
Parapsychology: The “Spiritual” Science

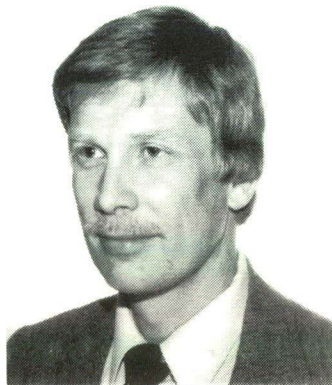
James E. Alcock

Parapsychology, once the despised outcast of a materialistically oriented orthodoxy, may now claim pride of place among the spiritual sciences, for it was parapsychology which pioneered the exploration of the world beyond the senses.

—J. L. Randall, *Parapsychology and the Nature of Life*

Whether in séance parlors, in “haunted” houses, in simple laboratories using decks of cards and rolling dice, or in sophisticated research centers employing equipment of the atomic age, the search for psychic (“psi”) forces has been under way, in the name of science, for over a century. The quest to demonstrate the reality of these putative

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forces, which are said to lie beyond the realm of ordinary nature, at least insofar as it is known by modern science, has not been an easy one. Yet, despite the slings and arrows of sometimes outrageous criticism, many men and women have dedicated themselves over the years to the pursuit of psi and to the task of attempting to convince skeptical scientists of the necessity of taking the psi hypothesis seriously.

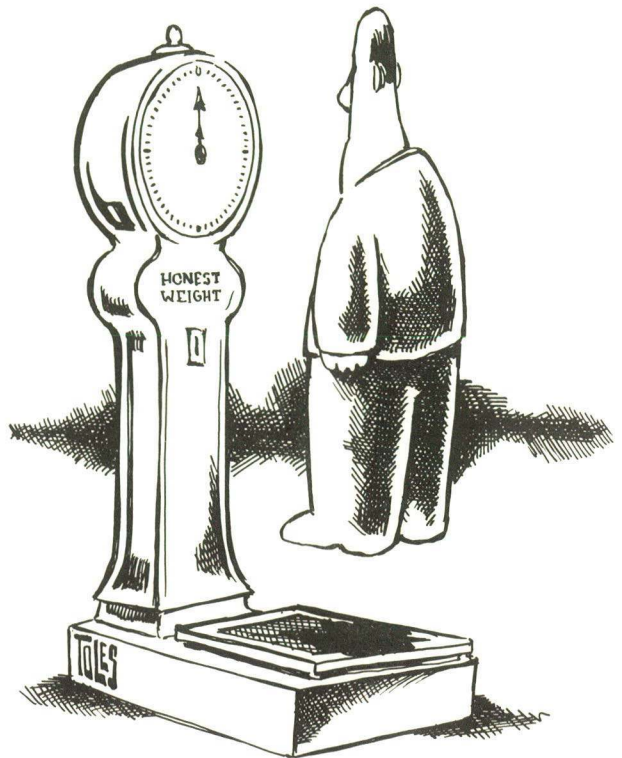
There must be some important motivation to continue to believe in the reality of psi, and to continue to pursue its study. In this article, it will be argued that this motivation is, for most parapsychologists at least, a quasi-religious one. Such a viewpoint is bound to anger many in parapsychology who see themselves simply as dedicated researchers who are on the trail of important phenomena that normal science has refused to study. However, were that the case, one would expect to see much more disillusionment and abandonment, given the paucity of the results, than actually occurs. There are several, perhaps many, instances in parapsychology of researchers who admit not only to never having produced a single indication of psi in their laboratories but to not even having had personal experiences of a seemingly psychic sort; yet they continue to be active within parapsychology and to express a conviction that psi is real. Such behavior is hard to understand until one examines the history of parapsychology, until one sees the reasons that distinguished scholars were in the past drawn to the study of the paranormal. In order to understand the rise of parapsychology, it is necessary to begin with the development of science itself.

Human beings everywhere have always tried to come to grips with the mysteries of existence through the erection of powerful belief systems to explain them. Both through natural magic, based on the notion that nature operates in a lawful way that can be discovered and then used to control natural processes, and through religion, which is based on a belief in supernatural beings who hold in their power the destiny of the world and all that is in it, humankind has tried to forge a link with nature and with forces that might lie beyond it.

In the sixteenth and seventeenth centuries, when modern science began to form out of a swirl of superstitious ignorance mixed with practical knowledge, belief in spirits, witchcraft, and divination was still taken very seriously, not just by the untutored masses but by the educated elite as well. The scientific revolution, beginning with Copernicus's challenge to the geocentric model of the universe, reflected in part a growing sense of dissatisfaction with the dogmatic theological philosophy that had been predominant in Europe for centuries, a dissatisfaction that had already given rise to the Protestant Reformation. As scientific thought developed and spread, the belief in magic began to decline, although the reason for this is not so obvious as it might seem, and indeed is not fully understood even today (Thomas 1971).

The keystone to the development of science, as K. E. Boulding (1980) pointed out, was the high value placed on the combination of informed speculation and empirical testing, with the latter being used as a check on the former. It was the attempt to fit theory to observation, rather than the use of sophisticated logic by itself, that led to the Copernican challenge that began the scientific revolution. Copernicus's ideas, especially as later promoted by Galileo, ran headlong into opposition with Catholic dogma, and this led to considerable friction between the emerging scientific world-view and theology. Yet the degree of conflict between science and religion has usually been greatly overstated (Rudwick 1981). The giants at the roots of modern science—Isaac Newton, Robert Boyle, and the others—in no way doubted the existence of a divine creator, nor were they hindered by organized religion in their attempts to explain the workings of nature. Indeed, it may be in no small part due to religious ideas that modern science arose, for it can be argued that it was principally the evolution of religious thought that gave rise to the quest to discover immutable natural laws of nature. The rise of Protestantism, whether reflecting or generating the shift away from magical thought, brought with it a dramatic change with regard to belief about divine intervention in human affairs and promoted an attitude that was far less oriented toward the miraculous and the supernatural than was that of the Roman Catholic faith.

