause of mental events in the present. For instance, Griffin thinks, in accordance with a statement of J.B. Rhine, that "because perception and causation are two sides of the same relationship, to speak of perceiving a future event means saying that the future event has caused the present perception" (Griffin 1997a: p. 90). According to Griffin this is a logical impossibility. "Because causes necessarily and always bring about their effects, it must be irredeemably self-contradictory to suggest that the (later) fulfilments might cause the (earlier) anticipations", Griffin approvingly quotes Flew (Flew in Griffin, 1997a: p. 91). That is why, according to Griffin and the others mentioned, 'retrocausation', as it is also called, is impossible. This does not mean that they deny the evidence for precognition, but they see this evidence as the result of clairvoyance, psychokinesis or telepathy.

However, the assertion of the impossibility of retrocausation, is denied by some theoretical findings on both the micro and macro levels.⁸ For example, in physics, when Maxwell's equations are applied to radio

⁵For evidence for the existence of the abilities of some mediums, see Hodgson, 1892, 1889, 1897-1898; Sidgwick, 1900-1901, 1915, 1921; Myers, 1903; Feilding, Baggally & Carrington, 1909; Carrington, 1913; Glenconner, 1921; Thomas, 1928, 1935; Fuller, 1979; Gauld, 1982; Almeder, 1992; Fontana, 2005. Of poltergeist phenomena, see Bender, 1974; Roll, 1976; Gauld & Cornell, 1979. Of kinds of psychokinesis by groups of people, see Radin, 1997: p. 157-174. Of ghosts, see Gurney, Myers & Podmore, 1886; Tyrell, 1953. Of memories of former lives, see Stevenson, 1974, 1975-1983, 1997. Of possession, see Myers, 1903; Hyslop, 1909, 1919; Stevenson & Pasricha, 1980; Gauld, 1982; Stevenson, Pasricha & McClean-Rice, 1989; Roy, 1990; Akolkar, 1992. Of out-of-the-body experiences, see Crookall, 1966; Green, 1968; Sabom, 1982; Almeder, 1992.

⁶For those who want to go more deeply into this subject, I recommend Patterson, 1995 and Griffin, 1997a.

⁷This does not mean that the, mostly implicit, theoretical notions that the descriptions of these phenomena contain are correct.

⁸Besides the examples included, see for other possibilities of retrocausation: Maso, 1997: p. 144-152.

antennas, they allow for two solutions. The first is a normal solution, in which "an electromagnetic disturbance at the antenna ... causes a detectable effect at a distant point in space later. This is the so-called retarded solution ... The shock was that Maxwell's equations also accept an advanced solution; i.e. energy waves arriving at the antenna from infinite space" (Nahin 1993: p. 218). The possibility that the equations have two solutions points – according the cosmologists Fred Hoyle and J.V. Narlikar – to an intrinsic weakness in Maxwell's theory. However, when L.M. Stephenson showed "that the advanced solution can have a perfectly reasonable physical interpretation in the context of Maxwell's equations ... it is simply the mathematics relating the current in the receiving antenna now to the fields in the past. ... Hoyle ... indicated he has had a change in his opinion of advanced effects" (Ibid: p. 219). Efforts to dismiss the advanced solution as a mere anomaly of the mathematics have failed so far. Indeed, in 1941, John A. Wheeler and Richard P. Feynman argued that neither solution is an anomaly, but that both have profound physical significance because - as they demonstrated — it makes everything we observe predictable: radiative reaction, the direction of the electromagnetic arrow from past to future (retardedonly effects), and the absence of infinite self-interactions (Ibid: p. 224, 225-226). This is why they declared in a later paper "We conclude advanced and retarded interactions give a description of nature logically as acceptable and physically as completely deterministic as the Newtonian scheme of mechanics. In both forms of dynamics the distinction between cause and effect is pointless. With deterministic equations to describe the event, one can say: the stone hits the ground because it was dropped from a height; equally well: the stone fell from a height because it was going to hit the ground" (Wheeler & Feynman in Nahin, 1993: p. 220). Wheeler and Feynman's approach was subsequently incorporated into the description of quantum theory by John G. Cramer. This so-called 'transactional interpretation' explains why the wave function collapses to 'a fact' if it is observer (measured), which the Copenhagen interpretation of quantum mechanics fails to do. The collapse arises when the future-generated conjugated wave [the calculated conjugate of the wave function] propagates back through time to the origin of the quantum wave itself (Wolf, 1989: p. 261-263.).

Besides these and other physical fireworks showing that retrocausality is possible, there are also parapsychological experiments that make it hard to attribute their results to anything other that precognition. Dean Radin, for instance, placed subjects behind a computer and attached electrodes to one hand of each subject to record fluctuations in skin conductance, heart rate and the amount of blood in a fingertip. In the other hand each was given a computer mouse which, when pressed, randomly selected a photo out of a pool of 120 possibilities. First the computer showed a blank screen, then - after five seconds — the selected photo was displayed for three seconds. After ten seconds the subjects received a message on their screens, informing them that they could proceed further. In each session the subjects viewed forty photos. The 120 photos consisted of two kinds of photos: calm and emotional. As expected by the classical orienting response, after the participants viewed emotional pictures, their autonomic nervous system reflected the expected (average) reaction: heart rate dropped, blood volume in the finger dropped, and electrodermal activity increased. By comparison, responses to calm pictures just showed that they remained relaxed. These results confirmed that the experimental method was working as planned (Radin, 1997: p. 121-122). What was surprising was that the electrodermal activity already increased before the emotional pictures were seen: "it appears that a person's 'future' experience can affect his of her nervous system in the present" (Ibid: p. 121). Repetition of this experiment by Dick Bierman yielded the same results (Ibid: p. 123). Because the subjects did not see the photos beforehand, psychokinesis can be ruled out. Telepathy cannot be the explanation, because the procedure of randomisation made it impossible for the researchers to know which photo would appear. Finally, clairvoyance must be dismissed because the photo did not exist as an image (hidden or otherwise) before it appeared on the screen, but as the code (zeroes and ones) in which the computer stored its data.

A final objection against the existence of precognition is that it implies that the future is fixed and that free will, something that belongs to the core of our common sense (Griffin, 1998: p. 37-400), must be an illusion (Griffin, 1997a: p. 91-93). However, this conclusion is not as obvious as it seems. If we assume that a precognition is cognition of a 'probable reality', for instance a reality that will come into existence if we proceed on the same footing as before, this implies that we can change our 'fate' by our free will. If this is correct, it is understandable that there never was, is, or will be a psychic, no matter how gifted , who was or is always right, whereas there must be examples of precognition

which could be prevented by the intervention of the persons involved⁹.

Dualism

Except for materialism, there are two other main basic assumptions to be considered: dualism and panpsychism.¹⁰ Dualism assumes that ontologically there are two fundamental different kinds of existence: on the one hand matter or energy, and on the other the mind.¹¹ Mind differs from matter in that it does not possess extensiveness (Descartes) and so does not occupy space, i.e., it is non-spatial (McGinn, 1995: p. 222)¹². This characteristic means that the mind is non-temporal. After all, if time is seen as a change in space, this means that if there is no space, there is no time; this implies that the mind is non-temporal. The same conclusion must be drawn if, like Einstein, we see space-time as a continuity; in this case, lack of space implies lack of time.

This conception of the mind — non-spatiality and non-temporality — enables dualists to make many paranormal phenomena understandable. If we make further inquiries into the best researched types of paranormality, we will notice that in telepathy, clairvoyance, psychokinesis and precognition there seems to be no distance between subject and subject/object, while with both precognition and the other types of paranormality mentioned, the normal idea of time seems to have disappeared (Rhine, 1953: p. 153-158; Rao, 1997: p. 75; Jahn et al, 1997: p. 345-367). In such an existence, it becomes almost self-evident that no perceptible signal between sender and receiver — and thus any form of energy — can be detected with these types of paranormality (Rhine et al, 1940: p. 291-205; Varvoglis, 1992: p. 21, 269).

This dualistic conception of the mind makes other types of paranormality understandable as well. If the mind is really separate from the body, out-of-body experiences and possession are conceivable. Because the death of the body cannot have any effect on the mind — that

⁹See Broughton, 1991: p. 18-22 for an example.

¹⁰This is only more or less correct for the philosophies we know in our Western culture. In Africa, for instance, the basic assumption should be, according to Hebga, pluralistic and monistic at the same time. Hebga claims that, this assumption allows African paranormal phenomena to be made understandable. (Hebga, 1998)

¹¹This 'ontological' dualism must not be mixed up with non-dualist interactionism that assumes that there is only a gradual difference between matter and mind (Griffin, 1997a: p. 129)

¹²The existence of non-spatiality or non-locality (in the quantum state) has been theoretically and experimentally demonstrated by the theoretical physicist John S. Bell and the experimental physicist Allan Aspect respectively (see also Gribbin, 1993: p. 215-227). Implicitly, it is made obvious that in a situation of non-locality time does not exist. On this basis a close relationship between the mind and quantum states can be supposed (Hodgson, 1993: p. 383-388).

would presuppose interaction between body and mind — life (of the mind) after death (of the body) and, consequently, mediumistic power, memories of former lives and reincarnation are possible. However, the ontological difference between body and mind seems to rule out any interaction between them. If this is correct¹³ clairvoyance, psychokinesis and related phenomena — psychokinesis by groups and Poltergeist phenomena — cannot be brought into line with dualism¹⁴. The impossibility of this kind of interaction is the reason that in contemporary philosophy dualism is rarely a serious option (Griffin, 1997a: p. 104-110). This means that to the above critique on materialism can be added that dualism not only gives no answer to the question how subject and object might influence each other, it also rules out in advance all possibility of any answer whatsoever. So we are left with panpsychism, which most philosophers find more improbable than dualism¹⁵. That is the reason — unjust, in my opinion — why it has hardly be discussed during the past hundred years.¹⁶

According to the most general conception of panpsychism, everything — from the smallest particle to the entire universe — has something like a mind, even if only rudimentary. This conception has once again been made topical by the work of David Griffin, who bases his case on the philosophy of Alfred North Whitehead (See Griffin, 1997a; 1997b; 1998). However, Griffin does not call his conception 'panpsychism' but 'panexperientialism'. By using this term, he wants to make clear that the rudimentary, sometimes short-lived form in which the mind can manifest itself should not be confused with the way we usually talk about "psyche". With this term he also wants to distance himself from the adherents of panpsychism who think that rocks and telephones also have something mental that is more than the sum of their component parts. According to Griffin, these parts — atoms and molecules — have something mental, but their arrangement has no separate individuality, i.e. no private spontaneity or self-determination (Griffin, 1997a: p. 132-133; 1998: p. 778, 95-96, 229).

Panexperientialists see all existing matter as spatio-temporal events that have both physical and mental aspects (Griffin, 1997b: p. 261). In

¹³Revising this article for publication, I'm not so sure anymore; see: Stapp, 2005; Schwartz, Stapp & Beauregard, 2005.

¹⁴John Beloff turns this argument upside down by suggesting that the mind can influence the brain by psychokinesis (Beloff 1994: p. 36). How that is possible, he omits to tell us.

¹⁵See for instance Dennett, 1978.

¹⁶A recent exception is De Quincey, 2002.

this respect the mind is ontologically not different in kind from matter (Griffin, 1998: p. 31). Because they cannot be conceived separately, mind and matter are extended both spatially and temporally (*Ibid*: p. 161, 227-228)¹⁷. Directly related to this is the idea that every event is caused by a temporally earlier condition (*Ibid*: p. 230) ¹⁸ and so that, in this sense, we are dealing with a realistic view of time (Griffin, 1997a: p. 92; 1998: p. 28, 33). As we have seen, this makes precognition impossible, with the consequence that Griffin has been forced to discuss alternative explanations (Griffin, 1993: p. 270-275; 1997a: p. 92-95).

To panexperientialists, telepathy and clairvoyance are possible because the fundament of our perception is non-sensory. This enables us to become conscious of our perception of another mind or thing. Because non-sensory perception and causation are two sides of the same relation, this also makes psychokinesis possible (Griffin, 1997a: p. 140-146; 1998: p. 42-44, 207-208).

Apart from what I believe to be an erroneous view that precognition cannot exist, another consequence of the spatio-temporal kind of existence of everything is that mind cannot exists separate from matter (Ibid: p. 227, 229-230). The consequence would be that the abilities of mediums, or ghosts, memories of past lives, possession and out-of-body experiences could not exist either. However, according to Griffin, the evidence for the existence of these phenomena is so powerful that not only does he consider it quite impossible that the Super-ESP (or Super-Psi) hypothesis could explain these phenomena sufficiently, but that *contrary* to the panexperientialistic theory he also asserts that at least the human mind can exist separate from the body (Griffin, 1997a: p. 263-268). As he states, "the distinctive powers of the human soul, which emerged along with the distinctively human capacity to use symbolic language, may include yet one more power: the power of the soul to survive separation from the kind of body that was originally necessary to bring it forth (Ibid: p. 148). About the way in which this capacity to use symbolic language causes a mind that can separate itself from the body, he only says, "Perhaps the very power of human souls to ask, "When we die, will we live again?"(Job 14: 14) brought with it the power to do just

¹⁷In this Griffin follows Whitehead, who asserts that "though mentality is non-spatial, mentality is always a reaction from, and integration with, physical experience which is spatial" (Whitehead in Griffin, 1998: p. 162). The consequence is that the non-spatiality and non-temporality of the mind cannot be experienced.

¹⁸This process does not need to be deterministic if these conditions influence an event with its own individuality (Griffin, 1998: p. 230).

that" (Ibid: 148). This explanation is hardly satisfactory.

Besides the fact that he has to reject precognition, Griffin makes a desperate move to include the abilities of mediums, ghosts, etc. in his theory. It is probably not by chance that he does not repeat this move¹⁹ in his following book, in which he expounds panexperientialism in a consistent and philosophical way (Griffin, 1998). So, because of the evidence for some types of paranormality and the way in which he deals with them, there are good reasons to reject, partly or totally, the panpsychism which Griffin champions.

Panpsychism

So we are left with the task of searching for a type of panpsychism in which, besides the possibility that the basis of our perception should be non-sensory in order that telepathy, clairvoyance and psychokinesis (by groups) can exist, there is also room for precognition. In such a type of panpsychism, it should be 'logical' that the mind could be separated from the body in order that the abilities of mediums, possession, memories of former lives, ghosts and out-of-body experiences can be made understandable.²⁰

An important feature of such a panpsychism is the non-spatiality and non-temporality of the mind. In discussing dualism we have seen that this feature makes understandable some characteristics of telepathy, clairvoyance, psychokinesis and precognition, *viz.* that with these types of paranormality, distance and thus time do not play a role. Apparently, the non-spatiality and non-temporality of the mind make it possible for the mind, in principle, to directly communicate in a non-sensory way with another mind, regardless of the location and time of the other mind.

¹⁹Described in Griffin, 1997a.

²⁰Because most parapsychologists still have problems using ghosts as an explanation for anything, poltergeist phenomena are generally seen as a type of psychokinesis caused by someone who is, more or less, emotional disturbed. However, two facts oppose the suggestion that this is a sufficient explanation for all cases. Firstly, the effects that a psychokinetically abled person in a laboratory can accomplish fade into insignificance compared to some poltergeist manifestations: in the laboratory it is a fantastic accomplishment when somebody manages to move a little, light object a few centimetres (see, for instance, Broughton, 1991: p. 142-143), whereas there are poltergeist manifestations in which heavy objects were moved several meters through the air (there is at least one example of a jeep of 2500 kg that, because the absence of traces in the mud, must have to be shifted about 37 meters through the air; Playfair, 1975: p. 255). Secondly, there exists at least *one example* of the shifting of heavy gravestones while no living person could be present (Wilson & Wilson, 1988: p. 34-36; Wilson, 1997: p. 69-71; Maso, 1999: p. 12-18). For these two reasons, I assume that poltergeist phenomena can be caused by people and/or ghosts. This is why I will not mention poltergeist phenomena again but will talk about psychokinesis or ghosts.

