

CHAPTER 3

Origins of the Science

Can I not number all the grains of sand,
And measure all the water in the sea?
Tho' a man speak not I can understand;
Nor are the thoughts of dumb men hid from me.
A tortoise boiling with a lamb I smell:
Bronze underlies and covers them as well.'

That poetic reply by the Pythia, priestess of Apollo at Delphi, represents the successful conclusion of the very first parapsychological experiment on record. According to the Greek historian Herodotus, it was conducted around 550 B.C. by the ambitious King Croesus of Lydia. Croesus had grown concerned about a buildup of forces by Cyrus of the rival kingdom of Persia and he wished to consult the oracles for advice about what the future might hold. But whom to consult? Which oracles were reliable?

The king decided to do his own consumer testing. He sent delegations to the seven best oracles of the day with instructions to approach the oracle on the hundredth day after departure and ask, "What is the king of Lydia doing today?" This was not an experiment in seeing the future. It was a telepathic (or clairvoyant) experiment, and even the messengers would not know the correct answer—to preclude leakage of information. On the appointed day the king chose to do something very unkinglike—to make a lamb-

and-tortoise stew in a bronze kettle—in order to reduce the possibility of chance coincidence.*

Five of the oracles were completely wrong. The oracle of Amphiaraos had a near miss. Only the Delphic oracle was exactly correct. Convinced of the Pythia's powers by this test, Croesus asked whether he should go to Persia and attack Cyrus. The oracle replied, "When Croesus has the Halys crossed, a mighty empire will be lost." Believing fate to be with him, Croesus attacked, but he had failed to reckon on the notoriously ambiguous nature of Delphic advice: Croesus was defeated, and it was *his* empire that fell.** What Herodotus made of this story is not known, but the great historian once commented, "My duty is to report what I hear—but I am not obliged to believe everything equally."

There are other references to successful tests of oracles in the classics, and it is clear that among the ancient philosophers the reality of paranormal phenomena was as hotly debated as it is today. Religious scriptures, especially the Old Testament, are replete with examples of prophetic dreams and other parapsychological phenomena. Some scholars have viewed the Old Testament as a record of the shamanistic practices of divination (foretelling the future) and magic as they evolved from a fairly primitive form to an organized religion. Moses, for example, can be viewed as a typical shaman, having had his calling made known to him by mysterious signs and wonders and having established his credentials by besting Pharaoh's priests in a contest of magic.

Around the world the historical record up to the nineteenth century shows paranormal phenomena to be inextricably bound up with religious beliefs. In most cultures paranormal events such as miracles or foretelling the future typically seemed to serve at least two purposes. First, such an event helped the group to avoid some calamity—destruction by an enemy, a plague, and so on—or to gain

*Many historians have assumed this story to be apocryphal, though others, citing the very Lydian characteristics of the story, claim there may be an element of truth among the Delphic propaganda. In any event it is not a bad experimental design for its day.

**Given the Greeks' propensity to kill messengers bearing bad news, it is not surprising that the oracle would disguise unwanted news. Actually Croesus asked four questions in all, and he misinterpreted all of the answers in a way that missed the warnings contained in them.

some advantage and; second, it reinforced faith in the power of the gods or their representatives on earth. Fairly early on, as religion became more institutionalized, the leaders of the Roman Catholic church, in particular, began to realize that uncritical belief in miracles and other phenomena that we would consider paranormal could be a threat to orthodox beliefs.

Lives of the Saints

Some of the best-documented early reports of paranormal phenomena come from the investigations of individuals declared saints by the Roman Catholic church. Over the centuries the Catholic church developed strict standards for evaluating reports of miracles. As the monastic movement grew through the Middle Ages, more and more reports emerged of miracles happening in the presence of particularly devout men and women, supplementing the already long tradition of miracles related to shrines and relics. Far from embracing every claimed miracle as another example of God working in the world, the Catholic church actually took a very skeptical and hard-nosed stance toward these reports. Before any individual could be declared a saint, the Church would conduct a long and rigorous investigation of his or her past, including reports of miracles associated with the person.

The Church created the post of *promotor fidei*, more popularly known as the devil's advocate, to conduct these investigations. In due course the case for canonization would be argued much as a court case would, with the *promotor fidei* doing all that he could to discredit the testimony and evidence of the would-be saint's advocates.

Despite this relatively hostile approach to miracles, the records of the lives of many of the saints contain amazing accounts of paranormal phenomena. Among the most dramatic, and often the best attested, was the phenomenon of levitation. Levitation stories are associated with many of the better known Catholic saints, and one might be tempted to dismiss it all as mere hagiography or pious embellishment of the record. Some of the cases, however, are backed by impressive amounts of eyewitness testimony.

In the sixteenth century Saint Teresa of Avila was observed on

many occasions, typically when she was deep in prayer, to rise anywhere from a few feet to as high as the ceiling of the room. A fellow sister, Anne of the Incarnation at Segovia, testified that one afternoon she observed Sister Teresa enter the choir and kneel in prayer for about ten minutes.