While the Catholic God regularly manifested himself through miracles and sacraments, Protestantism, especially the Lutheran and Calvinistic strains of it, downplayed or denied the immanence of God. The Protestant belief in a transcendent God led to the view that the universe is a legal-mechanical creation that operates according to divine law. Thus Newton, Boyle, and others carried out their research secure in the belief that immutable laws of nature, imposed by God, were there to be discovered (Klaaren 1977). Protestantism no doubt further influenced the development of the scientific method through its



belief that one could *personally* question theological dogma, for it was necessary to have both the will and the freedom to challenge the Aristotelian pronouncements that had for so long dominated the world-view of the Roman Catholic church.

Yet, in many specific instances, organized religion did do battle with science and technology. This was especially true of the Roman Catholic church in the early days of science. This was partly because the church, under the guidance of St. Thomas Aquinas, had linked theology *and* morality to Aristotelian science, and thus any significant departure from the latter threatened the former. Consequently, as Andrew White ([1896] 1965) described, the Catholic church attempted to suppress not only the heliocentric theory of the solar system but many other ideas and products of science as well, from inoculation to lightning rods. This is not to suggest that Protestant leaders were always foursquare on the side of science, for nothing could be further from the truth, although some Protestant sects do appear to have been more tolerant and inspiring with regard to scientific thought than were others (Kemsley 1973). Despite the individual freedom to question dogma, and despite a new view of the role of the divinity, some Protestant leaders exceeded their Catholic counterparts in their zeal to halt the rise of science and technology. However, even when Protestant clerics were outraged by scientific claims, Protestantism as a whole could not mount as effective an opposition as the Catholic church for several reasons: There was a diversity of competing sects; there was no body like the Inquisition to enforce orthodox belief in Protestant countries; and, perhaps most important, Protestantism did not possess the concept of infallibility. Scriptural interpretation was left to individual judgment, and thus it was possible for individuals to accommodate scientific ideas through modification of their interpretation of tation of the Bible (Russell [1935] 1961). Yet it is clear that,

where Protestant clerics have been able to mount effective protests, they have often done so; the Scopes “monkey trials” and the recent attempts to promote “scientific creationism” as an alternative to evolutionary theory through insistence that science textbooks should give equal time to creationism bear witness to the fact that at least some Protestant sects continue to view science as a threat.

It is important to note that during the same epoch that gave rise to science—the late sixteenth and early seventeenth centuries—there was also a sharp recrudescence in magical thinking and practice. As John Beloff (1976) commented:

. . . The challenge to orthodoxy in religion and philosophy, especially to Aristotelian scholasticism, had left something of an intellectual vacuum which science had not yet been able to fill. The result was a great upsurge of interest, not only in the two traditional occult sciences of astrology and alchemy but also in all manner of old and new systems of magic. [p. 193]

Two centuries later, beginning in the second half of the nineteenth century, there was another explosion of scientific and technological achievement and, just as in the sixteenth century, interest in magic and the occult flourished; this was the very time that modern psychical research was born.

In the second half of the nineteenth century, a number of influences combined to set the stage for the development of “scientific” parapsychology:

1. The growing interest within medical circles with regard to hypnotism and dissociation stimulated speculation about the hidden potentialities of the human mind. Hypnotized subjects occasionally seemed to demonstrate clairvoyant or other psychic qualities, and this aroused curiosity about the possibility of true psychic powers. Although the concept of hypnosis itself was not quite respectable in scientific circles because of a pedigree that tied it to mesmerism, respectable medical researchers were beginning to assess its properties.

2. Because of the religious opposition that had met some aspects of scientific and technological advancement, there was great suspiciousness in science about anything that was redolent of the religious beliefs that had so dominated thought throughout the Middle Ages and beyond. Christianity became a target for those who found scientific thought more compelling than religious dogma. For example, Sir Francis Galton initiated an experimental attack on the manifestations of religion with his famous “Statistical Inquiries into the Efficacy of Prayer,” first published in the *Fortnightly Review* in 1883 (Hearnshaw 1973). The latter 1800s also saw a number of critical analyses of biblical material, such as Ernest Renan’s *Life of Jesus*, which made it difficult for those of a logical, rational bent to continue to accept the Bible as being literally correct.

Ironically, just as Protestantism seems to have been responsible, at least in part, for the changes in thinking that led to the scientific revolution and to the consequences of that revolution that challenged all religion, so too can Protestantism be linked to the birth of psychical research, an endeavor that in its turn ultimately stands as a challenge to traditional religion. J. J. Cerullo (1982) in *The Secularization of the Soul*, suggests

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that it is no accident that psychical research emerged in Great Britain and the United States rather than elsewhere. This is because, he says, the Protestant versions of Christianity make some particular demands on the individual: The believer is led to understand his own selfhood in terms of an ineffable, unique, and immortal soul. Yet he argues, as did Georg Weber before him, that Protestant belief systems were also particularly vulnerable to secularizing forces, as a result of the denial of supernatural interventions into the day-to-day world:

During the nineteenth and early twentieth centuries, scientists attempted to move into the cultural territory vacated by religion. But science’s alternative view of selfhood (or, perhaps, its failure to provide any singular or cogent view of selfhood) was disquieting. First in Spiritualism and then in psychical research, what we see is an attempt to come to terms with scientific thought while retaining the understanding of the self that religious tradition had transmitted. [1982, pp. xi–xii]

The attempt to save the concept of the soul, while at the same time casting it into a form more acceptable within the framework of science, led to the formulation of what Cerullo calls the “secular soul”:

It was a vision of selfhood that whittled down the Western religious sensibility to its barest essence and, in doing so, magnified its most intoxicating assertion. It was a vision of the self that incorporated what had been the supernatural qualities of the soul into the worldly persona itself, with the vitalism religion would truly unleash only after death operational in the here and now. It was a vision of protean man. [p. xii]

3. The Darwinian theory of evolution and the challenge it posed to religious beliefs made many people, scientists among them, uneasy about the future of their beliefs and pushed them to attempt to find evidence of an empirical nature to buttress them. It was Darwin’s *Origin of Species* that most threatened the Christian concept of the soul. It was as serious a challenge to theology as had been Copernicus’s heliocentric model of the solar system; for if evolutionary theory were true it would be necessary to abandon the idea of the fixity of species, to accept that humankind descended from the lower animals rather than having been the special creation of a divine Being, and to accept that the world was created much, much earlier than calculations based on biblical descriptions would suggest. As one clergyman in Darwin’s day expressed it: “If the Darwinian theory is true, Genesis is a lie, the whole framework of the book of life falls to pieces, and the revelation of God to man, as we Christians know it, is a delusion and a snare” (cited by R. A. White [1895] 1955, 71).