The interesting thing is that the mind does not always seem to function in a non-spatial or non-temporal fashion. Henri Poncaré describes how, for weeks, he was working on a problem about so called 'automorphic functions'. He could not find the solution and joined the army. One night, being very tired, he had some coffee and, afterwards, was not able to get to sleep. Suddenly he saw, as he says himself, how ideas and mathematical combinations were flying through space like atoms; they were merging and falling apart and suddenly formed a right sort of combination; then he saw, like a flash of lightning, the whole solution! He got up, but needed more that half an hour to develop and to write down the arguments of the proof. The conscious mind needed half an hour to formulate one argument after the other: from this follows that, and from that follows something else, until at last he had the proof that would make him famous in the world of mathematics — but he saw it like a flash of lightning.

The same happened to the famous mathematician Gauss. He found one of the number theorem's in the same way. He said, 'My mind was totally absorbed by the problem, but I could not see the solution and then, suddenly, by the grace of God, I saw the whole like in a flash of lighting; but afterwards I was not able to tell how I got there or what my reasoning or the connection was.' He saw, so to say, the whole order timelessly, but then his conscious mind had to work along the links to transform them into a mathematical proof that consists of the first, second, third, fourth step and so on (Von Franz, 1992: p. 124-125 — translated from German text by I. Maso).

Von Franz, with whom these examples originate, says about them, "All this indicates that the unconsciousness does not contain the sequence 'one after the other'. Because of time and space, this is the art to which our consciousness is committed; to our intellect it is the only way it can function. But in our unconscious time and space are relative or, at least, very flexible, if they do not disappear altogether; there they are not so important as in our consciousness" (*Ibid*: p. 125 — translated from the German text by I. Maso).

These examples, and the way in which Von Franz discusses them, support the idea that the mind is non-spatial and non-temporal. At the same time, however, they show that this does not apply to what she calls 'our consciousness'. Our consciousness should, according to Von Franz, be committed to space and time.

I think that this is not quite right; there are moments that our con-

sciousness shows its non-spatial and non-temporal face. The flashes in which Poincaré and Gauss saw the solutions to their respective problems did not happen in their unconscious but in their conscious. And if, for instance, we listen to Bach's Cello Suites, we do not hear the succession of tones as separate, mutually independent sounds; we hear these tones as accents of a unity that is formed by the preceding music and by the music which we know or expect will follow. Once in a while, when we are situated in the twilight area between the conscious and the unconscious, it happens to some of us that the accents disappear and that we hear the music as a unity (Thakar & Smith, 1987: p. 57).

Whatever is really the case, the mind's non-spatially and non-temporality do not prevent it from functioning in a spatio-temporal way, in which case the content of the non-spatial and non-temporal mind will be adjusted to the spatio-temporal reality.²¹

We even can take this a step further and consider that the non-spatial and non-temporal mind not only, from time to time, adjusts its functioning to the spatio-temporal reality, but that this reality itself is the outcome of a change of the non-rational and non-temporal mind. Remember that dualism is rejected by most philosophers because, if mind and matter are ontologically different in kind, it would be impossible for them to interact. This points in a direction in which mind and matter only gradually differ. Although this idea is also honoured by materialism, this assumption, as we have seen, no longer suffices in all respects which is why we study the panpsychistic option. When we think of a gradual difference between mind and matter, it could be that there exists a more or less gradual transition between the non-spatial and non-temporal mind and spatio-temporal 'moulded' matter.

Besides the fact that this allows for psychokinesis, another advantage of this approach is that it gives a solution that has been formulated by the mathematician and parapsychologist George N. M. Tyrell, *viz.* how it is possible that there is evidence both for apparitions who do not distinguish themselves physically from living persons as well as for the classical image of more or less translucent apparitions (Tyrrell, 1953: p. 80). Tyrell thinks that all apparitions including the physical apparitions, are the expression of an idea of the observer. If more people perceive

²¹It is possible that the adjustment of the mind to the spatio-temporal reality is totally or partly responsible for the fact that generally we hardly notice the telepathic, clairvoyant or psychokinetical 'signals' we receive.

²²Because it is the mind and not matter that has primacy in panpsychism, I describe the spatio-temporal reality as an effect of the non-spatial and non-temporal mind and not the other way around.

the same, more or less physical apparition, even from different perspectives, this would be the outcome of the fact that one observer telepathically communicates his or her idea to others (*Ibid*: p. 99-103, 109-115). This is, however, hardly probable. The 'receiver' in a telepathic experiment hardly ever acquires exactly the same image as that in the mind of the 'sender'. For the images for 'sender' and 'receiver' to be situated in the same place, where both see it from their own perspective, is almost beyond believe. Taking, instead, our assumption of the gradual transition from mind to matter, it is much more probable that either such an intersubjectively perceived, more or less materialized apparition was really there, or that someone, possibly unconsciously, had created it in a form perceivable to others.

With this little detour to apparitions we come to a problem that also refers to the abilities of mediums, possession, memories of former lives and out-of-body experiences, *viz.* how it is possible that the mind can detach itself from the body.

Like the Hungarian writer and journalist Arthur Koestler (whose ideas were subsequently more or less confirmed by the biologist Mae-Wan Ho (Ho, 1996, especially pp. 237-242), I assume that the human body is a whole, consisting of a hierarchy of quasi-autonomous 'sub-wholes' that branch into sub-wholes of a lower order, and so on. So one level below the body (as a whole) we find, for instance, the circulatory system and the digestive system; the levels below those systems consist of organs, and then come, successively, the levels of tissues, of individual cells, of the organella's inside the cells, of the macro-molecules and smaller and, who knows, of still smaller sub-wholes (Koestler, 1979: p. 27, 28-29).

All of these sub-wholes are "self-regulating open systems which display both the autonomous properties of wholes and the dependent properties of parts" (Koestler, 1970: p. 383). Because of this equivocality, this Janus face of independence and dependence, Koestler calls such a sub whole a 'holon' from the Greek *holos* = whole, with the suffix *on* which, as in proton or neutron, suggests a particle or part" (*Ibid*: p. 65-66). So, "every holon has the dual tendency to preserve and assert its individuality as a quasi-autonomous whole; and to function as an integrated part of an (existing or evolving) larger whole" (*Ibid*: p. 385).

On the basis of this idea, every molecule, every organella, every cell, every tissue, every organ, every organ system and also the organism itself must be seen as a holon that has individuality and is quasi-

autonomous but also forms a part of a greater whole that also must be seen as a holon. In addition, each holon is integrated into and controlled by a higher-level holon, at the same time keeping its own identity and quasi-autonomy. As part of a greater holon, every holon exercises a degree of influence upon that greater holon.

In this light, the human body, for instance, can be seen as the level that, directly or indirectly, takes care of controlling and integrating the holons of which the body consists. One level higher than the human body is the human mind (of which our daily consciousness is only a small part). So this is it what takes care of controlling and integrating the body.

When we die 'the human mind separates from the body". This must be seen as a metaphor for the fact that the human mind stops controlling and integrating the body. The consequence of this stop is that the body disintegrates and, for its part, stops controlling and integrating the subsequent level; there, the same happens, and so on until the body is reduced to its elements.

The metaphor that 'the mind separates itself from the body' is unfortunate as the mind, partly owing to its non-spatiality and non-temporality, is indivisible. In principle, there is only one mind, but there are a tremendous number of manifestations of it, each with its own, indivisible identity. When we die, our spatio-temporal existence shifts into a non-spatial and non-temporal existence. In this sense, we indeed exchange temporality for eternity.

It is this 'freed' human mind with which we, to the degree that we use our mediumistic abilities, can communicate. It is also this mind that sometimes assumes — i.e. it controls and integrates — an 'already occupied' body, on the basis of which we talk about possession (when the body is not already occupied, this will mostly concern a foetus or baby). Because our daily consciousness is only a small part of our mind, and because we realize only a few times what is happening there — telepathy, clairvoyance, precognition and possibly psychokinesis — we also rarely have access to the memories the mind possesses of former bodily existences. If so, we speak about memories of former lives. Finally, when people have out-of-body experiences, we should not assume that the mind separates itself from the body, but that the consciousness avails itself of the non-spatial and non-temporal possibilities of its own mind to do whatever it does (when we dream something similar happens, except that most of the time we do not realize it).

Obviously this is only a first sketch of how a panpsychistic theory could look if we take the well-researched types of paranormality seriously. In the near future, I hope to answer the many questions that have not been addressed or that have yet to be raised. However, in view of Griffin's remarks about them, I must say something about one question: do rocks and telephones have something mental that is more that the sum of their component parts? In other words, are the atoms and molecules that make up rocks or telephones parts of a holon that controls and integrates them?

I do not think that we could discover something that looks like some kind of controlling agent, but it is undeniable that there is a question of integration. This seems to indicate the existence of holons that integrate but do not control. However it is more probable that, under certain conditions, the controlling and integrating features of atoms and molecules are able to integrate into a bigger whole. This would mean that every atom or molecule (holon) should, in principle, be able to cooperate in forming a bigger holon.

Conclusion

In our society, the interest in and belief of paranormality, esotericism, etc. is growing, judging by the increase in activities and publications that for the past 25 years have been grouped under the term "New Age", whereas science seems to be leaving more and more room for books and publications that pay serious attention to these "anomalies". However, because almost everybody in and outside the field of science is more or less a supporter of the materialistic worldview and the scientific convictions that are based on it, acceptance of the paranormal, etc. by the scientific community will not only depend on the results of scientific experiments and well-researched case studies, but also on a relaxation of or change in the materialistic worldview. As dualism and panexperientialism seem to be insufficient as underpinnings of paranormal phenomena, I have tried to develop a worldview, a version of panpsychism, that is compatible with paranormality and leaves room for both materialistic and non-materialistic approaches.

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Self-Concept and Body Investment in Out-of-Body Experients

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Abstract

Prior research has found that Out-of-Body Experients (OBErs) report higher levels of body dissatisfaction than people without a prior OBE (non-OBErs). When the general population is studied, people who score higher on body dissatisfaction tend to score higher on measures of social anxiety. However, this does not appear to be the case for OBErs. This paper presents the results of a study designed to investigate this apparent discrepancy. It was hypothesized that OBErs maintain a positive self-concept which means they do not experience higher levels of social anxiety, although they score higher than non-OBErs on a measure of body dissatisfaction. It was also hypothesized that the higher levels of body dissatisfaction, but absence of social anxiety observed in OBErs might be explained in part by a lower degree of psychological investment in their bodies than non-OBErs. A total of 59 participants (19 OBErs, 40 non-OBErs) completed measures of self-concept and body investment. As predicted, OBErs were found to have a more positive self-concept than non-OBErs, but did not differ in regards to body investment. Based upon these findings we present a modified argument that the dissatisfaction expressed by non-OBErs towards their bodies may reflect aesthetic concerns, while OBErs' responses are more expressive of frustration with the physical constraints of the body.

Introduction

Many people report having had an out-of-body experience (OBE) in which they felt as if their phenomenal self was separated in Cartesian space from their physical body. Irwin (2000) has argued that OBEs are in part the result of somatoform dissociation in which there can be a 'deficit symptom' such as numbness in a part of the body, or 'positive symptom' in which psychosomatic pain or tics are experienced. One rationale for studying somatoform dissociation in OBEs is that "at a phenomenological level the OBE appears to entail a dissociation between sensory processing of somatic (somaesthetic and kinaesthetic) events and the sense of self or identity" (Irwin, 2000, p.265). Irwin (2000) found scores obtained on the Somatoform Dissociation Questionnaire to be the only predictor variable (from a logistic regression analysis which included participants' data for dissociative experiences, absorption, gender and age) able to independently discriminate between people with (OBErs) and without (non-OBErs) a prior OBE, as well as the only independent variable which contributed significantly in predicting OBE frequency.

Irwin's (2000) theory for the occurrence of the OBE is that it is the result of the convergence of a number of dissociative factors. This includes high levels of 'absorption' (a psychological state in which the person is in a high state of engrossment in experience), as well as a simultaneous occurrence of dissociation from somatic input. This theory builds upon Irwin's (1985) earlier work which found that OBErs exhibit a high capacity for psychological absorption, while people with high levels of psychological absorption were more susceptible to experimentally induced OBEs. These changes are posited to undermine the socially conditioned assumption that the body is the container of the self, and as a result to promote the feeling that the person's consciousness is no longer in the spatial confines of the body.

Murray and Fox (2004, 2005a, 2005b) have recently extended Irwin's (1985, 2000) work to argue that the daily bodily experiences of OBErs differ from those without this experience. Based upon the phenomenological description of the OBE as an experienced dissociation, or separation, of the physical body and the self, Murray and Fox suggested that the person who experiences an OBE has a different relationship between their physical body and sense of self than do people without such experiences. They also argued that their approach was in accordance

with and informed by Irwin's (2000) dissociational theory of the OBE, and that the OBEr's bodily experience is that of a generalized dissociation (as compared with non-OBErs) between their self and body that can be assessed on a number of levels. This includes perceptual experience, namely the person's sensory experience of their body; affective experience, namely the person's feelings of satisfaction or dissatisfaction with their body; and social experience, namely the person's anticipatory experience (e.g., anxiety) of how others evaluate their bodily appearance or performance.

In a test of the above hypotheses, Murray and Fox (2004, 2005a) found that OBErs reported higher levels of dissociation between their perceptual body and self, had a heightened self-awareness or self-consciousness, were more dissatisfied with their bodies, and had lower confidence in the presentation of their physical skills. However, the hypotheses that they would have a reduced belief in their physical ability, an objectified view of their bodies, and be more anxious at the prospect of having their physique evaluated by others were not supported (though see Murray & Fox, 2005b).

The above work has been informative in demonstrating that OBErs and non-OBErs differ across perceptual, affective and social dimensions of bodily-related dissociational experiences. However, the finding that OBErs and non-OBErs do not differ with regards to social anxiety in general, and social physique anxiety in particular, was not expected. Previous research in the general population has found that dissatisfaction with one's appearance is related to higher levels of social anxiety, particular concerning occasions when one's body is open to public scrutiny (e.g. Davison & McCabe, 2005). The present study is particularly interested in this latter finding. Murray and Fox (2005a) have argued that a future avenue of research may be to examine OBErs' and non-OBErs' levels of 'self-satisfaction' or the degree to which they have a positive self-concept. If OBErs have a more positive self-concept than non-OBErs, then this could explain a lack of anxiety about an experienced dissatisfaction with their bodies.

One way in which to investigate the above hypothesis would be to use a measure which examines people's sense of personal worth independently of how they feel about their body or social relationships. The Tennessee Self-Concept Scale (Fitts, 1965) is comprised of five subscales which measure a person's self concept along a number of dimensions. Two of the subscales (Family Self and Social Self) are particularly con-

cerned with the person's feelings of adequacy and self-worth as a social person. One of the subscales (Physical Self) is concerned with a variety of issues relating to the body, including the person's health and physical appearance.

The final two subscales (Moral-Ethical Self and Personal Self), of particular interest in the present study, are concerned with the person's sense of personal worth independently of their social relationships. This is an important distinction. For instance, while some people's sense of self-worth may be related to their perceived worth as a family member, or adequacy in social relationships, others may have positive self-concepts which do not depend on their social standing. Therefore, in order to explain why OBErs do not score higher on measures of social anxiety, but do higher on measures of body dissatisfaction, we hypothesize in the present study that OBErs will score higher on these two subscales of the Tennessee Self-Concept Scale.

Another possibly related issue is that of body investment. In their Body Investment Scale, Orbach and Mikulincer (1998) evaluate the degree of psychological investment a person has in their body across four dimensions. These are the way a person feels about their body, and the degree to which they enjoy physical contact, care for and protect their body. The higher levels of body dissatisfaction, but absence of social anxiety observed in OBErs might be explained in part by a lower degree of psychological investment in their bodies than non-OBErs. The present study uses both the Tennessee Self-Concept Scale and the Body Investment Scale in order to test the following hypotheses:

- 1. OBErs will score significantly higher than non-OBErs on measures of Moral-Ethical and Personal Self-concept.
- 2. OBErs will score significantly lower on measures of body investment.

Method

Participants

A total of 59 participants (44 females, 15 males) completed a questionnaire regarding "self concept, body investment and the likelihood of experiencing an out-of-body experience". Of these, 50 were Psychology undergraduates contacted through e-mail and poster advertisement. Questionnaires were also sent out to 28 people who had taken

part in previous research on out-of-body experiences, and 9 of these were returned. A total of 19 respondents reported a previous OBE (13 females, 6 males, with a mean age of 26.42, SD = 8.21). Forty participants did not report having a prior OBE (31 females, 9 males, mean age 21.52, SD = 6.58).

Materials

Respondents completed a questionnaire comprised of two validated scales and one item for assessing whether they had had a previous OBE. In the following we detail each of these questionnaire components in the order they were presented.

Measures

The Tennessee Self-Concept Scale (TS-CS): The TS-CS (Fitts, 1965) is a 100-item questionnaire instrument designed to measure self concept, and consists of five sub-scales: Physical Self (the person's view of their body, health, physical appearance, skills and sexuality); Moral-Ethical Self (e.g. feelings of being a 'good' or 'bad person'); Personal Self (the individual's sense of personal value or worth, feelings of adequacy, and evaluation of their personality apart from their body or relationships to others); Family Self (the individual's feelings of adequacy, worth and value as a family member); and Social Self (the person's senses of adequacy and worth in relation to social interaction with other people in general). The items were presented as a 5-point interval scale ranging from *Completely false* (1) to *Completely true* (5). High scores indicate a more positive self-concept. In the present study Cronbach's alpha indicated appropriate internal consistency for each sub-scale (.82, .75, .77, .71, and .86 respectively).

The Body Investment Scale (BIS): The BIS (Orbach and Mikulincer, 1998) consists of four subscales. The 'Feeling' subscale includes items related to body image feelings and attitudes (e.g., I am satisfied with my appearance). The 'Touch' subscale consists of items relating to comfort in touch (e.g., I enjoy physical contact with others). The 'Care' subscale is comprised of items about body care (e.g., Caring for my body will improve my well-being). The 'Protection' subscale includes items about body protection (e.g., It makes me feel good to do something dangerous). The items were presented as a 5-point interval scale ranging from I do not agree at all (1) to Strongly agree (5). A high score indicates a more

positive feeling about the body, about touch, and more body care and protection. In the present study Cronbach's alpha indicated appropriate internal consistency for each sub-scale (.77, .86, .75, and .86 respectively).

Item for Assessing the Occurrence of Out-Of-Body Experiences: In order to ascertain whether participants had experienced an out-of-body experience, respondents were provided with the following *modified* statement from Palmer (1979) and asked to indicate 'yes' or 'no': "Have you ever had an out-of-body experience, that is, an experience in which you felt that 'you' were 'outside of' or 'away from' your physical body; one in which you felt that your consciousness, mind, or centre of awareness was at a different place than your physical body? (If in doubt, please answer 'no')."

Procedure

Participants were provided with an information sheet and consent form prior to completing the questionnaire. If the participant was willing to continue they were then provided with the study questionnaire (these were mailed together to the 28 people who had taken part in previous research, and they were free to choose whether to respond or not). The first page of this asked for details regarding the participant's age and sex. This was followed by the Body Investment Scale and the Tennessee Self-Concept Scale. The final section consisted of Palmer's (1979) modified item to assess whether the participant had had an out-of-body experience. Finally, participants were thanked for their participation.

Results

Self-concept, Body Investment and OBEs

Respondents' mean scores and mean ranks for each measure along with the results of Mann-Whitney U significance tests are shown in Table 1. Participants reporting a previous out-of-body experience scored higher on the 'Moral-Ethical Self' (U=229.5, p=.007, one-tailed) the 'Personal Self' (U=260.0, p=.026, one-tailed), and the Social Self (U=252.0, p=.037, two-tailed) subscales of the Tennessee Self Concept Scale. OBErs also scored higher on the Care subscale of the Body Investment Scale (U=266.5, p=.032).

Table 1: Mean scores (with standard deviations) and mean ranks with Mann-Whitney U significance values on the study measures

| Measure | OBE Group | Mean | Non-OBE Group | Mean | \overline{p} |
|--------------------|----------------|-------|---------------|-------|-------------------|
| | $(n = 19)^{-}$ | Rank | (n = 40) | Rank | value |
| Family self | 67.32 (8.81) | 31.13 | 67.15 (8.21) | 29.46 | .732a |
| Moral-ethical self | 73.63 (6.71) | 37.92 | 68.48 (6.57) | 26.24 | .007 ^b |
| Personal self | 71.47 (7.76) | 36.32 | 66.90 (7.71) | 27.00 | .026 ^b |
| Physical self | 61.53 (8.04) | 33.87 | 59.40 (6.67) | 28.16 | .236ª |
| Social self | 71.16 (7.36) | 36.74 | 67.82 (6.15) | 26.80 | .037a |
| Body Investment | | | | | |
| Scale Total | 94.84 (8.55) | 36.37 | 89.35 (11.53) | 26.98 | $.070^{b}$ |
| Care | 25.37 (3.77) | 35.97 | 23.62 (3.75) | 27.16 | .032 ^b |
| Feeling | 27.16 (4.25) | 34.89 | 24.47 (5.86) | 27.68 | .066 ^b |
| Protection | 22.63 (4.27) | 32.32 | 22.02 (3.39) | 28.90 | .240 ^b |
| Touch | 19.68 (2.52) | 31.45 | 19.22 (2.75) | 29.31 | .330 ^b |

^aTwo-tailed.

Sex, Body Experience and OBEs

Most participants in the study were female. In order to address the possibility of participants' sex impacting upon the study findings the mean scores for males and females are show in Table 2. Female OBErs and Male OBErs scored higher on measures of Moral-Ethical Self (M = 73.46, SD = 7.30, M = 74.00, SD = 5.83 respectively) and Personal Self (M = 72.15, SD = 8.22, M = 70.00, SD = 7.13 respectively) than their non-OBE counterparts (M = 69.45, SD = 6.16, M = 65.11, SD = 7.10 respectively for Moral-Ethical Self and M = 67.81, SD = 7.54, M = 63.78, SD = 7.92 respectively for Personal Self).

Table 2: Means and standard deviations on study measures for male and female OBErs and non-OBErs

| | Out-of-body Experients | | | | Non Out-of-body Experients | | | |
|-----------------------|------------------------|-------|---------|------|----------------------------|------|---------|-------|
| | Males | | Females | | Males | | Females | |
| Measures | M | SD | M | SD | M | SD | M | SD |
| Physical Self | 60.83 | 11.77 | 61.85 | 6.24 | 61 | 7.2 | 58.94 | 6.58 |
| Moral-Ethical Self | 74 | 5.83 | 73.46 | 7.29 | 65.11 | 7.09 | 69.45 | 6.18 |
| Personal Self | 70 | 7.13 | 72.15 | 8.22 | 63.78 | 7.9 | 67.81 | 7.54 |
| Family Self | 68.67 | 10.56 | 66.69 | 8.28 | 61.44 | 8.92 | 68.81 | 7.34 |
| Social Self | 67.5 | 9.52 | 72.85 | 5.8 | 66.89 | 6.09 | 68.10 | 6.24 |
| Body Investment Total | 89.17 | 12 | 97.46 | 5.11 | 87.67 | 9.64 | 89.84 | 12.12 |

^bOne-tailed.

Correlations Between Study Measures

A summary of the correlations (Spearman) between the scales used in the study are summarized in Table 3.

| | | | , | | | |
|--------------------|----------|---------------|----------|--------|--------|-------|
| | Physical | Moral-Ethical | Personal | Family | Social | BIS |
| | Self | Self | Self | Self | Self | Total |
| Physical Self | _ | | _ | | | |
| Moral-Ethical Self | .23 | _ | _ | | | |
| Personal Self | .58** | .52** | _ | _ | _ | _ |
| Family Self | .21 | .53** | .36** | | | |
| Social Self | .36** | .32* | .38** | .30* | | |
| BIS Total | .50** | .36** | .48** | .23 | .46** | |

Table 3: Correlations between study measures

Discussion

As predicted, respondents reporting a previous OBE were found to report higher levels of positive self-concept for the 'Moral-Ethical Self' and 'Personal-Self' subscale of the Tennessee Self-Concept Scale (TS-CS), while no differences were found on the Physical-Self or Family-Self subscales. However, OBErs were also found to score higher on the Social-Self subscale. These findings lend support to our argument that although OBErs score higher on a measure of body dissatisfaction (Murray & Fox, 2004; Murray & Fox, 2005a, 2005b), they maintain a positive self-image. Whereas for people in general scoring high in body dissatisfaction is usually accompanied by increased feelings of social anxiety and social physique anxiety, this relationship does not appear to be the case for OBErs. The unexpected difference between OBErs and non-OBErs on the Social-Self subscale of the TS-CS only lends further support to this argument.

The only difference to be found between OBErs and non-OBErs on the Body Investment Scale (BIS) was on its Care subscale. We had expected OBErs to score lower on body investment, based upon our theorizing that a lack of body investment would help explain why OBErs score higher than non-OBErs in body dissatisfaction but do not differ on measures of social anxiety. In fact, along with scoring significantly higher on the Care subscale, our OBE sample scored higher (rather than

^{*}Correlation is significant at the 0.05 level (2-tailed).

^{**}Correlation is significant at the 0.01 level (2-tailed).

lower as we expected) on total BIS and all the BIS subscales. These findings do not indicate a lack of psychological investment in the body on the part of OBErs.

Taken together, we draw upon the previous findings of Murray and Fox (2004, 2005a, 2005b) and those presented here to formulate a modified argument. We hypothesize that the self-reported dissatisfaction with their bodies expressed by OBErs (Murray & Fox, 2004, 2005a, 2005b) when completing the Body Satisfaction Scale (BSS) is qualitatively different from the dissatisfaction expressed by non-OBErs. That is, when completing the Body Satisfaction Scale, the dissatisfaction expressed by non-OBErs towards their bodies may reflect aesthetic concerns, while OBErs' responses might be more expressive of frustration with the physical constraints which a body imposes upon them. Further support for this interpretation is provided by the non-significant finding on the Physical-Self subscale of the Body Investment Scale. Items on this subscale explicitly relate to aesthetic concerns (e.g. "I am satisfied with my appearance"), but OBErs did not differ to non-OBErs on this measure.

We feel the above findings are an important development in understanding the relationship between the self and body as experienced by OBErs, and in aiding an understanding of how and why the OBE occurs. Crucially, the present findings appear to explain the prior anomaly found with regards to OBErs' expressed higher levels of body satisfaction but lack of elevated social anxiety. However, the present study has several limitations which should be acknowledged. The study sample was relatively small, comprised mostly of females, and drawn largely from an academic sample comprised of students and staff at two UK universities. This selection method means that there is a need to be cautious when interpreting the findings for samples which differ in significant ways to that in the present study.

The retrospective nature of the present study is a further limitation. This means it is not possible to make strong claims about possible causal relationships in the study findings. For example, while we would argue that differences in body-related experience predispose certain individuals to an OBE, an alternative explanation is that an OBE affects one's body attitudes.

Therefore, alongside further work to address body image in OBErs, similar future work needs to be carried out using a random sampling strategy (in contrast to our focus on a self-selecting academic popu-

lation), and where possible prospective studies carried out. In addition, the broad delineation in the present study between those who responded 'yes' or 'no' to the item for assessing whether an OBE had occurred should be replaced in future research by a more fine-grained analysis.

We would argue that the various forms of self-concept presented in this paper should be examined alongside body image in relation to different forms or types of OBEs, such as spontaneous versus deliberate OBEs, and those occurring as part of the related phenomenon of near-death experiences. Such analysis may reveal certain forms of selfconcept and body image to be more characteristic of particular types of OBE.

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Does Psi Exist and Can We Prove It? Belief and Disbelief in Parapsychological Research

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Abstract

Psychokinesis research is encountering difficulties in replicating its findings. While experimental and analysis methods became more and more professional in the last decades, researchers complain about a loss of effect size and evidence. Walter von Lucadoù explained this erosion of evidence with his "Model of Pragmatic Information" (MPI). He proposed a new experimental paradigm for future research. In elaborating further theoretic implications and consequences of the MPI, it is shown that the MPI is not suitable to provide evidence. Some effects like successful replications of ganzfeld experiments or the successful replicated sheep-goats effect indicate that the MPI has to be upgraded. Some evidence is given that successful experiments are dependent on experimenter's belief in paranormal phenomena. The best conditions for growing evidence might be the use of test subjects and experimenters who are open-minded and do not doubt in the existence of psi. The demand of skeptics to ban parapsychology from the realm of science have to be rejected. It is a science with its own special research conditions.

Introduction

The scientific status and position of parapsychology in the sphere of science has been a bone of contention from the very beginning (Bauer, 1985; Palmer, 1990; Alcock, 2003; Parker, 2003; Parker & Brusewitz, 2003;

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Irwin, 1989; Hoebens, 1982). Exponents of the skeptics' organisation GWUP (the German CSICOP) challenge the 'scientific nature' of parapsychology and seek to ban it entirely from the area of science if it fails to provide proofs for the existence of psi. In this context, it is often claimed that 'parapsychology has yet to succeed in identical replicating a single anomalous effect under laboratory conditions' (Hüsgen & Kamphuis, 2000)¹. Beside the problems of replication we find in general a decline of evidence and effect size of psychokinetic phenomena. Is this a consequence of the increasing skepticism in the last centuries?

At the beginning of the 17th century there was no academic parapsychological research. Miracles and paranormal events were generally accepted and widely evident in the society. Skepticism was just beginning to be a part of scientific work. In this time, the Italian monk St. Joseph of Cupertino provoked the displeasure of the Holy Inquisition through the numerous cases of him levitating during the elevation of the host which could not be explained scientifically: "There are many skeptical witnesses of the numerous levitations of Joseph of Cupertino who did not trust these phenomena and had enough scientific knowledge to justify their doubts. Yet it was precisely in the presence of such skeptical witnesses that Joseph of Cupertino levitated to amazing heights, virtually every time that mass was celebrated. The levitation occurred to him so frequently and led to such a disturbance of the service that he had to be tied down with lead boots; yet this was to no avail and he rose together with the lead boots. Sometimes he levitated to the ceiling of the church and it was only with the greatest effort that he could be brought down to earth again from the highest ledge to which he held on to after his awaking from ecstasy. On several occasions, an acolyte tried to hold him down but was himself carried upward together with him." (Benz, 1969, p. 218). Macro-PK phenomena like levitation were evident in the 17th century. There was little doubt about it, and even some skeptical witnesses were convinced by the experience of paranormal phenomena.