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Catholics and Protestants alike condemned Darwin's ideas. Some theologians argued that “Christ died to save men, not monkeys” (Russell [1935] 1961) while Pope Pius IX wrote about Darwinism:

A system which is repugnant at once to history, to the tradition of all peoples, to exact science, to observed facts, and even to Reason herself, would seem to need no refutation, did not alienation from God and the leaning toward materialism, due to depravity, eagerly seek a support in all this tissue of fables. . . . And, in fact, pride, after rejecting the Creator of all things and proclaiming man independent, wishing him to be his own king, his own priest, and his own God—pride goes so far as to degrade man himself to the level of the unreasoning brutes, perhaps even of lifeless matter. . . . [Cited by R. A. White (1895) 1955, p. 75.]

Darwin himself was uncomfortable with the implications his work had for religious beliefs, and Alfred Russel Wallace, who independently discovered natural selection, never accepted that this process was responsible for moral and mental abilities. Some process other than natural selection must account for these, Wallace believed, and ultimately he turned to spiritualism, since it seemed to offer to him a “scientific explanation for the development of human moral character” (Turner 1974).

4. The spiritualist movement, with its claims of empirical demonstrations of mediumistic communication with the dead, called out for scientific appraisal, especially since spiritualists presented themselves not as religious worshippers but as empirically oriented investigators.

Spiritualism was a direct ancestor of modern parapsychology. The roots of the spiritualism craze that swept North America and western Europe during the late nineteenth and early twentieth century can be traced to the Shaking Quakers, a Protestant sect (Dingwall 1929). Ann Lee, a young English-woman, joined the Shaking Quakers in the latter part of the eighteenth century and began to show a mediumistic capability. She emigrated to the United States in 1774, and was well known for her mediumistic abilities when the religious revival broke out in 1779. She died in 1784 and was succeeded by others of similar talent. The belief in mediumistic communication with the dead continued to be held by that sect and, in 1837, a series of disturbances in which small girls began to sing in a strange fashion and to describe visions of angels occurred at various Quaker settlements. This was followed by adults being attacked by convulsions that sometimes took them into trancelike states in which they ostensibly carried on conversations with the dead. Their bodies were said to have been taken over and controlled by these spirits who spoke and acted

through them. Indeed, just as occurred later in séance parlors of Europe, the spirits of the recently dead presented evidence of their identities through the medium. In Dingwall's words, “The Shakers had sown the seed: the harvest had merely to be gathered in” (1929, 329). This harvesting began in Hydesville, New York, in 1848, when the now famous Fox sisters produced their mysterious spirit rappings. Out of this, the spiritualist mania was born, and a system of belief began to grow up around it.

No doubt because of the high value given to scientific thought in those days, and because of the fact that spiritualism was in part a reaction to materialistic science and appealed to those whose religious beliefs had given way to scientific thought, the spiritualists wanted and claimed to be on the side of science; they saw themselves as empiricists who were investigating observable phenomena, and they rejected supernaturalism, claiming that natural laws were immutable (Moore 1977). An opportunity to explore the afterworld without having to give up life or science and without the need to obey biblical injunctions or to believe religious mythology was a welcome refuge for many for whom the struggle between science and theology was too uncomfortable. As Dingwall (1929, p. 329) said: “The claim to be able to furnish evidence of human survival after death naturally compelled the attention of those over whom the influence of orthodox religion was beginning to weaken.”

These four factors, and possibly others as well, provided a *Zeitgeist* conducive to psychical research. It was in this time of previously unparalleled scientific advancement that threatened deeply held convictions about the nature and meaning of life that the first organization dedicated to the scientific study of psychic phenomena was born.

The Society for Psychical Research (SPR) was organized in England in 1882. Its objectives included the study of the extent to which one mind can affect another beyond the limits of normal sensory communication: the study of hypnotism and clairvoyance; the investigation of reports concerning apparitions and hauntings, and an inquiry into physical phenomena associated with spiritualism (Shepard 1980). While its working goal was to investigate the mediumistic claims, the SPR's leaders also hoped that they would one day be able to put the existence of the soul on a sound scientific footing (Mauskopf and McVaugh 1980) or, at the very least, show that there is a nonmaterial aspect to the human mind (Cerullo 1982).

It is commonly believed that the SPR was organized by Cambridge scholars who were upset by the challenges made by science to their religious beliefs. While it was just such scholars who formally led the society and who served as its principal investigators, the organization and control of the society were actually in the hands of spiritualists (Nicol 1972). Indeed, the very idea for the society grew out of a conference held in the offices of the British National Association of Spiritualists in January 1882 (Shepard 1980). When the society was being set up, Dawson Rogers, who was vice president of the Central Association of Spiritualists, and William Barrett, a professor of physics at the Royal College of Science in Dublin and a spiritualist, decided that they must have someone of intellectual strength and respectability to be the head of the new society.

Their choice fell upon Henry Sidgwick, a Cambridge philosopher of considerable repute.