On the wake of the 20th century, paranormal effects became slowly an area of research. Reports of poltergeist phenomena and macro-PK events were widely discussed but never got an academic status or scientific recognition. Nevertheless, mediumistic phenomena were fascinating the academic world and attracted respected scientists like the radio pioneer Oliver Lodge. The famous German author and Nobel laureate

¹Quotes of German papers and studies were carefully translated into English and indicated by single quotation marks. Original English quotes were indicated by double quotation marks.

Thomas Mann only hoped to see 'once again, with my own eyes, the handkerchief ascending into the red light' (Mann, 1983, p. 255), and in 1922 mediumistic-talented test persons could move macroscopic objects many feet by psychokinetic influence (Bender, 1966, p. 496). In the 1930's, J. B. Rhine introduced scientific methods in parapsychology to evaluate macro-PK effects with psychokinetic talented test persons trying to influence dice tossing. Later Beloff and Evans introduced electronic devices and random event generators as targets for micropsychokinetic influence.

Today skeptic scientists are often involved in parapsychological experiment design in order to protect it against fraud or misinterpreted natural explanations. At the same time, anomalous PK phenomena become rare and weak in parapsychological research, and have shrunk to minor statistical mean value deviations of micro-PK effects in large databases containing abstract columns of numbers. It is required to run tens of thousands, even hundreds of thousands of PK experiments before any significance becomes apparent. The days of flying monks and PK-moved objects are over. Why did the effects lose their impressive strength? Were they all the result of fraud?

Skeptic scientists argue that with improved methods of analysis and evaluation many errors, artifacts and even fraud were excluded which seem to have been the true source of claims of the paranormal for them. When the highest standard of analysis is reached, no paranormal phenomena would remain in their view. But this is only one interpretation. It is the aim of this paper to introduce another interpretation: increasing skepticism for itself might be one reason for the erosion of evidence. This could depend on the nature of paranormal phenomena itself.

The problem of successful replications

In 1997 the Princeton Engineering Anomalies Research group (PEAR) published its evaluation of a twelve-year series of micropsychokinesis tests with random number generators (RNGs) which came to a (statistically) impressive conclusion: "The overall scale of the anomalous mean shifts are of the order of 10^{-4} bits per bit processed which, over the full composite database, compounds to a statistical deviation of more than 7 sigma ($p = 3.5 \times 10^{-13}$)" (Jahn et al, 1997, p. 363). The effect size of one bit in every 10,000 which could be changed

by the test subject in the intended direction appeared to be reliable and leading to the expectation that psychokinesis really exists as an anomalous, replicable phenomenon. A similar conclusion was drawn by Dean Radin: "After sixty years of experiments using tossed dice and their modern progeny, electronic RNGs, researchers have produced persuasive, consistent, replicated evidence that mental interaction is associated with the behaviour of these physical systems" (Radin, 1997, p. 144). This leads to the expectation that PK effects could be easily reproduced with a large number of tries and test subjects (Radin & Nelson, 1989). In 1996, the collaborative programme of anomalous Mind-Machine Interactions (MMI) under the leadership of the PEAR group was established. The laboratories of the Freiburg Anomalous Mind-Machine Interaction (FAMMI) and the Giessen Anomalies Research Program (GARP) took part in it. Their common goal was to replicate the successful PK results of the PEAR PK experiments. What also could be more disappointing than to discover in the years that followed, that the large-scale replication test performed by the MMI consortium was neither able to confirm the effect size that had previously been established nor to attain the level of significance which was to be expected on the basis of the tests run previously (Jahn et al., 2000).

But this disappointing result is not limited to the PEAR laboratory and the MMI consortium alone. While Radin and Nelson still claimed a reliable effect (Radin & Nelson, 1989; Radin & Nelson, 2000), a new meta-analysis based on effect-size computations rather than on Stouffer-Z revealed that the observed effects were not as reliable as they seemed to be: "A sensitivity analysis showed that only 67 studies, each with an average of 2366 bits, would be required to bring the database down to non-significance. Thus just a few studies could potentially change the conclusions from this meta-analysis." The PK meta-analysis of Steinkamp, Boller and Bösch collected the data of 357 published experimental studies and 142 control studies, and "both yielded the same effect size of $\pi=.50003$, although the effect size from the control studies went down to $\pi=.49999$ once one large control run reporting a significant effect had been removed." (Steinkamp et al, 2002).

At first glance the situation looks much better for the field of ganzfeld experiments (Utts, 1991). Bem and Honorton (1994) reported replicable evidence for an anomalous process of information transfer in 1994. Milton and Wiseman criticised the Bem and Honorton study, reanalysed the data and found a non-significant result in total. Bem,

Palmer and Broughton (2001) criticised the Milton and Wiseman study because they included studies which were not conform with the standard ganzfeld procedure, and they confirmed the significant overall result of the Bem and Honorton meta-analysis. But we don't know how robust these results remain if somebody works out a meta-analysis using those rigorous criteria which were applied in the Steinkamp, Boller and Bösch PK meta-analysis (Steinkamp et al, 2002).

These disappointments certainly fed the (skeptical) suspicion that anomalous paranormal effects do not exist (Alcock, 2003). However, according to Walter von Lucadou there would have been in fact no real reason to be disappointed in case of PK experiments, if the MMI consortium had applied his model of pragmatic information to the replication and the formulation of the effect size expectation. His model predicts that decline effects must arise in future replications (Lucadou, 2001). Is the model of pragmatic information convincing enough to reject any skeptic objection?

The model of pragmatic information

The model of pragmatic information (MPI) is a theoretical approach predicting such declining effects in psychokinesis experiments. It is not yet a complete and finalised theory, merely a model which seeks to describe the conditions in which an anomalous effect might be expected.

In MPI anomalous or psi effects are not supernatural but meaningful correlations between the test person (psi agent) and the target system (RNG). While interacting, the psi agent (or test subject) and the RNG become a closed system with self-referential dependencies, an "organisational closure" (Varela, 1985). This is irrelevant to any temporal or spatial distances, it is a non-local analogy to non-local effects in quantum mechanics (Lucadou, 1992). Its boundaries are defined by the ratio of internal and external pragmatic information in the interaction of its constituent parts. (Lucadou, 2001) The correlations of MPI are — in worst case — only a weak violation of the laws of nature as known today because the underlying mechanism of the correlation is unknown. However, the situation becomes more critical when such correlations are supposed to be used for long-distance transfer of information or signals. The possibility of intervention paradoxes prohibits such an information transfer: it would be a serious violation of natural laws (If I know what will happen in the future I can act in the present in such a

way that I can prevent unpleasant future events occurring). Therefore Lucadou recommends: "Do not treat psi as a signal!" (Lucadou, 2001, p. 10).

Pragmatic information is "a measure for the meaning of the information". It manifests itself in "its effect on the system", but it has no informative content (unlike a newspaper or a newscast on the radio). In order to show what pragmatic information is, Lucadou reported the following party scene: 'One of the guests is called to the telephone, returns after a short time and leaves the party without a word to the other party guests. No one else could have heard what was said during the telephone call, but we all know that something important must have occurred' (Lucadou, 1997, p. 144). We are unaware of the content of the call itself, but only of its effect.

Pragmatic information (I) which a system produces, is in itself the product of further factors which exclude the possibility of using pragmatic information for signal transfer: An event with the character of novelty happens unexpectedly and suddenly, it cannot be the basis of signal transfer because I don't know before whether this event might happen or not. An event which acts with autonomy cannot be used for signal transfer because I don't know how or where it will appear. These factors of pragmatic information exist in opposites: "Novelty" vs. "Confirmation" (Weizsäcker, 1974). Lucadou added later "Autonomy" vs. "Reliability" (Lucadou, 1997). The portion of pragmatic information grows in line with an increase in the portion of autonomy and/or novelty. The system itself contains something that resembles a "memory" in which the system states of the past are "stored". While the factors "Confirmation" and "Reliability" rise, the product of the produced pragmatic information falls. These factors are responsible for the decline effects observed in the replication experiments, because the novelty declines when repeated tests are run to reproduce such effects. At the same time the autonomy is limited, since one possible test result is already available as a result of the pilot experiment. In order to enable a repetition of a high degree of novelty, the effect must emerge either elsewhere in a replication where it is expected, or it must change its effect size or direction. MPI provides the possibility of conceptual replications with high degrees of novelty and autonomy. Identical replications have to fail: if they are successful they could be used for signal transfer which would violate the exclusion of an intervention paradox.

After all, with such a model the results of random experiments can

be described. Yet, how do we know whether a single psi effect claimed is a (still) unexplainable anomaly and not simply a variety of coincidence? Can meaningful research activities be conducted at all under such conditions?

In 2000 the author made a conceptual replication of the full moon effect as claimed by Radin and Rebman (1998) for casino payout rates with Retro-PK experimental data from Fourmilab (Walker, 1996), expecting that the Fourmilab Retro-PK data would demonstrate the same full moon effect. The time serial analysis of the experimental data with respect to lunar phase was published in the year 2000 (Etzold, 2002). A significant z-value of 3.24 for the first 53,082 Fourmilab Retro-PK experiment data seems to confirm Radin and Rebman's claims of a peak effect in the full moon period. Was it an anomaly or just a coincidence? After the publication in 2000 I made a replication of my first analysis with the next 47,192 experimental data which were accumulated in the Fourmilab Retro-PK data base until August 2001. This time I was doubtful about the outcome of the analysis. I could not believe that the observed lunar effect was persistent enough for replication (MPI for example forecasts a decline effect for the new evaluation). Now I got a (negative) z-value of -2.49 for the specified full moon time period, and I reported that this replication failed (Etzold, 2002).

Referring to my results (Etzold, 2002), von Lucadou wrote (2002, p. 83): 'The MPI...does not state that, if the experiment were to be repeated, the effect that had been established earlier would simply disappear, since it was merely a random fluctuation. Under MPI, it either disappears *slowly*, something which one would not normally expect to occur with a random fluctuation, or it *overturns* (as was the case in the Etzold study), or it appears in *other channels*, as occurred during the large-scale MMI replication experiment (Jahn et al, 2000)'. In a somewhat schematised form, three possibilities therefore emerge under MPI for an anomalous effect during replication:

- (a). Slow reduction (Decline)
- (b). Overturn, change of signs
- (c). Emergence in 'other channels' (Displacement)

Do these truly represent all of the possibilities, or are there more? As far as the three possibilities are concerned, (a) and (b) would appear

to be reasonable to the extent that they are found in the observation direction or at the other end of the scale. Yet, possibility (c) appears to be highly problematic. How do I know in which 'channel' the effect will re-appear? What happens if I am unable to find the channel because I do not possess the methods and measuring techniques for this channel?

These three possibilities therefore are not a real help if I am unable to say immediately after completing the replication experiment and prior to evaluating the data whether or not, under the circumstances, I can expect the outcome to fall into category (a), (b) or (c). Without further definition, the three possibilities put forward by Lucadou can be applied to the expected effect of any given RNG experiment in replications. A lack of evidence always remains. Lucadou himself admits in general (2001, p. 7): "To my conviction, parapsychology has...not yet succeeded in establishing indisputable scientific evidence that psi exists."

In a discussion with Volker Guiard (Lucadou, 2003), Lucadou points to his two fundamental theorems of parapsychology which I would like to reiterate at this juncture (Lucadou, 1997, p. 162):

- 1. Psi phenomena are non-local correlations in psycho-physical systems that are induced through pragmatic information which is generated by the (organisationally closed) system. The physical part of the system might be a random event generator, the psychological part is represented by a test person.
- 2. Each attempt at using non-local correlations for the purpose of signal transmission causes these to disappear, or converts them in an unpredictable manner.

These theorems are not widely accepted. In connection with the second fundamental theorem and its implied avoidance of intervention paradoxes, Lucadou also writes 'that psi must be conditioned in such a manner that no reliable signal transmission can result. This would suggest that, during a psi experiment, each statistical deviation that is measured and which can be interpreted as psi or an anomaly may not exceed a certain parameter' (Lucadou, 2003, p. 139). A signal transmission would mean: a clear and identifiable signal which is more than pragmatic information without any uncertainty.

According to MPI the existence of psi cannot be proven

In empirical science, inductive evidence is taken to confirm hypotheses which are derived from experience, observations and experiments. In this context, the term 'inductive' merely stands for a probable causal link between a hypothesis and the findings of an experiment or observation. The amount of truth which results from an experiment, based on a hypothesis, becomes all the more probable, the more frequently it can be repeated. Evidence relies on information which can be obtained from the interpretation of the experimental data.

For parapsychology this process of obtaining evidence, according to von Lucadou, depends fundamentally on MPI: "Because the MPI is a general system-theoretical description of interacting systems which acts self-referential, it can also be applied to the system that creates scientific evidence." (Lucadou, 2001, p. 10)

The information contained in the claims of evidence can, for example, be summarised in one sentence: 'psi-phenomena exist'. This is more than just external pragmatic information. It is a concrete piece of information content. This means that the correlation must be so convincing that it unmistakably 'carries' such information and consequently assumes the character of a signal. This approach, however, violates Lucadou's second fundamental theorem of parapsychology since, after all, the intention of this 'horizontal signal transmission' is to convey the information that 'the anomalous psi-phenomena exist'. The consequence of this is that the anomalous phenomena disappear or are modified in an unpredictable manner. In concrete terms, this means, that as soon as the experiment is repeated for the purpose of proving the anomaly, the results of the experiment will vary in the frames of the null hypothesis.

For skeptics the condition *sine qua non* for claiming evidence of an effect is a successful replication of the effect. Hergovich (2001, p. 122) summarises the skeptical position: 'To date, no convincing experiment has been found that proves the existence of psi-phenomena. It is not because the methods required by psychology could not be adequately applied or because the effect sizes were perhaps too weak..., but because the effects are not reliable enough.' Under MPI in the present shape, however, the effects cannot be 'reliable enough'.

The situation gets even more complicated because in such an experiment which should provide evidence, the whole dubiety of our con-

ventional worldview is present. With such a burden of information, the replications of an experiment for proving psi possibly has to fail according to Lucadou's second fundamental parapsychological theorem.

If the presumptions of the MPI were correct, psi comes therefore in fact across as a troll, a ghost that only manifests itself when there is no scientific conclusiveness. 'The more confident one is of having 'bagged' the psi effect, the lower the chances are that it can be replicated in a future experiment' (Lucadou, 1997, p. 187). However, on this basis, it is not possible to prove psi by further replications with the help of scientific laboratory research, and any attempt will lead to further disappointment. What ways out are there? At first we have to check whether the MPI is conform with the observed phenomena in parapsychology.

Is the MPI correct with its presumptions?

Anomalies in the sense of psi effects are evidently phenomena with the quality that they cannot be proven using conventional scientific methods. If the MPI is correct, we have to look for evidence but not for convincing proofs because proof-testing methods will destroy any possibility of finding evidence. Lucadou (2001, p. 13) has therefore proposed a new experimental paradigm that has been derived from MPI and which modifies the exterior test procedures and their evaluations with a view to attaining better findings. These include among others: no accumulation of evidence; short test runs; triple blindness; conceptual, i.e., no identical replications. However, his fundamental requirement alone, that of not-treating psi as a signal, raises doubts as to whether this new paradigm can produce better results. As long as this new paradigm is also accompanied by a level of interest in producing scientific proofs, any potential anomalous effect may be bound to collapse, no matter how much autonomy and novelty the experiment is subjected to.

Another critical point too is the postulation of short test runs. It is easier to make a study with short test runs, but it is easier too to suppress non-significant results of short test run studies. Additional, the interest of a journal's editor to publish short test run studies with non-significant results might be lower than to publish a long test run study with non-significant results.

Many scientists do not accept the MPI and its presumptions. One reason is that some empirical findings are not conform with the MPI. There is a lot of anecdotic material which suggests an anomalous information transfer which might be excluded by the implications of the MPI. Even in laboratory research, ESP could be used already for anomalous information transfer: Ryzl (1966) was successful in identifying "five three-digit numbers... without a single mistake." Ryzl claimed indeed, that "to do this, it was necessary to make 19,350 single color-calls... The average speed on the whole was about 400 calls per hour so that the mere accumulation of the data took some 50 hours (with two persons participating)." But this amount of time seems to be negligible with respect to the importance of this result today. In the context of the MPI, such a result might not be possible.

The concept of pragmatic information is controversial. Every scientific experiment is a kind of information transfer. We want to get new information and we want add knowledge to our world view. We have seen here that a scientific progress in psi research is only possible if we treat psi as a signal. Without this signal we don't have anything which we could interpret.

Another point is the forecasts of the MPI. As long as the MPI does not provide an exact formula which allow us to forecast the appearing and the magnitude of an expected anomalous effect, the MPI is suspected of being a self-immunisation strategy against critics. But this formula is necessary to test the MPI for its correctness (Schestag, 2002).

Belief and Disbelief in Parapsychological Research

Meanwhile believing in the existence of something has become part even of such solid sciences like physics. The hypotheses and theories about parallel universes or a infinite number of open multiverses seem to be mathematically correct (Susskind, 2006). But it is impossible for us to enter these multiverses. Space and time are insuperable frontiers for our explorative attempts of today. We have to believe that they exist, based on mathematical predictions.

In parapsychology the situation is somehow reversed. We don't have a theory of anomalous phenomena, but we have experiences which indicate the existence of anomalous phenomena. And we have indications that dealing with psi anomalies scientifically requires that I already believe in the existence of these anomalies if I want to obtain positive and significant results. This credo is not to be interpreted as any form of intellectual shortcoming like Hergovich (2001, p. 171) claims, but rather as an opportunity. By doing this, the experimenter is tak-

ing off the pressure from his research activities to have to prove something that cannot be proven. This could facilitate the scientific progress in parapsychology. The traditional Cartesian doubts that are prevalent in natural science are also merely a subjective fundamental principle which is just as capable of producing its 'cognitive blind spots' as 'belief' does. Yet, in the case of parapsychology, the Cartesian doubts are counterproductive, as it has been shown at last by the failed replication tests performed by the MMI consortium (Jahn et al, 2000). Only by this way it can be checked if the claimed human-machine interaction actually exists, if the thoughts in the mind of the experimenter can generate a corresponding effect in the physical world. Those researchers who believe in the existence of anomalous phenomena or believe in their own ESP or PK ability will get more positive results in their studies with other test persons (Smith, 2003b). Those who doubt this will get also the appropriate 'psychokinetic result' which seems to negate the existence of paranormal phenomena. The growing lack of positive PK results, the "erosion of evidence" (Lucadou, 2001, p. 7) might be a result of growing disbelief in the possibilities of PK which for itself could be a PK-generated result.

The first true indication of this effect emerged in the studies performed by Gertrude Schmeidler (1943) on the effect of belief or disbelief persuasions in ESP experiments. She observed that subjects who believed in an anomalous effect (the 'Sheep') performed better than those who viewed anomalous effects with skepticism (the 'Goats'). Schmeidler's notion of separating the 'sheep' from the 'goats' was: "Do you believe it is possible that ESP can be shown under the condition of this experiment?" A meta-analysis of the 'sheep-goat ESP studies' for the years between 1947 and 1993 performed by Lawrence (1993) produced an astronomically high z-value of 8.17 ($p = 1.33 \times 10^{-16}$) which provides high evidence for the existence of a sheep-goat effect. Edgar Wunder complements in reaction to my own reflections (Etzold, 2004): "The meta-analysis of Lawrence already was even a successful replication, namely of the above comparable study of Palmer (1971). Palmer (1971) found in the studies published till there a sheep-goat effect of a medium effect size which Lawrence found in the studies published afterwards again in the same order of magnitude". It seems that contrary to the predictions of the MPI successful replications are possible.

Believing in psi seems to improve the results of PK experiments. Smith (2003b) evaluated the psychology of the 50 named 'psi-conducive

and psi-inhibitory experimenters' and found by multiple regression of self-report questionnaires that higher psi-conduciveness scores were associated with belief in one's own ESP or PK ability.

Smith, while discussing different kind of experimenter effects based on explanations of social-interaction (Smith, 2003a), has collected some successful studies of parapsychological experiments which might confirm this statement and supposed: "If psi is real, then it is plausible, indeed likely, that the experimental participants are not the only source of psi in a successful parapsychology experiment. The experimenter may also exert a psi influence over the data. Given that apparently 'psi-conducive' experimenters typically tend to believe that psi exists, and are highly motivated to obtain findings in support of psi (often more so than their research participants) then one might argue that the experimenters are potentially a more significant source of psi than the participants." (Smith, 2003a, p. 79) Others before him have suggested the same experimenter-influence and noticed some anecdotic material: "For example, when Blackmore, a devoted parapsychologist for many years, found herself increasingly skeptical about Psi as a consequence of her inability to produce experimental evidence for it, she noted that 'many parapsychologists suggested that the reason I didn't get results was quite simple — me. Perhaps I didn't sufficiently believe in the possibility of *Psi'* (Alcock, 1987, p. 561).

This is possible. Smith commented in view of experimenter effects: "From a methodological perspective, whatever the purported mechanism(s) of this effect of the experimenter upon the data, it does raise potential problems for skeptical researchers who wish to attempt to replicate psi experiments. This is because it suggests that such researchers, especially if they act as the experimenter who comes into contact with research participants, are less likely to obtain positive findings even if the psi effect is real." (Smith, 2003a, p. 82) This material gives some evidence for the claims that a causal link exists between the erosion of evidence with increasing scientific criticism and skepticism. If this is true one skeptic experimenter or even other persons like checkers or observers (White, 1976a) could dominate the effect size of the whole experiment.

Alcock (2003) told an example for this case in which his friend Jeffers was involved, but without noticing that he himself could be the reason for obtaining negative results. "Jeffers stands in lonely company as one of the very few *neutral scientists* who have empirically investi-

gated the existence of psi phenomena." (Alcock, 2003, p. 36) Jeffers tried a conceptual replication of the PEAR RNG-PK experiments, not using RNGs but interference of light as target for anomalous influence. Alcock himself, whose position is radical skeptic, was involved in this experiment: "Jeffers came to me at least a tad defiantly, requesting that I review his experimental design and offer any suggestions and criticisms before he began his research. He stressed that I should not after the fact, were he to obtain data supporting the parapsychological interpretation, then argue that the experiment was not to be taken seriously because it had fallen methodologically short in some fashion. Thus began our relationship, which was to grow into the very positive one that it is today." (Alcock, 2003, p. 36-37).

Alcock himself became part of the organisational closure, in this case as a doubtful experimenter who wished to find the confirmation for his disbelief in Jeffers' experimental result: "As Jeffers reports in his paper, his research findings give no support to the Psi hypothesis." (Alcock, 2003, p. 37) The possibility that Alcock himself produced via the experimenter's psi faculties the negative result of Jeffers' research was not discussed in his paper, but cannot be ruled out if we apply the MPI for the whole system which consists of Jeffers, his experimental target and also Alcock as critical designer and reviewer of the experiment. Alcock, who believes in the null hypothesis and asks to give the null hypothesis a chance will find nothing else than evidence for the null hypothesis. If psi exists, and I believe it, psi will also acting in the skeptics attempt to obtain evidence for the non-existence of psi.

Consequences

In science we have "two schools of research on belief in the paranormal" (Lawrence, 1993, p. 83), represented by scientists and investigators who differ fundamentally in their approach. 'Parapsychologists' as well as the 'skeptics', organised in different communities. Every school has their own lists of studies which provide evidence for the correctness of their own belief or disbelief. These "schools" have been around since the inception of scientific parapsychology, and they are testimony to the fact that the scientific status of parapsychology was controversial in the beginning.

The conclusion drawn by the parapsychologists that predicated anomalies (or psi effects) cannot be proven in sense of a skeptical proof, might alleviate the tension in the relationship. For the 'skeptics', this would mean making a concession of not demanding from the parapsychologists, what they (and other scientific disciplines) can not produce. For the parapsychologists, it would mean relief, in that they would no longer need to 'prove' anything to 'the others'. Instead of having to invalidate their own findings in a proof-orientated world of research, they have now found space to ask for other questions, parameters of psi performance for example. If I evaluate under which conditions an anomalous effect appears or not, I do not only know that there is an effect but I know how it works too. Belief and disbelief are such parameters.

More than in any other scientific discipline the researcher and the experimenter themselves are part of the experiment they observe and analyse. Their expectations, hopes, fears, beliefs and disbeliefs are self-referential, they act as self-fulfilling prophecies (Watzlawick, 1985). There are two possibilities how the experimenter's belief or disbelief could affect the results: via affecting the participant's belief or disbelief in paranormal phenomena (Wiseman & Watt, 2002), or somehow more direct: by unconscious influence on the outcome of the experiments in the same manner as the attempts of the test persons to get a convincing result. The experimenter, regardless of his beliefs, has probably the highest interest of all in the outcome of the experiment. Therefore, he might be the most powerful psi acting agent — possibly against his own will.

As we have seen, the existence of anomalies or psi effects cannot be proven in a radical skeptical sense. A grain of doubt will always remain. But this is common with all other scientific research. Everybody is likely to find evidence for his own belief. It is equally possible to gather strong evidence for the existence of psi like it is possible to gather strong evidence for the null hypothesis. The one is true, and the opposite is true, too. Evidence in this case means only that belief or disbelief create their own corresponding results in the real world (Etzold, 1992). The answer for the question "does psi exist?" (Parker, 2003) is undecided and has to be undecided as long as we have found no convincing evidence which might even satisfy skeptic doubts. Eberhard Bauer (1991, p. 138) states that in spite of all the skeptic doubts, parapsychology still belongs in the realm of science. For scientific acceptance now it is more important to say under which conditions the existence or inexistence of psi is falsifiable. In general, the thesis "psi does exist" is falsifiable if every human experience can be explained in conventional scientific terms. The thesis

"psi does not exist" is falsifiable if anomalous human experiences will be found which cannot be explained in conventional scientific terms. Bauer qualifies this by writing that parapsychology 'does not seek to prove psi but instead wants to find explanations for a certain type of human experiences for which temporary was used the neutral theoretical term psi'. (Bauer 1991, p. 142). Parapsychology has to be considered a scientific discipline as long as human beings have experiences which can't be explained with the help of conventional scientific knowledge. However, this discipline has research approaches different from any other scientific branch. Against skeptic claims that no paranormal effects were ever replicated, we have to state that replications are possible. Parker and Brusewitz (2003) have given a list of successful research reports. The summarised results of parapsychological experimentation are indicative of an anomalous process of information transfer. Evaluating the state of belief/disbelief of the experimenters in connection with the experimental results might be another way for finding growing evidence. However, it is highly questionable if this will convince skeptics.

Lawrence claimed: "What is needed is a good, reliable, accurately validated measure of general belief in the paranormal... Questions should most certainly include the Schmeidler question seen to be joint most successful measure of belief in terms of getting results." (Lawrence, 1993, p. 83) And White adds: "It is obvious that the role of the experimenter (conceiving this term in its broadest sense) must be taken into account in designing the results of parapsychological experiments" (White, 1976b). And Parker added: "High-scoring subjects and successful experimenters are to be found and a technology is available." (Parker, 2003, p. 132) Test subjects like experimenters should be tested before the beginning of an experiment, using a variant of Schmeidler's question: "Do you believe it is possible that PK can be shown under the condition of this experiment?" For doing successful parapsychological laboratory work it seems necessary and consequent to document the belief or disbelief of the experimenter for further evaluations. But the most promising way to respond to the question of missing evidence might be the search for parameters and modulator variables of psi performance.

We know that the daily weather is very elusive. While the sun may shine at one moment, clouds could appear in the next hour and the day could finish with heavy rain. In the past people had only weather proverbs for forecasting the weather of the next few days, and we know how reliable those weather proverbs had been. Most of them were nothing more than superstitious beliefs. Today, the most powerful computers and immense data pools of different environmental data are necessary to forecast the weather alone of the next few days. In relation to that, the prediction of the appearing and disappearing of an anomalous effect is still in its infancy. Kennedy argued, "that many factors combine together to make psi elusive" (Kennedy, 2001) and Wunder phrased the only meaningful question: 'In which respect psi anomalies are replicable and in which respect they are not (yet)?' (Wunder, 2004) To find the answers for these questions might be the tasks for the next time.

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Historical Notes on Psychic Phenomena in Specialised Journals

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Abstract

This paper presents brief information about the existence and orientation of selected journals that have published articles on psychic phenomena. Some journals emphasize particular theoretical ideas, or methodological approaches. Examples include the Journal du magnétisme and Zoist, in which animal magnetism was discussed, and the Revue Spirite, and Luce e Ombra, which focused on discarnate agency. Nineteenth-century journals such as the Proceedings of the Society for Psychical Research and the Annales des Sciences Psychiques emphasized both methodology and the careful accumulation of data. Some publications, such as the Journal of the American Society for Psychical Research and the Dutch Tijdschrift voor Parapsychologie, were influenced by the agenda of a single individual. Other journals represented particular approaches or points of view, such as those of spiritualism (Luce e Ombra and Psychic Science), experimental parapsychology (Journal of Parapsychology), or skepticism (Skeptical Inquirer). An awareness of the differing characteristics of these publications illustrates aspects of the development of parapsychology as a discipline.

Introduction

With the rise of modern interest in psychic phenomena, several specialised journals were created both to put on record the existence and investigation of such happenings, and to provide a venue for serious discussion of them. Our paper is not meant to be a complete history of such journals. The paper should be understood as an impressionistic discussion that reflects the interests of the authors. We are limiting ourselves to a small number of journals and have included on purpose a few journals published in languages such as Dutch and Italian that are usually forgotten because of language barriers, as well as to some of the methodological and theoretical perspectives that are embedded in the editorial policies of these journals. It is beyond the scope of this paper to place these journals fully in their historical context, nor to consider all aspects of the publications in question. We do not write for historians and sociologists of science, instead we are writing for researchers in parapsychology who generally are unaware of the journals on which we focus.

Not all publications we mention are parapsychology journals. Some focus on mesmerism and spiritualism, and include differing viewpoints about the phenomena. But regardless of the concepts discussed, or of the terminology employed, all of the journals that will be highlighted in this paper were concerned, at least in part, with phenomena that required the assumption that knowledge may be obtained without the use of the senses, and that the physical world may be influenced but by other than the usual means.

Nineteenth Century Journals of Mesmerism and Spiritualism

Mesmerism

During the nineteenth century many journals were founded for the purpose of discussing mesmeric phenomena such as trances, healings and clairvoyance. Among the mesmeric periodicals were *Annales du magnétisme animal* (1814-1816), *Archiv für den thierischen magnetismus* (1817-1824), *Blatter aus Prevorst* (1831-1839), *Journal du magnétisme* (1845-1860), *Magikon* (1840-1853), *The Magnet* (1842-1844), and *The Zoist* (1843-1856).