Sidgwick and the other major figures who contributed to the founding of the SPR had previously undergone religious crises. Although raised by parents who put heavy emphasis on the central importance of religion in one's life, their education put their religious belief into doubt (Gauld 1968; Moore 1977; Turner 1974). Henry Sidgwick's belief in Christianity had been shaken both by Darwin's theory of evolution, which denied to humankind the special place in the world described by the account in Genesis, and by Ernest Renan's criticisms of the Bible's accuracy. This was very upsetting, since without the Bible, there would be no moral code; consequently, he sought to find some other basis upon which to anchor morality. According to Cerullo (1982):

Without a solution in the form of a system of ethics on a firmly rationalistic foundation, Sidgwick could foresee little but social chaos and an uninhabitable world. For his ethical system to achieve coherence, Sidgwick found himself required to postulate that the human personality survives bodily death, so that the sacrifice of personal gratification necessitated by social duty could eventually be compensated. Demonstration of survival, for Sidgwick, became something of an obsession. [p. 41]

In order to demonstrate the existence of post-mortem survival, it would be necessary to demonstrate a nonphysical aspect of the human personality while the person was still alive, an aspect not tied to the material world and therefore not subject to disintegration upon the death of the physical body. Sidgwick saw in telepathy the possibility of demonstrating the existence of spirit, and in the SPR, the opportunity, in Cerullo's words, to "secularize the soul"—to demonstrate, in a scientific way, the existence of a soul without all the attendant beliefs that surround the concept of soul in the religious context.

After Sidgwick became president of the SPR, several important friends and colleagues at Cambridge joined the Society, including F. W. H. Myers and Edmund Gurney, who became the principal researchers. Myers had a particular horror of the idea of death and the dissolution of the human personality into nothingness. He, too, surrendered his belief in Christianity to the rationality of science. During a life-threatening bout of pneumonia in 1869, he realized that he was no longer a Christian, and for the next year he vacillated between agnosticism and semi-belief—he *needed* religion in order to make life meaningful (Gauld 1968). He then began the search for evidence that the soul lives on beyond bodily death, using as his tool the very science that had robbed him of his religious beliefs. Indeed, Myers wanted nothing less than to build a new religion, a religion whose basic spiritual tenets would be scientifically demonstrable. It was telepathy that convinced Myers that the mind existed separately from the physical body, and he felt that the spiritual sphere of existence may exist side by side with the material sphere (Turner 1974).

Edmund Gurney also became estranged from orthodox religion; in his case, the suffering in his own life, including the deaths of three sisters in a boating accident on the Nile, led him to reject the possibility of the existence of a kindly God.

Yet there had to be more to human existence than materialism allows; in psychical research, he saw the opportunity to demonstrate the ineffable aspects of the inner person.

There was nothing inherently irrational, of course, in the desire to investigate the claims of the mediums. Even Michael Faraday, the great physicist, turned his attention to the examination of the table-tilting during séances; he reported that nothing unusual was occurring and that the movements of the table were unconsciously made by the hands of the participants. However, the difference between Faraday's and SPR's approach was that, despite their dedication to scientific empiricism, the SPR investigators hoped to find evidence of paranormal phenomena in order to shore up their faith in post-mortem survival and in morality. This is not to suggest that they did not take a rigorous stance in their evaluation of evidence, for they certainly tried to do so, to the dismay of the spiritualists, who left the SPR in large numbers once the SPR investigators' hard-nosed attitude toward mediums became evident.

No sooner was psychical research formally begun in Britain than an organization was set up in the United States to pursue similar research. The American Society for Psychical Research (ASPR) was founded in Boston in 1885. The officers of this group included four prominent psychologists: William James, G. Morton Prince, Stanley Hall, and Joseph Jastrow. The latter two were later to become outspoken critics of parapsychology. Unlike their British counterparts, these men, with the notable exception of James, had no interest in trying to demonstrate the reality of post-mortem survival, but they shared with the SPR an interest in investigating the claims of spiritualists. On the whole, these people were critical of the SPR, viewing it as being in large part a spiritualist organization (Mauskopf and McVaugh 1980). When they were unable to come up with any solid evidence, most of the group lost interest. It disbanded in 1889 and its remnants were absorbed by the British SPR. James continued to support psychical research and went on to become president of the SPR. In 1905, James Hyslop of Columbia University set up the new American Society for Psychical Research. However, Hyslop died in 1920 and in 1923 the spiritualists managed to legally assume control of ASPR. Walter Prince, who had been Hyslop's assistant and protégé then founded, under the sponsorship of psychologists William McDougall and Gardner Murphy, the Boston Society for Psychical Research in an effort to keep experimental parapsychology alive in the United States. It was only in 1941 that Gardner Murphy and George Hyslop (James Hyslop's son) managed to wrestle the ASPR away from the spiritualists and again turn it into an organization dedicated to scientific investigation of parapsychological phenomena.

Just as in Britain, disaffection with conventional religion played an important role in bringing people into psychical research. For one notable example, Gardner Murphy, a giant in the history of modern parapsychology, just as he was a giant in the history of psychology, gave up his religious faith because of its conflict with his education. He was the son of an Episcopal minister, and perhaps because of this the loss of religion was not easy to accept. As had Sidgwick, Myers, and others, he found comfort in psychical research, which he viewed

as “a potential hostage in the scientific camp and through which he might eventually find his way back to religious belief” (Mauskopf and McVaugh 1980, 60). Murphy saw psi as a means for humankind to reach out to one another:

... Because man cannot bear to be sealed up within the little cell of his own individuality he uses to the limit of his powers the senses and the outreaching arms which immerse him in the world of his fellows; that when his senses fail him or his arms cannot reach to those whom he seeks, he contrives other modes of seeking, of which two are through the mystical and through the paranormal. [Murphy 1952, p. 141]

Throughout his life, Murphy was a driving force in parapsychology, and perhaps more than anyone else in the modern era, he brought respectability to the study of the paranormal by virtue of his stalwart reputation within mainstream psychology. However, it fell to Joseph Banks Rhine, who devoted his entire professional career to the subject, to lead American parapsychology to world predominance.

The history of parapsychology would no doubt have been very different indeed were it not for Joseph Banks Rhine and his wife Louisa, for it was the Rhines, especially J.B., who put the study of parapsychology on an empirical footing that was based on laboratory studies.

J. B. Rhine had planned a career as a minister, but like Sidgwick, Myers, and others we have already discussed, his university studies led him to doubt the validity of his religious beliefs. He grew to see scientific materialism as a substitute for his religious outlook and pursued an education in science that led to a Ph.D. in plant physiology from the University of Chicago in 1925; Louisa Rhine also obtained a Ph.D. in the

same domain. However, the Rhines were never totally at ease with scientific materialism. Despite their dedication to the scientific method, they harbored many doubts about strict materialism, and they wondered about the place of human beings in the natural order of things and about the existence of a soul (MacKenzie 1981).

Even before they obtained their Ph.D.'s, the Rhines had become interested in psychical research. When they attended a lecture given by Sir Arthur Conan Doyle, who toured the United States in 1922 speaking on spiritualism and describing the wondrous feat of mediumistic communication with the dead, they were impressed by Doyle's belief that psychical phenomena could be subjected to scientific evaluation. It seemed to them that psychical research might be able to serve as a bridge between science and religion, a view that was to persist throughout their lifetimes (Mauskopf and McVaugh 1980).

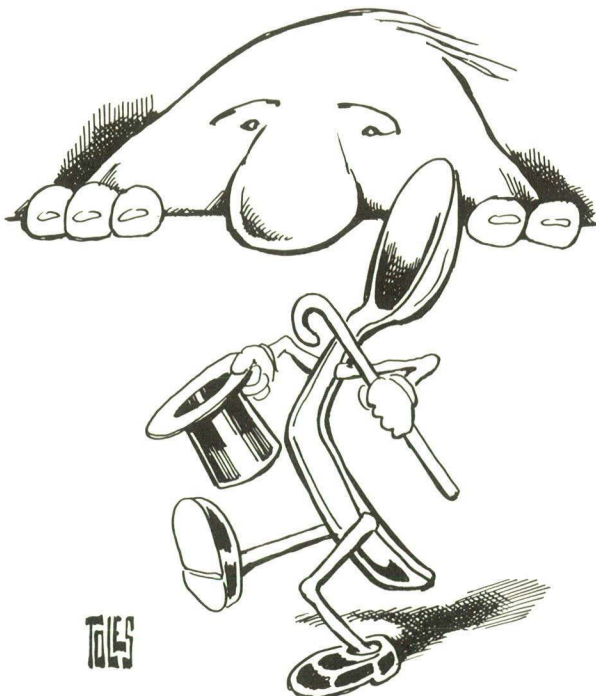
The Rhines sought out William McDougall, an eminent psychologist and a committed opponent to the wave of behaviorism that was sweeping through North American psychology. McDougall shared with the Rhines a vitalistic view of life, believing that there is more to human existence than materialism can account for. In 1927, McDougall was appointed to the chair of the psychology department in the newly created Duke University. Shortly after, it was arranged that J. B. Rhine would spend a semester at Duke during which time he would examine, under McDougall's supervision, a body of evidence relating to mediumistic communications. He was to be supported by a private donor, indeed, the same individual who had furnished the mediumistic evidence. Thus, Rhine's parapsychological career was born out of the study of the survival problem (Rhine et al. 1965). Rhine was soon appointed to the position of assistant professor of philosophy and psychology (in 1929), and he subsequently founded the Parapsychology Laboratory at Duke. He and his wife Louisa spent the rest of their careers, indeed the rest of their lives, pursuing parapsychological research.

To Rhine, it was essential to demonstrate the reality of extrasensory perception and psychokinesis (PK) if one were to have any hope of putting the existence of a soul, or at least the principle of mind-body dualism, on a solid scientific footing. In 1943, in an editorial in the *Journal of Parapsychology*, which had been founded by Rhine and his colleagues, Rhine wrote that it was essential to demonstrate

that man possesses ESP and PK capacities in order to make any tentative conception of an existence beyond the transitions of bodily death a reasonable one. Without them, such survival could not occur and be discovered. [1943, p. 227]

As time went on, Rhine became convinced of the reality of paranormal phenomena, ESP and PK in particular, and he began to write about their implications for philosophy and for living. In 1953, in his book *New World of the Mind*, he said,

But the work in parapsychology does more than refute materialism. It is more, too, than a new method of solving problems. There are, at least, still other definite implications and possibilities. Since this new science has penetrated the physical bar-



rier that has hidden man's true nature from the scientists of the past, it has become literally the science of the spiritual aspect of nature. [1953, 227]

In the same work, he speculated on the relationship between religious communication and paranormal communication:

If prayer *is* effective and if the thoughts of men *do* reach out to other personalities in the universe beyond the range of the senses, it must be through the medium of extrasensory perception. If, originating in any personal agency anywhere, celestial or mundane, there is an effect produced upon the physical world in answer to prayer, it would have to be a psychokinetic effect, a psi phenomenon. Psi, then, would be the scientific concept of the operations underlying any demonstrable spiritual manifestation involving either cognitive or kinetic effects. [p. 229]

Rhine, it seemed, had done something of which Myers and Sidgwick and Gurney had only dreamed. He had scientifically demonstrated the reality of extra-materialistic processes that indeed must put the lie to the monistic, materialistic view of humankind. Toward the end of his life, Rhine reiterated his belief that parapsychological research deals with the same phenomena that gave rise to religious belief:

On the whole, the types of psi that have been quite independently outlined by laboratory research closely resemble the kinds of exchange that religious men have assumed in the theologies that arose out of human experience long before the laboratories of parapsychology began their work. [Cited by Hall 1981.]

Other eminent parapsychologists shared the view that the existence of psi ruled out materialism. One such individual, Henry Habberley Price, a professor of logic at Oxford University, commented in 1949 that:

We must conclude, I think, that there is no room for telepathy in a Materialistic universe. Telepathy is something which ought not to happen at all, if the Materialistic theory were true. But it does happen, so there must be something seriously wrong with the Materialistic theory, however numerous and imposing the *normal* facts which support it may be. [Cited by Randall 1977, p. 186.]