In England, the *Zoist* was edited by physician-mesmerist John Elliotson between 1843 to 1856 in London. The *Zoist* recorded numer-

ous examples of what seemed to be mesmerically induced healings and clairvoyance phenomena.¹ In a period when other British periodicals, such as the medical journal *Lancet*, were antagonistic to mesmerism (Parsinnen, 1979), a publication that would present the opposite view was needed. Elliotson utilized the *Zoist* as an instrument of pro-mesmeric propaganda and as a way of defending mesmerism from its critics. Evidence for this may be found in his frequent criticisms of the medical profession's opposition to mesmerism, opposition which Elliotson considered to be a "disgrace to their intellect" (Elliotson, 1843b, p. 208). He described them as "practitioners who go their daily rounds gossiping their ignorant nonsense against mesmerism" (Elliotson, 1844b, p. 393).

Elliotson frequently criticized the medical profession by opening his papers with epigraphs against mesmerism, quotations from opponents that covered such points as the inefficacy of mesmeric cures. The paper that followed typically answered these points in great detail. Two good examples of Elliotson's style of ridiculing the critics by exposing their ignorance are papers in which he prefaced his discussion with comments made by Thomas Wakley, editor of the *Lancet* and an acerbic critic of mesmerism (Elliotson, 1843a, 1844a).

In France, the Baron Jean du Potet de Sennevoy edited the *Journal du magnétisme* starting in 1845. While the journal covered all aspects of animal magnetism, its editor had a particular interest in healing. As stated in an editorial in the first issue of the journal presumably written by the Baron: "A therapeutic agent of great power exists; it is within the reach of everyone and it can heal the most desperate ones" (Appel, 1845, p. 3, this, and other translations, are ours). The journal, Du Potet (1845) wrote in the following contribution to the first volume, was "concerned with the *art* of magnetizing maladies..." (p. 8).

The first volume includes many examples of medical uses of magnetism. In one of them, the amputation of a leg while the patient was magnetized was reported (Opérations, 1845). Other papers discussed healings that had presumably been accomplished by magnetic action (e.g., Cutter, 1845; Goux, 1845). One of these (Cutter, 1845) reported on medical practice in the United States in which bronchitis, dyspepsia, neuralgia, paralysis, and ulcers were treated by mesmerism.

In Italy the two main mesmeric journals in the nineteenth cen-

¹For a review of the contents of the *Zoist*, see Dingwall (1968, pp. 90-113).

tury were Cronaca del Magnetismo Animale (1850-1860) and Gazzetta Magnetico-Scientifico-Spiritista (later called La Salute; 1865-1890). These journals were published by physicians who practised hypnosis (Bernardini, 1890). Both journals devoted a good part of their articles to the discussion of theoretical aspects of hypnosis, while also presenting casehistories (e.g. surgical interventions with hypnotic analgesia, resolution of neurological and psychiatric troubles). Sometimes articles on psychical phenomena were published in the form of narratives of spontaneous cases such as apparitions of the dead during dreaming, thoughttransference after the production of the hypnotic trance, and the transposition of the senses. Such phenomena were covered from a point of view favourable to Spiritism (Gallini, 1983). It is interesting to note that mesmeric periodicals, as well as the physicians who practised hypnosis at the time, were vigorously opposed to clairvoyance. They used this term to indicate the powers of some hypnotized persons who claimed to be able to perceive the interior of their bodies so as to make medical diagnoses.

Spiritualism and Spiritism

Many spiritualist and spiritist periodicals appeared in the nine-teenth century, among them *Annali dello Spiritismo* (1864-1898), *Banner of Light* (1857-1885), *Light* (1881-present), *Revue spiritualiste* (1858-1869, which continued with different title), and *The Spiritualist* (later *Spiritualist Newspaper*, 1869-1882), *Spiritual Magazine* (London, 1860-1877), and *Spiritual Telegraph* (New York, 1853-1857).

The *Revue Spirite* (Figure 1) was founded in France in 1858 by Hippolyte Léon Dénizard Rivail, better known as Allan Kardec. Its purpose was to publicize spiritism in France. Kardec felt that there was a need for "a special organ that could inform the public of the progress of this new science and prevent the exaggerations of credulity, as well as of skepticism" (Kardec, n.d./1858, p. 2). Kardec saw the function of his journal as twofold. First, it was founded to publish cases of phenomena such as somnambulistic lucidity, second sight, presentiments, visions and apparitions, and "psychological" phenomena taking place at the moment of death (Kardec, n.d./1858, p. 6). Second, it conveyed the doctrinal content of spiritism. In addition, Kardec used the *Revue* to organize the spiritistic movement. He published speeches given at spiritistic conferences by himself and others, the proceedings of the meetings, and news of developments both in France and abroad (e.g., *Bulletin de la so*-

cieté parisienne d'étude spirites, 1860).

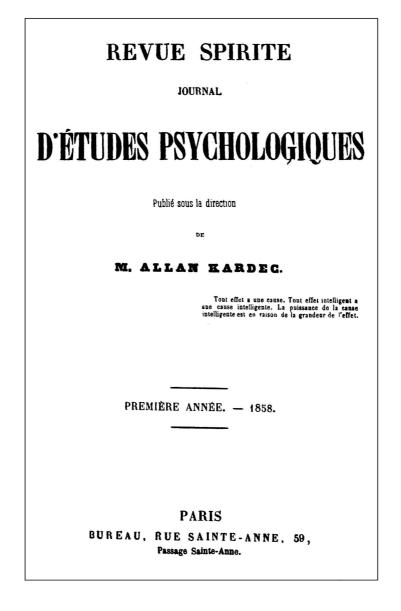


Figure 1. Cover of first volume of Revue Spirite

Spiritism was also promoted through discussions of poltergeist and possession phenomena, believed by Kardec to be spirit interventions from the other world. Kardec presented spiritism as a system of great utility because in possession cases mediums could communicate with the entities to put a stop to the manifestations (Biondi, 1986).

Kardec clearly conceptualized his journal as an instrument through which he could spread spiritism as a philosophy as well as promote such concepts as reincarnation and such phenomena as mediumistic communication, both of which presupposed the acceptance of survival of bodily death. The journal devoted considerable space to the transcription of those spirit communications that were moral and philosophical in character because Kardec assumed humankind could benefit from the knowledge of advanced spirits. This was a key element in his philosophy, the whole of which was based on a simple system: questions and answers to and from spirits of deceased individuals.

In other countries, among them England, various groups founded many spiritualist journals and newspapers to promote their causes because, as Oppenheim has stated: "By and large, the nonspiritualistic press reported the world of séances and spirits in a tone of condescension repeatedly questioning the judgment and critical faculties — not to mention the honesty — of spiritualists in general" (Oppenheim, 1985, p. 48). Consequently, a variety of journals such as *The Spiritualist* and *Light* were founded in England to provide a non-hostile forum for the movement.²

However, there was more to the founding of these spiritualist publications than the need to provide a favorable context for discussion. As Barrow (1986) and Podmore (1902) have reminded us, the journals reflected different orientations to Spiritualism as a philosophy and as a social movement. Some British publications, such as the *Spiritual Magazine* (founded in 1860), were conservative in that they were Christian and distanced themselves from reform movements and such political positions as socialism. In contrast, the journal *Human Nature* (1867-1878) served the popular movement in that it was non-Christian but committed to social reform and ideas of human equality.

The Spiritualist (founded in 1869), later called *The Spiritualist Newspaper*, had a different orientation. In Podmore's words this publication "was avowedly intended to represent the scientific element. It essayed primarily to record the phenomena, to analyse the evidence, and discuss the explanations, and proposed to defer theological and Socialist speculations until a more convenient season" (Podmore, 1902, Vol. 2, p. 168). This emphasis on the recording and analysis of the phenomena was evident in the reports of William Crookes (1874) and Cromwell Varley (1874) on the materialization phenomena said to take place around the medium Florence Cook. Many reports of seances with other physical mediums were published as well. Among these were reports on mediums D.D. Home (Aksakof, 1871), William Eglinton (Harrison, 1876), and

²For a list of American spiritualist journals and newspapers, see Braude (1989). There were also many articles and reports published in general newspapers presenting both positive and negative images of the phenomena (e.g., Bogus Spiritualists Exposed, 1888; Curious Phenomena, 1852).

Francis Ward Monck (Oxley, 1876). This does not mean that other spiritualist publications ignored the use of mediumistic and other phenomena to validate Spiritualism. But the *Spiritualist Newspaper*, as stated by Podmore, seemed to emphasize phenomena over other concerns.

The leading journal on Spiritism in Italy during the nineteenth century was *Annali dello Spiritismo in Italia*, published monthly between 1864 to 1898. It was edited by Niceforo Filalete, who believed Spiritism was a philosophy of life and a religion, somewhat different but not contrary to Christian belief. Filalete used the journal to reply to the continuous attacks launched by Catholic priests and bishops against Spiritism.

Every issue of the journal published at least one long article on philosophical, ethical, or doctrinaire themes, many mediumistic "communications," and brief excerpts of dialogues with the "deceased." In the final decades of the *Annali* mediumistic poems and books were published which were said to have been dictated by Dante's spirit through a well-known painter of Dante's themes, Francesco Scaramuzza (Scaramuzza, 1880).

In the Netherlands, Spiritualism became very popular from 1860 onwards. By the end of the nineteenth century there were several journals dedicated to the topic. In 1877, Mrs. Elise van Calcar, an author and early activist for women rights, started the magazine *Op de Grenzen van Twee Werelden*. Over the years, 28 volumes of this journal were published. Mrs. Calcar did not encourage her readers to experiment themselves with the world of spirits as she was of the opinion that such things should be left to real mediums. Religious ministers were also greatly interested in Spiritualism. Some associated spiritualistic phenomena with the devil. Others, such as the reverend Martinus Beversluis, promoted the movement. Around 1900 the Rev. Beversluis found a journal called *Geest en Leven* of which 25 volumes were published. Its intended audience were other members of the clergy.

In 1896, the Dutch spiritistic society Harmonia began to publish their journal *Het Toekomstig leven*. From about 1900 to 1920 this was the most important and influential journal in Holland. The Editor-in-Chief was J.S. Gobel. The second editor, N.H. de Fremery, was known for his critical mind and an advocate for the experimental testing of mediums. In May of 1914, De Fremery resigned as editor of the journal because his series of in-depth debunking articles on the famous medium Mrs. Harris were not appreciated either by J.S Gobel or by many readers of the journal (De Fremery, 1914).

Psychical Research Periodicals

The Proceedings of the Society for Psychical Research

The last quarter of the nineteenth century and the first half of the twentieth saw the founding of a variety of journals devoted to psychical research in different countries, a process that has continued to our time. Some of those founded in the nineteenth century are: *Psychische Studien* (1874-1926), *Annales des sciences psychiques* (1891-1919), *Psychical Review* (1892-1894), and *Rivista di Studi Psichici* (1895-1901).

No other periodical of the nineteenth century was as influential for the development of psychical research (at least between the 1880s and the 1920s) as the Proceedings of the Society for Psychical Research (PSPR, 1882-present).³ Founded in London in 1882 the Society for Psychical Research (SPR) gave order to the study of psychic phenomena by defining and identifying the research problems of the times. One of its instruments in this endeavour was the PSPR. The first evidence for this is the opening document in the first issue of the Proceedings in which the Society printed its statement of purpose. The SPR set as goals for itself the investigation of such phenomena as thought-transference and apparitions (SPR, 1882). This statement, an early attempt to chart the field in terms of particular areas of study, provided a rudimentary outline of the desired research program. From 1882 the *PSPR* was the main way in which the Society reported its work and communicated with the lay public and with the scientific community.⁴ In its pages the methodological approach to the field was articulated in such a way that the periodical became very influential and served as a model for other journals and groups interested in psychic phenomena. The importance and impact of the PSPR is apparent in the high number of citations to its articles contained in European introductory books about psychical research published during the 1920s and the 1930s (e.g. Driesch, 1932/1933; Sudre, 1926).

An overview of the types of papers published in the *PSPR* between 1882 and 1900 show a variety of approaches to the field. These were experiments (23%), theoretical or conceptual papers (23%), multiple case

 $^{^{3}}$ The *Journal* of the Society, published since 1884, was distributed only to members until 1948. It included shorter articles than the *PSPR*, as well as correspondence and the minutes of the SPR meetings. Today the journal has taken over the purpose of the original *PSPR*. It appears regularly while the *PSPR* appears occasionally.

⁴Some SPR members also discussed psychical research in newspapers (Gurney, 1883) and in the intellectual review magazines of the times (e.g., Myers, 1885).

reports (14%), séance reports (9%), methodological reviews (8%), general literature reviews (6%), single case reports (4%), and other (12%). These approaches were not novel in 1882, but they represented the beginnings of systematic and organized psychical research. By focusing on these topics a small number of SPR members hoped to actively reorganize the field along the empirical lines that characterized nineteenth-century science at large. In the pages of the *PSPR* such individuals as Edmund Gurney, Frederic W. H. Myers, Eleanor M. Sidgwick, Henry Sidgwick and others prescribed methodology and recommended potentially fruitful lines for future research. They did nothing less than redefine research standards to focus on methodological concerns.

For example, early SPR researchers discussed a number of evidential problems in detail with such spontaneous phenomena as apparitions of the dead (Mrs H. Sidgwick, 1885), and general ESP experiences (Barrett, Massey, Moses, Podmore, Gurney, & Myers, 1882). The latter paper emphasized the importance of interviewing witnesses and of obtaining independent corroboration of their statements. There were also prescriptions about how to conduct thought-transference experiments. An early circular on the subject mentioned the importance of recording the results of every trial as opposed to selected ones, the necessity of absolute silence during the test, and it recommended the use of such simple targets as cards and numbers (SPR, 1883). In addition, the SPR writers were concerned about such potential artifacts as the inherent problems of taking testimony in seances (Davey, 1887; Hodgson, 1887, 1892), sensory cues such as those provided by hyperesthesia (Myers, 1887), and fraud in physical mediumship (Mrs H. Sidgwick, 1886).

Other European and American Journals

Other journals fulfilled functions similar to those of the *PSPR*. Founded and edited in Germany by Russian imperial Councilor of State Alexander Aksakow, the journal *Psychische Studien* (*PS*, 1874-1926) was very important in bringing together the community of Germans concerned with the study of psychic phenomena. The journal provided a forum for the discussion of methodological and theoretical issues, as well as a place to discuss controversial issues (e.g., Wittig, 1884). In addition, as Wolffram (2005, p. 62) has argued, *PS* provided German students of mediumship with information about foreign developments, such as the work of William Crookes and Alfred Russel Wallace, and

Akakow's (1887) discussion of spirit photography in England. Wolffram summarized Aksakow's plans for the content of the journal. He hoped to include the "phenomena of the waking state, including sense deception, hallucination, second sight and intuition ... phenomena such as dreams, visions, somnambulism, hypnotism, clairvoyance and ecstasy ... [and] more subjective and problematic phenomena, including spiritualism, which occurred in both waking and non-waking states ... " (Wolffram, 2005, p. 62).

Many prominent authors wrote for *PS*, among them Carl du Prel, Max Dessoir and Albert von Schrenck-Notzing. The latter published many important papers in *PS* in later years, some of which have been reprinted in his collected works (Schrenck-Notzing, 1929). For example, he published reviews of the work of other researchers such as Oskar Fischer (February 1925) and W.J. Crawford (July 1921), and reports of poltergeist phenomena such as "Spukphänomene bei Johanna P." (May-June 1923).