Likewise, it could be argued, as John Beloff (1976) has done, that "If ever scientific materialism should win the day it [is] hard to see how religion, in any meaningful sense, could survive. . . ."

The triumph of materialism would be, for many, the death of existential meaning. It is the fear of this that seems to have motivated so many of the leaders in parapsychology. R. L. Moore (1977) concluded, in his study of the history of parapsychology in the United States, that not only were the leaders of parapsychology motivated by the quest to find meaning in life after having lost their religious convictions that had earlier provided such meaning, and not only were the people who showed the greatest interest in Rhine's results people who also

happened to disbelieve in the existence of God, but that "most parapsychologists, from the very time they lapsed into agnosticism, began searching for evidence to sustain the view that individual life held meaning" (p. 239).

In a similar vein, Ruth Brandon (1983; 1984), who has studied the history of parapsychology in Britain, reported on her examination of the scientists who have become involved in the study of the paranormal:

In almost every case I have looked into, the facts turn out to be singularly revealing. Time and again they present a curious dichotomy between the publicly proclaimed spirit of pure scientific inquiry in which the investigations in question were undertaken, and the underlying emotional motivation which prompted those investigations in the first place. [1983, p. 785]

That the founders of modern parapsychology were motivated by the need to find a bridge between science and religion, by a desire to demonstrate through the methods of science that human personality and thought are more than epiphenomena, there can be little doubt. This by itself does not of course necessarily weaken the evidential value of the products of their labors. After all, as mentioned earlier, the founders of modern science were steeped in religious beliefs. One difference, however, is the fact that psychical research was not carried out *despite* religious needs and beliefs, but, it seems, *because* of such needs. The quest was not simply to understand nature, but rather to demonstrate that nature is more than what is dreamt of in the materialists' philosophy, and it has, historically at least, been associated with a dissatisfaction not just with scientific materialism but also with the mythological aspects of conventional religion.

It is important to stress that it would be quite unfair to automatically attribute such motivation to any and all who work within parapsychology. Nonetheless, it would be equally imprudent to ignore the major role that anti-materialistic sentiment has historically played and continues to play in parapsychology. It may well be that modern parapsychologists are not all motivated by the needs that pushed Sidgwick, Myers, Rhine, and others. Nonetheless, there are prominent parapsychologists even today who explicitly see parapsychology as a bridge between science and religion. Some contemporary parapsychologists talk openly along these lines: Charles Tart (1977), one of today's most prominent parapsychologists, wrote:

Because I was so impressed with the power and accomplishments of the scientific enterprise, I found it hard to believe that science could have *totally* ignored the spiritual dimensions of human existence. I began reading intensively in the fringe areas of science and discovered the greatly neglected field of psychical research.

I had happened upon a partial resolution of my personal (and my culture's) conflict between science and religion. Parapsychology validated the existence of basic phenomena that could partially account for, and fit in with, some of the spiritual views of the universe. . . .

I now understand that the personal conflict I experienced between my religious upbringing and the scientific world view was and *is* shared by many of us. [pp. xii-xiii]

Indeed, in recent years, the parallelism between parapsychological and religious thought has been made more apparent by parapsychologists themselves. This is not to suggest that parapsychologists are surrendering themselves to the charge that they are motivated by other than pure scientific curiosity, but only that the similarities between parapsychological phenomena and religion are so obvious that some researchers are beginning to reinterpret religious concepts, and particularly miraculous ones, including prayer, in terms of parapsychological constructs. It is to this subject that we shall now turn.

“Not only have some parapsychologists seen in parapsychology vindication of their belief in the wrongness of the philosophy of materialism but there have been many calls to examine the accounts of miraculous religious phenomena from a parapsychological point of view.”

Not only have some parapsychologists seen in parapsychology vindication of their belief in the wrongness of the philosophy of materialism, but there have been many calls to examine the accounts of miraculous religious phenomena from a parapsychological point of view. Indeed, parapsychological interest in miraculous events that occur in a religious context seem to be drawing increasing interest among parapsychologists in recent years (Grosso 1983). Some take the position that psi and religious forces are one and the same, while others, such as W. H. Clark (1977), contend that it is perfectly possible to separate religious and paranormal occurrences, although there does seem to be a “deep-lying kinship.”

R. H. Thouless (1977) argued that reports of miracles in the religious literature take on a new credibility in the light of parapsychological findings and that parapsychology can bring a belief in God back into respectability:

Belief in God or in any spiritual reality has seemed to many people to have become impossible, because these beliefs contradict the expectations raised by the scientific views which have come down to us from the last century. These views regard reality as being bounded by the physical world and necessarily exclude any spiritual world. Parapsychological investigations tend to undermine this “physicalistic” view of the world and, thus, to remove one of the obstacles to religious belief. . . . Parapsychological research seems to reveal a world in which it is more reasonable to suppose that God and the supernatural play a part. [pp. 175–176]

J. R. Randall (1977) made a similar point:

Despite the contempt with which religion is regarded in some intellectual circles, the vast majority of mankind still seeks relief from the misery of the existential vacuum through ritual, sacrament and prayer. Now at last we are witnessing the extension of scientific procedures into these spiritual areas of human experience: is it too much to hope that the result will be a deepening of understanding which will lead to yet another advance in the liberation of the human spirit? [pp. 242–243]

It is true that if the Bible or the literature from other religions is examined from a paranormal viewpoint, there is an abundance of seemingly parapsychological phenomena: telepathy, clairvoyance, precognition, mediumship, psychokinesis, and out-of-body experiences (Clark 1977; Perry 1982; White 1982). Indeed, D. Scott Rogo (1982) devoted an entire book to the examination and discussion of miraculous religious phenomena and M. Perry (1982) argued that “the paranormal and the miraculous are not identical phenomena, though they overlap; to remove either from the pages of the Bible would be to emasculate it intolerably” (p. 370).
late it intolerably” (p. 370).

Rhine, too, commented on the parallels between scriptural reports of miracles and the discoveries made by parapsychology:

. . . What parapsychology had discovered and labeled *psi* communication in all its types, forms, and conditions has turned out to have a remarkable parallel to the whole communication system of religion. . . . Had the founders of the religions been working with the 34-volume set of the *Journal of Parapsychology*, or had the workers in parapsychology been guided by the scriptures of the great religions, the parallelism of the two systems of communication could hardly have been more nearly perfect. [1972, p. 117]

Grosso (1983) advocates even more interest by parapsychologists in religious phenomena and miracles:

. . . psychological research branched out in two directions: scientific parapsychology and, through William James, the psychology of religion. . . . The parapsychology of religion would reunite these distinctive strands onto one discipline and begin to forge a powerful new science of the human spirit. [p. 344]

There are many other examples of a growing interest in the similarities between paranormal constructs and certain religious ones. R. A. McConnell (1982), suggested in effect, that religion arose out of ignorance of the true nature of paranormal processes:

What does it mean that throughout history the phenomena of parapsychology have been in the province of religion? Perhaps organized religion is nothing more than the cultural expression of psi phenomenon and the truth behind religion may be waiting for discovery by science. [p. 140]

Even paraphysicists Russell Targ and Harold Puthoff (1977) have linked parapsychology and religion:

When man first began modeling the universe around him, paranormal functioning was gracefully accepted as one of the phenomena to be accounted for, and therefore occupied an important place in religion and philosophy. [p. 212]

These several excerpts are intended to help convey the seriousness with which some modern parapsychologists view the correspondence between religion and parapsychology. Of course the former is typically seen as a somewhat mistaken

interpretation of the latter. It is fascinating, given what has been said about the historical motivation underlying parapsychology that, in a sense, parapsychology not only supplants religion's role of supplying meaning to life and hope about post-mortem existence, but is now taking over its miracles as well.

On the other hand, there are also parapsychologists who show a decided disinterest in anything touching on religion and yet who accept the basic dualistic philosophy that underlies virtually all religion. It is the axiom of mind-body dualism, with its obvious anti-materialistic ramifications, that not only links parapsychology and religion but keeps parapsychology outside of science.

There is still much in contemporary parapsychology that directly reflects the tradition of mind-body dualism, of a soul that can survive bodily death. William Roll's studies of poltergeists, Karl Osis' pursuit of near-death out-of-the-body experiences, and Ian Stevenson's studies of reincarnation are obvious examples. Yet, it is hard to say whether or not these form part of the mainstream in modern parapsychology, for it is difficult to say just what the mainstream is. Certainly some eminent parapsychologists will deny any interest in proving mind-body dualism. They would claim to be simply good scientists in hot pursuit of anomalous phenomena that do not fit the contemporary world-view. However, others openly embrace dualism; consider the words of M. A. Thalbourne (1984):

Whether we like it or not, and despite the best efforts of an Eccles or a Popper . . . the dominant mode of thinking among present-day scientists is that of Central-State Materialism. Parapsychologists alone constitute a professional group where Dualism is still the most popular assumption. [p. 13]

As John Beloff (1977) pointed out, these two different guiding philosophies exist side by side in modern parapsychology. For those in the first camp, there is the view that ultimately the phenomena of parapsychology will be understood within the context of an expanded scientific world-view. The concept of "paranormal" will no longer be needed. For those in the other camp, there is the viewpoint that has historically dominated parapsychology, the one we have been describing, which argues that paranormal phenomena mark the boundary limits of the scientific world-view. Beloff wrote:

Beyond that boundary lies the domain of mind liberated from its dependence on the brain. On this view, parapsychology, using the methods of science, becomes a vindication of the essentially spiritual nature of man which must forever defy strict scientific analysis. [1977, p. 21]

However, even the first view must surely lead one to a dualistic position; for as Gardner Murphy (1961) commented, the nature of psi seems to require

the assumption of some kind of fundamental dualism, some basic difference, between normal and paranormal processes. One way of stating the situation is that paranormal processes do not represent a part of the time-space-event system which the physical sciences describe. . . . There is a certain timeless,

spaceless, or we might say transtemporal and transpatial character at the very heart of the paranormal. This is indeed one of the major reasons why the phenomena do not belong to and are rejected by official science. [p. 276]

Yet there may be many present-day parapsychologists who conduct their studies without even considering the dualistic implications of the phenomena they hope to demonstrate. As Louisa Rhine (1967) wrote:

It is not only outside the field but also within it that sometimes an appreciation of the objective behind present-day parapsychological research is lacking. It is entirely possible to do work in parapsychology today and never once consider the antithesis between the parapsychological and the physical. [p. 241]

B. MacKenzie and S. L. MacKenzie (1980), in their analysis of the development of parapsychological thought, found the earlier philosophical approach to the paranormal more in keeping with the essence of parapsychological inquiry:

Even if modern researchers are not driven by the motive of disproving mechanism, materialism, etc., the objects of their study are still phenomena barred from the universe by the assumptions and implications of the natural sciences. . . . Parapsychology remains tied to its historically conditioned adversary relationship with the natural sciences. Without that, it has no continuing basis for identity. Achievements in the field, therefore, are important just to the extent that they are incompatible with, and as a result have revolutionary implications for, the modern scientific world picture. For these reasons, we feel that the old-fashioned ideologues in the field, such as J. B. Rhine and J. G. Pratt, had a more accurate conception of parapsychology's significance than some of the less philosophical newcomers. [p. 163]

If the philosophy of materialism is incorrect, once that misunderstanding is put right the implications for humankind could be overwhelming, at least in the view of some parapsychologists whose writings suggest that the harnessing of our psychic potentials will herald a new chapter in human history. Theirs is the dream of a better age to come, the dream of a psychic millennium.