Annales des sciences psychiques (ASP) was another important European journal, published in Paris between 1891 and 1919. In the introduction to the first issue of the ASP, French physiologist and psychical researcher Charles Richet (1891) emphasized the importance of focusing on facts as opposed to theories, which he considered premature. Ophtalmologist Xavier Dariex (1891), the editor of the ASP, took a similar approach. Referring to telepathy, he assured the readers of the ASP that the journal was going to center on research and on the observation of facts, but not on theory. With this in mind they presented many original case reports (e.g., Morice, 1892-1983), as well as some case discussions reprinted from the PSPR (e.g., Mme H. Sidgwick, 1891/1891-1892). This emphasis on facts and observations was also evident in séance reports, such as those which recounted the performances of Italian medium Eusapia Palladino (e.g., Sabatier, de Rochas, de Gramont, Maxwell, Dariex, & de Watteville, 1896). While the ASP published some theoretical papers (e.g., Denis, 1895), for the most part the journal focused on the compilation of evidence, at least during the first decade of its existence. An empirical orientation was not unique, as can be seen in the content of other journals such as PS and PSPR. But in general, theory was more often discussed in the *PSPR* than in the *ASP*.

In 1895, Giovanni Battista Ermacora, a young physicist, and Giorgio Finzi, a spiritist, founded the *Rivista di Studi Psichici* (*RSP*, 1895-1901), a monthly journal devoted to psychic phenomena, as defined and

studied by members of the English SPR. In the foreword they wrote that the purpose of the journal was to search for the truth in this area, based on positivist and scientific principles, and not to seek wonders as other publications did (Ermacora & Finzi, 1895). During the following years the *RSP* dealt with psychic phenomena with a rigorous attitude. There were discussions about telepathy, precognition, and poltergeists from a critical point of view, and analyses of mediumistic phenomena that did not refer the doctrine of spiritism.

The first volumes of the *RSP* also include a detailed review of English experiments on telepathy (later published as a book, Ermacora, 1898), and original research on phenomena such as poltergeists (Ermacora, 1897). Ermacora was almost the only Italian author during this period to conduct original research. He filled the pages of the *RSP* with high quality material often drawn from SPR publications. When Ermacora died in 1898, the *RSP* changed its mission under the editorship of authors interested in survival and mediumship. The first four years of the journal's life represented the best Italy had to offer, and was close in quality to the standards set by the *PSPR*.

In line with the European tradition Inglis (1984) has described, such journals as the *ASP*, the *Revue Métapsychique* (*RM*, first called the *Bulletin de l'Institut Métapsychique International*, 1920-1982), and the *Zeitschrift für Parapsychologie* (1926-1934), published more reports about physical phenomena than did the *PSPR*. A comparison of articles about mental and physical mediumship published in the *PSPR* and in the *RM* from 1920 to 1930 shows that the French journal published more papers about physical than mental mediumship, while in the pages of the *PSPR* the opposite was true. Seventy-five percent of the mediumship papers published in the *PSPR* (N = 36) focused on mental mediumship, and 25% on physical effects. In the *RM* (N = 68) the proportion of papers was 21% and 79%, respectively (the difference was statistically significant, N (1) = 104, χ^2 = 26.95, p < .001). These journals articulated the research traditions of two very different groups of researchers, expressing their basic assumptions, presuppositions, and preferred subject matter.

As other periodicals discussed here, the *RM* was heavily influenced by the personalities and interests of its editors and main contributors. In the first period of its history, physiologist Charles Richet, and subsequently, physicians Gustave Geley and Eugène Osty influenced its content (Lachapelle, 2005). These men engaged in the study of biological and psychological dimensions of man as part of their professional

lives and work. Consequently, in keeping with their interests the journal published articles about such phenomena as materializations (e.g. Geley, 1924). The *PSPR* likewise followed the preoccupations of the SPR. Drawing on the nineteenth-century psychological tradition that was apparent in a good proportion of the SPR work (Gauld, 1968), later work focused more on mental phenomena and the issue of survival of death (e.g., Saltmarsh, 1929; Mrs H. Sidgwick, 1922).⁵

In the United States the American Society for Psychical Research published two periodicals that helped to develop American psychical research; the Proceedings of the American Society for Psychical Research (PASPR, 1885-1889, 1907-1974), and the Journal of the American Society for Psychical Research (JASPR, 1907-present). The new series of PASPR, under the editorship of philosopher James H. Hyslop, published remarkably detailed studies of mediumship, particularly those Hyslop conducted himself (e.g., 1910). An analysis of JASPR during the period in which Hyslop was its director and editor (1907-1920) shows that, to some extent, JASPR was a one man journal. Out of 331 articles for this period, 220 (67%) were authored by Hyslop. In addition, out of 156 issues for this period, 73 (47%) carried only one article, of which Hyslop was the only author. Hyslop's domination of JASPR is also evidenced by his strong promotion of his personal views of psychic phenomena and their study. For example Hyslop published long discussions defending the validity and logical consistency of the survival hypothesis (e.g., 1913), and arguing the weakness of telepathy as an alternate explanation for mediumistic communications (e.g., 1907). In his words, survival was "proved and proved by better evidence than supports the doctrine of evolution..." (1913, p. 88). Hyslop also devoted a considerable number of pages to criticisms of other psychical researchers' publications (e.g., 1917).

After Hyslop's death in 1920, *JASPR* changed. From the mid 1920s onward the journal slowly came to be dominated by supporters of the Margery mediumship, although this was not always visible in the journal's content. According to Thomas Tietze (1973), during the 1920s *JASPR* adopted a "policy of suppression of all evidence unfavorable to the Margery case" (p. 63).⁶ This included the rejection of negative re-

⁵There were, of course, exceptions to these emphases. Some articles in the *RM* dealt with ESP manifestations with no emphasis on biological aspects (e.g., Richet, 1920), and some *PSPR* papers focused on physical phenomena (e.g., Dingwall, 1926).

⁶This suppression did not extend to J. B. and L. E. Rhine's involvement with Margery, as argued by Matlock (1987).

views of a book by Malcolm Bird that defended Margery and of a paper by E. E. Dudley on the infamous thumbprints of Margery's spirit control Walter (Tietze, 1973, pp. 63, 159). The fact that no papers critical of Margery appeared in ASPR publications during this time and that Margery's husband authored papers about her mediumship (e.g., Crandon, 1925) suggests an editorial policy designed to defend Margery's mediumship at all costs.

In Germany, Albert F. von Schrenck-Notzing founded the *Zeitschrift für Parapsychologie* (*ZP*) in 1926 as a continuation of the previous *Psychische Studien*. Schrenck-Notzing was able to do this because of his financial independence, which allowed him to decide what was going to be published in the *ZP*, but also to "hire and fire editorial staff at will, and to set the agenda for parapsychological research in Germany..." (Wolffram, 2005, p. 166). Schrenck-Notzing remained the most influential figure behind the journal, controlling the content of the journal until his death in 1929 (the journal stopped publication in 1934). This produced considerable controversies with other German parapsychologists, such as Rudolf Tischner and Rudolf Lambert (Wolffram, 2005).

In the pages of the ZP one can see a variety of publications, some of which appear in Schrenck-Notzing's (1929) collected works. Among these are the following discussions about methodology that served as prescriptions for German researchers. In "Ein elektrischer Apparat für Medienkontrolle," (first published in 1926), Schrenck-Notzing discussed Karl Krall's system of electrical control of mediums, and presented his adaptation of the system. Electrical controls, he argued, could settle the often discussed propensity of some mediums to liberate their limbs so as to fake telekinetic phenomena. Another essay published in 1927, "Die Beweisführung in der Paraphysik," in part a reply to the critiques of Richard Baerwald, was also devoted to methodological issues. Schrenck-Notzing argued that we should not ask more proof than that which we ask of other sciences. In the case of Willy and Rudi Schneider, critics of their physical phenomena argued that the brothers were skillful magicians. But Schrenck-Notzing claimed that he and others had investigated the Schneiders controlling them to such an extent that such criticisms need to be considered speculations unsupported by the facts. In the paper, Schrenck-Notzing described specific forms of the control of mediums, arguing that sometimes the medium can be controlled through holding his or her limbs or putting the medium in a cage, or through the use of luminous substances that could put on the

medium's clothing, or on the objects that were expected to be moved telekinetically. In other words, Schrenck-Notzing was trying to limit the applicability of the fraud as an explanation by showing knowledge of the problem and of procedures necessary to control for such artifacts. In these articles in the *ZP* Schrenck-Notzing attempted to develop a scientific and critical parapsychology, and to justify belief in telekinesis and materialization.

The *ZP* also included many reports of phenomena (e.g., Schrenck-Notzing, 1928), as well as conceptual discussions of different sorts, among them such varied issues as criteria to determine what constitutes a fact in parapsychology (Kronfeld, 1929), parapsychological terminology (Prübusch, 1929), the application of psychoanalysis to psychic phenomena (Winterstein, 1930), and critiques of discarnate agency as an explanation of mediumship (Hänig, 1934).

In 1920, the Studievereniging voor Psychical Research was founded in the Netherlands under the direction of the well-known psychologist Gerard Heymans. The board of the society decided to establish a journal to publish their experimental reports. The journal was called *Mededeelingen der Studievereeniging voor Psychical Research (MSPR)*. The first issue was published in 1921 and included the famous report of the telepathy experiments conducted by Drs. Heymans, Brugmans and Weinberg (1921) of Groningen University, with a student named Van Dam. A second experimental article by Brugmans (1923) discussed his research on the "passive condition" of van Dam during the experiments, as assessed by the galvanic skin response (see also Schouten & Kelly, 1978).

Soon after the birth of the Dutch SPR there were two camps. On one side, there were those who wanted to conduct laboratory experiments, and on the other side, there were those who wanted to conduct sittings with mediums under "natural" circumstances, but under conditions that were as tightly controlled as possible. Several extensive reports of such sittings were published in the *MSPR*, among these the sittings in 1920 with the famous British medium A.V. Peters in Utrecht and the psychometric séances with Mrs Akkeringa in 1922 (Van der Hoop & Van Suchtelen, 1923).

Dr Paul Dietz, W.H.C Tenhaeff, and the publisher Emil Wegelin had founded the independent *Tijdschrift voor Parapsychologie* (*TP*) in 1928. This was, in fact, a commercial magazine. Tenhaeff soon suggested that it would be better for the field if the *MSPR* was incorporated in this

new publication, and the first issue of the *TP* was published in November 1928. From the first issues of the *TP*, Tenhaeff had a very prominent position because he was the primary editor. He intended to publish "experimental" work. However, by "experimental" Tenhaeff was not referring to what later became known as the Rhine approach. Experimental work for Tenhaeff was, in addition to Rhine's approach, the use of such psychological methods as introspection, the historical-bibliographical method, and the in-depth evaluation of spontaneous cases. Tenhaeff's (1940) article on reports of spontaneous occurrences of the phenomena of "colored hearing" provides one example of this wider definition of "experimental." Another later example is Tenhaeff's long article about the personality structure of psychics, in which he argued for links between the personal and emotional history of psychics and their ESP abilities, and response preferences (Tenhaeff, 1957).

By the end of the Second World War Tenhaeff was the most important parapsychologist in the Netherlands. It was decided at that time that the TP should become the official magazine of the Dutch SPR. Tenhaeff did not allow members of the younger generation such as George Zorab and Jan Kappers to have much influence on either the Society or the TP. While Tenhaeff's dominance of the journal was clear, Kappers did write some articles (six papers, e.g., Kappers, 1954) and Zorab wrote a much larger number (47 papers) during the 1946–1957 period. One remarkable example of Zorab's work, especially since it was written in English, is an article of Zorab entitled "Collectively Perceived Apparitions and Psychoanalysis" (Zorab, 1953). Tenhaeff dominated the TP until he died in 1981. His control of TP was not healthy, particularly during the period between the late 1960s and 1970s. Being 70 years old in 1964, Tenhaeff lost track of the way parapsychology was developing, causing a number of political problems with the new generation. The details of these years are beyond the scope of this paper.

In the late 1980s a new editorial team that included Dick Bierman, Hans Gerding and Hein van Dongen, brought a new focus to the *TP*. The journal became more academic and included papers about the "new" parapsychology, for example one that linked the field to physics through a discussion of the observational theories, while still keeping spontaneous cases reports and personal experiences. By the end of the 1990's the journal had changed once again. Today it is less academic, its articles are written in a more popular style, and it is printed with an attractive lay out that includes illustrations.

Tenhaeff was often criticized because he did not publish in English. Most of his books and articles in the *TP* were in Dutch. In order to meet this criticism Tenhaeff decided to reprint some of his most important research in an English language publication called *Proceedings of the Parapsychological Institute of the State University of Utrecht*, which appeared in December 1960. The first issue dealt with qualitative research on the use of paragnosts (Tenhaeff's term for psychics) for police investigations (Tenhaeff, 1960a), two examples of well-documented spontaneous cases (Tenhaeff, 1960b), and the chair experiments with Gerard Croiset (Tenhaeff, 1960c). Only three issues of the proceedings were published.

Experimental Parapsychology

Probably the first journal dedicated to experimental parapsychology was the Dutch publication *Driemaandelijksche Verslagen van het Psychophysisch Laboratorium te Amsterdam*. The publisher was Floris Jansen who started his Psycho-Physical Laboratory in Amsterdam in 1906 (Kramer, 2006). Jansen, a former medical student at Amsterdam University, was mainly self-taught. When it came to his research Jansen was convinced that there must be a continuum in evolution from biological to psychological forms of life. He was not a spiritualist, and believed that physical mediumship and such phenomenon as Reichenbach's Od, were examples of the connections between biology and psychology.

In the first issue of his journal, issued in the spring of 1907, Jansen (1907a) stated that the journal would cover as much experimental work as possible on the relationship between biological and psychological systems, and the energy of the ether. While literature reviews would be included, the priority was going to be experimental reports. Jansen (1907c) reported on his own experiments to test the validity of Paul Joire's sthenometer (an instrument to measure an individual's psychic force). Furthermore, Jansen repeated Reichenbach's Od experiments with an improved experimental design, and studied "mental suggestion" (Jansen, 1907b, 1907d). However, due to financial reasons, the journal did not last very long. Four issues (in Dutch and German editions) were published between April 1907 and April 1908. By July 31st of 1908, Jansen went bankrupt and his laboratory and journal were discontinued.

As experimental parapsychology was developed in the United States through the work of J.B. Rhine and his associates (Rhine, 1934; for

an overview see Mauskopf & McVaugh, 1980), a need was felt to create a new publication. The *Journal of Parapsychology* (*JP*, Fig. 2) was founded in 1937 and continues to be published to date (on the *JP* see Mauskopf, 1987; Mauskopf & McVaugh, 1980). The first two volumes of the *JP* were edited by William McDougall and J.B. Rhine, with Charles E. Stuart as Assistant Editor. As argued by Tietze (1973): "With the 1937 publication of the first volume of the *Journal of Parapsychology*, a new era of psychical research began. Published by Duke University, the [*JP*] consisted of careful, well-ordered reports of experimental studies..." (p. 176).

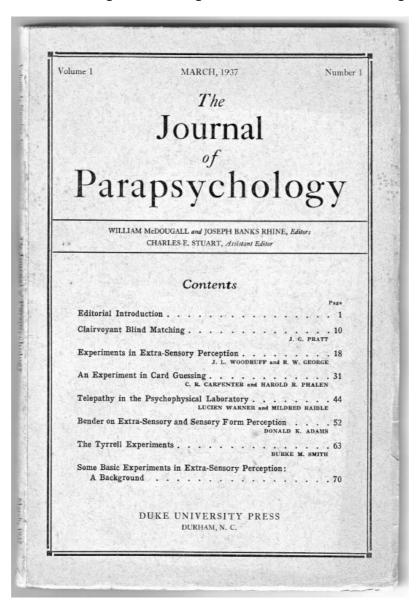


Figure 2. Cover of first issue of the Journal of Parapsychology. Reproduced with permission.