Humankind has often dreamed of the transformation of society into one in which personal problems and social evils have been vanquished through the coming of a "new age" (Wilson 1973). These dreams have taken many forms, from those of the Cargo Cults awaiting salvation from the air to those of the Judeo-Christian tradition awaiting the Messiah, or to the more secular and perhaps less seriously held wish of the sixties' youth for the dawning of the "Age of Aquarius."

There is a certain strain of such millennialism to be found in the writings of some contemporary parapsychologists. Although the idea that the human condition will be greatly improved once psychic forces are understood has been held throughout the history of parapsychology, it seems that in recent years, perhaps because of growing disillusionment with the ability of science and technology to alleviate human social problems and suffering, there has been a growing tendency in

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some parapsychological quarters to look to the flowering of psychic abilities to save the world.

Even though most parapsychologists would likely be very hesitant to make predictions about the future in a world in which psi is understood and harnessed, that has not stopped some prominent parapsychologists from rhapsodizing about just how great the future is going to be. Some write about the supposedly soon-to-come “paradigm shift” that will force science to accommodate psi and consequently open the door to a multitude of new discoveries about the place of humankind in nature. Of course, if it were true that parapsychological research will ultimately be able to answer the question “What is man as a person in a physical universe?” (L. Rhine 1967), and if that answer is that humanness transcends material existence, then, obviously, the meaning of human existence would take on quite an exciting new flavor. However, some speculation has gone far beyond that, to dreams of the psychic *control* of the material world. For example, Targ and Puthoff (1977) speculated about the “peaceful use of psychic energy” in terms of “executive ESP,” medical diagnosis, psychic exploration of space, and forecasting future social and political trends. R. O. Becker (1977) was even more obviously millennialistic:

The scientific revolution and scientific medicine have both failed humanity, and a new appraisal of our situation and a new scientific revolution are in order. The opposition of the scientific establishment to such a new revolution is obvious and determined, and its power is not to be underestimated. . . .

The discipline of parapsychology is uniquely suited to lead the new revolution. It deals directly with the core of the living process. . . . It can lead to a new vision of the human being and his place in the universe. Indeed, it may be the last and best hope we have. . . . [pp. ix-x]

R. A. McConnell (1982) too has referred to parapsychology as our last hope, calling it “the wild card in a stacked deck.” He argued that the ethical and philosophical implications of psi “offer the only hope I know—and slim it is—for a continuation of the human experiment” (p. 140).

There are many other examples of millennialistic thought to be gleaned from the pages of parapsychological writing. Although such thinking may not reflect the viewpoint of the majority of parapsychologists, and indeed would probably be challenged by many, it does represent yet another motivation behind the search for the paranormal, a motivation again that is held in common with most religions.

In the final analysis, we are left with one question: Is the goal of parapsychology to explain anomalous experiences, be they labeled telepathic, precognitive, out-of-body, or phantasmagoric, or is the goal to vindicate the core beliefs of the

founders of parapsychology—the beliefs that telepathy, clairvoyance, precognition, and psychokinesis, and ultimately, post-mortem survival of the human personality are real? If the answer to the first question were yes, then parapsychology would have no particular *raison d’être* except to inquire into those phenomena that mainstream psychology has for so long ignored. In this case, a rapprochement between psychology and parapsychology would not be long in coming; for such phenomena, in my view at least, do not require the introduction of the concept of psi for their explanation. However, parapsychology began, not because of any anomalies encountered in scientific research, but rather because parapsychologists believed that emerging scientific laws threatened the concepts of the soul (Cerullo 1982) and morality (R. A. White 1982). Although modern-day parapsychology may not directly concern itself with the soul or with morality, the search to find evidence for paranormal processes continues to be, by its very nature, an attempt to challenge the current scientific-mechanistic world-view rather than simply the study of anomalistic experiences and phenomena.

To call parapsychology a “spiritual science,” as a few parapsychologists have done, would appear to be a contradiction in terms: How can a science of the spirit exist, given that science is by its very nature materialistic? If one believes in the reality of the paranormal, then one must ultimately either change the basic foundations of science or accept that paranormal phenomena lie beyond science, in either case overthrowing materialism. While both approaches coexist within modern parapsychology, perhaps it is this contradiction inherent in the phrase “spiritual science” that perhaps best reflects both the persistence of parapsychology and its estrangement from science: Parapsychology is quasi-religious in nature while attempting to follow the path of science, a path laid down upon the foundation of materialism.

Instead Robert Jahn (1982) likened parapsychological research to the search for bizarre, rarely seen, and scientifically unrecognized forms of fauna in a vast, fog-shrouded swamp: Some researchers claim that they have searched and found nothing but shadows and sunken stumps that mislead the gullible, while others report with equal conviction and in minute detail their observations of “a variety of extraordinary beings of awesome dimensions and capability” (p. 136). Jahn concluded that:

When fully sifted, only a very few legitimate specimens seem to have been captured, by tediously deliberate trolling of the brackish domain, or by more incisive invasion of its turbid interior, and even these have proven so incomprehensible and so delicate to exposure, and the imposed criteria for their credibility have been so severe, that they have not been fully persuasive. Yet the goal remains alluring, and the search continues. [p. 136]

Parapsychologists are not, for the most part at least, just fishers of facts on the prowl for scientific anomalies for; if that were so, they would surely have long ago migrated to much richer waters of normal science. However, it seems to me that parapsychologists are not simply practical-minded investigators

tramping through the foggy night in R. G. Jahn's swampland looking for rarely seen specimens. Rather, the specimens, the anomalies, are for most parapsychologists only the means to an end; ultimately, they hope, these specimens will demonstrate once and for all that science as we know it is badly mistaken in its materialistic orientation and that human existence involves an ineffable, nonmaterial aspect that may very well survive the death and decay of the physical body. As long as the need to find meaning in life beyond that which is forthcoming from a materialistic philosophy exists, the search for the paranormal will go on. That being said, in all likelihood it will go on, in one form or another, until the end of the human story •

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