The *JP* was one of the vehicles through which J. B. Rhine and his associates at Duke University articulated their experimental research pro-

gram. The perspective of the journal was discussed in an unsigned editorial published in the first issue that has been attributed to McDougall (Mauskopf & McVaugh, 1980, p. 147), but that may have been authored by Rhine as well. The editorial presented an agenda for the new publication, as well as for the field at large. The term parapsychology, which had been used before in Germany to designate psychical research (e.g., Driesch, 1932), was given a new meaning:

"Parapsychology is a word that comes to us from Germany ... We think it may well be adopted into the English language to designate the more strictly experimental part of the whole field implied by psychical research as now pretty generally understood ... We do not claim that any sharp line can be drawn marking off the field of parapsychology within the larger vaguer province of psychical research. Rather, we anticipate that the stricter experimental methods will gradually invade other parts of the province annexing them to their own more special field, until possibly the two shall coincide."

(McDougall & Rhine, 1937, p. 7).

This perspective is evident in the journal's contents during the 1930s and 1940s. During this period the *JP* published many ESP experiments using such participants as mediums (Birge & Rhine, 1942), and children (L.E. Rhine, 1937). There was also work relating ESP scoring to such variables as distance (Rhine & Humphrey, 1942), and intelligence (Humphrey, 1945).

This was a field that was coming of age, which needed to move beyond amateur societies and into an academic laboratory approach such as that which had already proved fruitful in the work of J. B. Rhine (1934). The *JP* fully articulated the Duke Laboratory's work and its experimental paradigm.

In fact, the *JP*, much more than its American competitor *JASPR*, emphasized experimental reports from the beginning of its publication. For the first decade of the *JP* (1937-1946) experimental papers constituted 52% of the total of articles published, while only 11% of *JASPR's* papers reported experiments (Zingrone, 1988, p. 332).

"Rhinean" style experimentation was strongly supported in Italy for more than twenty years (1955-1977) by such journals as *Metapsichica* (1946-present), *Giornale Italiano per la Ricerca Psichica* (1963-1964), and

Rassegna Italiana di Ricerca Psichica (1964-1972). All these journals sprang from regional groups of parapsychologists which, in addition to some case research, conducted some laboratory studies of ESP abilities (e.g. Cassoli & Guarino 1964; Cerioli, 1955; Schepis 1939/1965). About 30% to 40% of the articles in that period were reports of original studies. In general it can be said that they succeeded in disseminating knowledge of parapsychology throughout the country. Over time, however, the acceptance of scientific parapsychology declined and these journals were forced to publish more popular and descriptive contributions, a process that caused an identity crisis among Italian parapsychologists.

The European Journal of Parapsychology (EJP) is an example of a modern journal published in the Netherlands that included many experimental papers. It was edited originally by Sybo Schouten and Martin Johnson of the Parapsychology Laboratory at the University of Utrecht. The first issue of the EJP was a so-called demonstration copy which appeared in August of 1975. In order to avoid selective reporting of research results, the journal encouraged the submission of the experimental design and methodology sections of the paper before the actual experimental work was conducted. The decision to accept or reject the paper, then, was based on the quality of the proposal, as opposed to its results. In this way, the editors hoped to prevent the lack of publication of well-conducted studies with statistically insignificant results (Johnson & Schouten, 1975). When the Parapsychology Laboratory was closed down in 1988 (Schouten, 1988-1989), Sybo Schouten made sure that the EJP could survive by moving it to the Koestler Chair of Parapsychology in the Department of Psychology at the University of Edinburgh. Several years later the EJP moved to Sweden, where it was published at the University Göteborg under Adrian Parker. More recently it has returned to Edinburgh, where it is being published under the editorship of Paul Stevens and Ian Baker.

Other Journals

In Italy, *Luce e Ombra* (*LO*, 1901-present), has always had a clear spiritistic orientation. In the first years the content was in accordance with Christian beliefs. Many of its articles started with "INDGCR," the Italian acronym for "In the Name of Jesus Christ, Redeemer." However, between 1905-1906 *LO* progressively moved away from conventional religion and embraced a particular form of "scientific spiritism," a doc-

trine strongly based on mediumistic and psychical phenomena (Biondi & Ravaldini, 2000). Under the firm direction of Angelo Marzorati, until 1931, *LO* published many articles supporting a broad spiritualistic position. There were also many reports of séances with such mediums as Charles Bailey, Augusto Politi, Filippo Randone, and Linda Gazzera, as well as analyses of old cases of psychic phenomena. From 1906 on, the most frequent contributor to the journal was Ernesto Bozzano, a strong defender of ideas of non-physicality and discarnate agency (Ravaldini, 1993). His articles in the journal both publicized and defended survival and spirituality by focusing on a variety of conceptual issues (e.g., Bozzano, 1923) and phenomena (Bozzano, 1934). To appreciate Bozzano's work with this journal, suffice it to say that in the years between 1925 to 1935 he contributed 1,845 pages, out of a grand total of 6,779 pages, that is, 27% of the journal's content.

After Marzorati died in 1931, his successor, Antonio Bruers, argued in an editorial that "supernormal psychology" was the only science closely connected to the "mystery" of human beings (Bruers, 1932). Bruers argued that this field presented "an impressive series of facts that current scientific theory does not explain" (p. 6). Under Bruers editorship then, the purpose of the journal was precisely to discuss these issues. Between 1931 and 1939, *Luce e Ombra* changed its title to *La Ricerca Psichica* and in September of 1939 publication was suspended. After the WWII, however, the journal started again. It maintained its previous spiritistic orientation, but now had a new openness to different ideas and even to non-survivalist positions.

Similar to *LO*, in England *Psychic Science* (1922-1945, continued until 1947 as *Experimental Metaphysics*) was particularly open to spiritualistic perspectives, being the "Quarterly Transactions of the British College of Psychic Science." For example, criticizing the tendency of some people to explain phenomena by recourse to the subconscious mind, an editorial argued that, instead: "We are looking for a directive will, a sustained and coherent intent, and a selective intelligence, and it is and must be something superior to and distinct from that purely passive secondary and mechanical agent which we properly term the 'subconscious'" (Editorial Notes, 1924, p. 271).

In Argentina, a journal was founded in 1947 that focused on medical and biological aspects of psychic phenomena. The *Revista Médica de Metapsíquica* (1947-1948) of which only three issues appeared, represented the interests of a parapsychological association composed of

physicians. Its guiding principle was expressed in a motto printed on the cover of the journal: "Biology without metapsychics, a bird without wings." Some of the articles included an early EEG study, and a comprehensive case study of a single psychic (Canavesio, 1947, 1948).

Some publications have gone even further beyond the discipline-building perspectives of *JASPR*, *JP* and other modern journals that focus on particular approaches while still publishing investigations conducted under competing approaches. We are referring here to publications that do not allow opposing viewpoints. An American example is the popular magazine *Skeptical Inquirer* (*SI*, 1976–present, called *The Zetetic* for 1976-1977) published by the Committee for the Scientific Investigation of Claims of the Paranormal (CSICOP). *SI's* ideological and rhetorical policies have been discussed by Hansen (1992) and by Pinch and Collins (1984). The pages of this publication are devoted to debunking the claims of the paranormal and to expressing the viewpoint of skeptics of parapsychology. Practically everything *SI* publishes about the field is negative in tone. The goals of the *Inquirer*, as Truzzi (1991) once wrote, is "not inquiry but to serve as an advocacy body, a public relations group for scientific orthodoxy" (p. 25).⁷

The "advocacy" Truzzi refers to is not expressed through original research as is common in science at large, where there are competing research programs. SI articles report very little original research. Instead, they consist of reanalyzes or critiques of previous work, and of speculative and theoretical discussions of physical, biological and psychological processes that might explain psychic phenomena in normal terms. Examples of actual research in which data are collected and analyzed with particular hypotheses in mind are rare in this magazine. This situation may indicate that its editors have formed a conscious strategy to combat the proponents of paranormal interpretations of psi phenomena. By avoiding publishing research, the magazine implies that there is nothing to study, thus making it easier to argue rhetorically that the phenomena under study by parapsychologists can be clearly and easily explained by known principles of the sciences. Otherwise, if SI publishes original research, it runs the risk of legitimizing the study of the anomalies that form the subject of parapsychology (and of other fields),

 $^{^{7}}$ McConnell (1987) has argued that one of the tactics used by the SI to ridicule parapsychology is to associate its claims with all sorts of wild popular beliefs so as to create the "impression that scientific parapsychology is part of a mélange of ignorance" (p. 191)

a legitimacy its editors want to deny.8

Another case in point is that of the *Revista de Parapsicologia*. This popular magazine was published in Brazil from 1973 to 1974 by the Centro Latinoamericano de Parapsicología, a group under the direction of the Jesuit priest Oscar González Quevedo. The magazine functioned basically as an instrument of propaganda for González Quevedo's system of parapsychology. His system was designed to destroy spiritism and its interpretations of psychic phenomena by using explanations that focused on the powers of the subconscious mind (including psi from the living explanations), by maintaining that psychic abilities are pathological, and by defending the supernatural, that is, divine character of some phenomena. A clear religious point of view is obvious in the *Revista*, especially with regard to such claims as the supernatural nature of the Lourdes healings.⁹

Like the *Skeptical Inquirer*, the *Revista* published little that may be considered original research. In addition, like the *Inquirer*, the *Revista* argued that its main purpose was to educate the public and to dispel superstition. Both magazines represent examples of extreme ideological agendas. While all journals have an agenda, very few limit themselves to papers that conform to a specific point of view. Most other publications discussed here – *ASP*, *JP*, *LO*, *PSPR*, *PS* – allow a variety of views towards psychic phenomena in their pages, but the *Inquirer* and the *Revista* have always presented a corporate opinion.

Concluding Remarks

Our purpose in this paper has been to present information about the existence and approaches of selected journals that have discussed psychic phenomena. We hope that our brief discussion has successfully brought to the attention of modern researchers a variety of publications, some of which are all but forgotten. We also hope that our notes have contributed as well to a breach in the language barrier, prevalent today, in which journals such as *Annales des sciences psychiques*, *Luce e Ombra, Psychische Studiën*, and *Tijdschrift voor Parapsychologie* are ignored by many English speaking individuals.

⁸Pinch and Collins (1984) argue that it is precisely this lack of commitment to research that allows CSICOP and the *SI* to follow an ideal model of science that makes it easy to criticize the work of others.

⁹For a brief review of this system, see Rueda (1991, pp. 181-186). Such ideas are part of a previous tradition in which priests have interpreted parapsychology from religious perspectives (e.g., Omez, 1956/1958; Tonquédec, 1955).

Undoubtedly some readers will miss more in-depth discussions of content, and of the historical and social contexts in which the journals were published. Other readers may also want to see discussions of additional journals. Among the more recent journals we could have added are such titles as the *International Journal of Parapsychology*, the *Journal of Scientific Exploration*, *New Horizons*, *Parapsychology Review*, *Psi Research*, *Quaderni di Parapsicologia*, *Revista Argentina de Psicología Paranormal*, *Spiegel der Parapsychologie*, *Theta*, and the *Zeitschrift für Parapsychologie und Grenzgebiete der Psychologie*. Unfortunately *EJP* restrictions on article length do not allow us to expand our discussion or add other publications.

The fact that almost every group publishes their own journal in order to have a "voice" is an indication of the power of the printed word, especially as it is embodied in periodical publications in which messages may be delivered repeatedly. Journals express philosophical outlooks, give publicity to particular ideas, and attempt to organize and reorganize disciplines by actively maintaining particular agendas. Examples of this include the efforts of early SPR writers (in *PSPR*), Hyslop (in *JASPR*), Bozzano (in *LO*), Schrenck-Notzing (in *ZP*), Tenhaeff (in the *TP*), and Rhine (in the *JP*).

The mesmeric, spiritualistic and spiritistic journals promoted the importance of animal magnetism and discarnate agency, respectively, as explanations of a variety of phenomena. Such journals as *PSPR*, *JASPR*, *ZP*, *TP*, and *JP* helped parapsychology develop a variety of approaches that are still influential today. The fact that they provided a forum in which methodological issues were discussed guided later research efforts and helped psychical research to develop as a science.

More systematic studies of the journals in question could contribute to our understanding of the development of parapsychology as a scientific and scholarly discipline, as has been done, for example, in psychology (e.g, Danziger, 1990). Unfortunately, our journal literature lacks the systematic historical studies that are more common for the journals of other disciplines (e.g., Meadows, 1980; for an overview of more recent work see Hamlin, 2005).

Many questions could be asked in studies of the journals mentioned in this paper. For example, how did the early mesmeric journals deal with mediumship and with the spiritualist movement? How was the survival question depicted in later journals such as the *JP*? Journals are particularly valuable in attempts to trace the historical development

of particular theoretical concepts or general ideas. For example, one might investigate how the understanding of the role of the subconscious mind and altered states of consciousness figured in the manifestation of ESP, of physical models of PK, or of the idea of the distribution of psychic abilities among the general population have changed over time.¹⁰

The journal literature may be useful to trace methodological changes over time. An example from psychology is Danziger's (1990) study of the use of case studies and statistics in psychology. Other research might include the frequency of multiple authorship in parapsychology, and how do depictions of specific issues or methods differ in parapsychology journals as compared to journals of other disciplines. Much can be learned about the structure of a discipline by mapping patterns of collaborative work (Harsanyi, 1993). It is also possible to conduct interesting citation analyses that can be helpful in charting intellectual communities as well as in the influence of particular publications or ideas (Hérubel, 1999), on the literature as a whole.

Following Zingrone (1988) in parapsychology, and the bibliometric studies of journals of other disciplines (e.g., Davoust & Schmadel, 1991), one can see that there is much to chart in quantitative studies of the journal literature. Such studies may help us to understand more deeply the variety of individual and national traditions, both in terms of type of research and writings style. Furthermore, such analyses might assist us in documenting such changes over time, including developments in methodology, rearrangements at structure of accepted conventions in writing style, and the use of graphic modes of representation.¹¹

Of course such studies need to be conducted using other sources of information as well, archival materials among them. In addition to journal papers we need to pay attention as well to the lives of researchers, focusing on such issues as their education and training, considering social, intellectual and cultural aspects. In any case, a deeper understanding of the circumstances and content of journals such as the ones discussed in this paper have many lessons to teach us about our field. It is our hope that our brief review will inspire research along the lines we

¹⁰This does not mean that the study of journals has been ignored in parapsychology. For example, studies of the work of the SPR (Gauld, 1968) and of J.B. Rhine (Mauskopf & McVaugh, 1980) have used journal publications. But much more could be done with parapsychology journals (e.g., Zingrone, 1988).

¹¹There is an extensive literature about the sociology and rhetoric of scientific publications that would be useful in conducting such studies. Examples include the publications of Bazerman and Paradis (1991), Gilbert and Mulkay (1984), and Gross, Harmon and Reidy (2002). Hamlin (2005) reviews some recent anthologies of papers on the topic.

have suggested.

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ERRATUM

In the paper by Paul Stevens published in the EJP, volume 20.2, 2005, "The effect of weak magnetic fields on a random event generator", the Results section on page 143 refers to "Columns 3-6 of Table 1". This should read "Columns 2-5 of Table 1".