As I was looking on, she was raised about half a yard from the ground without her feet touching it. At this I was terrified, and she, for her part, was trembling all over. So I moved over to where she was and I put my hands under her feet, over which I remained weeping for something like half an hour while the ecstasy lasted. Then suddenly she sank down and rested on her feet and turning her head round to me, she asked me who I was, and whether I had been there all the while.²

A bishop further testified that Teresa levitated just after she had received communion from him, and he watched as she grasped at the choir grillwork to stop her upward floating. Saint Teresa provided an account of her own feelings and experiences—of how it seemed impossible to resist being “carried away” and how she was most distressed by the embarrassment her flights caused—which was submitted to the censors of the notorious Inquisition while she was still alive. The Inquisition accepted her testimony.

The case of Saint Joseph of Copertino is stranger yet. As a Franciscan monk in the mid-seventeenth century, Joseph began levitating during services and was often observed by whole congregations. His superiors did not welcome his activities, and at times he was disciplined and made to do penance for his displays. Among the many persons who witnessed Joseph’s levitations was a pope (Urban VIII) as well as many laypersons, including non-Catholics. The Spanish ambassador to the papal court watched Joseph fly over a crowd to a statue of the Immaculate Conception and back again (the ambassador’s wife fainted). Johann Friedrich, duke of Brunswick, hid himself in a stairwell to observe one of Joseph’s levitations. On later observing a second levitation, the duke renounced his Lutheran faith and became a Catholic.³

Centuries of investigating the claims of miracles as part of the canonization process have provided the Catholic church with a wealth of information regarding paranormal phenomena. Indeed the Catholic scholars who investigated these cases could properly claim

to be the first psychical researchers. Chief among these investigators was Prospero Lambertini,* whose treatise *De Servorum Dei Beatificatione et Beatorum Canonizatione* was a thorough guide to what was known about paranormal phenomena by the eighteenth century. Interestingly many of Lambertini's observations remain valid to this day. For one thing, Lambertini noted that "knowledge of things to come, things past, present events distant in space, and the secret places of the heart" did not come to saints alone but also to ordinary persons. The same was true for apparitions of the dead and the living. He also noted that seeing the future was more likely to occur during sleep than during waking, and that often predictions of the future came in symbolic form rather than as a literal representation of what would take place. Often, Lambertini notes, the "prophet" is unable to distinguish between his own thoughts and "divine messages."⁴

The Emergence of Secular Psychical Research

In addition to the Church's circumspect interest in paranormal phenomena, there has always been a lively, if not well organized, interest in such matters among lay scholars and scientists. The alchemists of the Middle Ages included among their studies many experiments that we would consider parapsychological. In the mid-1500s John Dee, mathematician, astronomer, and astrologer to Queen Elizabeth, began experimenting with the divining rod and pendulum to locate lost objects. Later he attempted to gain information from spirits employing a somewhat disreputable colleague as a medium, but Dee devised a complex code for the spirits to use to prevent his colleague from cheating. For many years Dee labored to understand the process of divination. Dee's activities could have landed him in trouble had he not already won the confidence of the queen, who relied on the intelligence he provided regarding what was being plotted on the Continent. In Her Majesty's service as an

*Lambertini was regarded by his peers as a man of common sense and a sharp, critical intellect. He was elected pope (Benedict XIV) in 1740.

intelligence agent Dee's code name was 007, which was derived from the colophon he used to sign his reports.⁵

Interest in parapsychological phenomena continued throughout the sixteenth and seventeenth centuries. Many noted scholars and scientists of the time conducted investigations into cases of poltergeist or haunting activity, or of individuals with unusual abilities. The late eighteenth century, however, saw two developments that led directly to the organized study of psychic phenomena and eventually to parapsychology as we see it today: mesmerism and spiritualism.

Mesmerism

During his medical studies at the University of Vienna in the 1760s, Franz Anton Mesmer developed a theory that the sun, moon, and stars influenced all organized bodies "through the medium of a subtle fluid, which pervades the universe, and associates all things together in mutual intercourse and harmony." This theory owed much to earlier alchemical and astrological notions and had a practical counterpart in the form of healing forces that could be guided and strengthened by ordinary magnets. Mesmer's experiments led him to develop "treatments" using first mineral magnets and later the "animal magnetism" of the healer (himself), which was imparted through sweeping movements of his hands and other gestures. Patients often lost control of their limbs, suffered convulsions, or went into trances, all of which was regarded as part of the healing process. His treatments found little favor in Vienna, but when Mesmer moved to Paris in 1778, the reception was rather different. Although the medical authorities in Paris were no more sympathetic to his new theory of animal magnetism than were their Viennese counterparts, the public interest in his magnetic treatments—which now included baths in "magnetized" water—was enormous. This prompted a number of scientists to investigate Mesmer's claims; however, there was little agreement as to their validity. Eventually King Louis XVI set up the Royal Commission of Inquiry to decide one way or the other. The commission included some of the most eminent scientists of the day and was headed by Benjamin Franklin, then U.S. ambassador to France.

The commission's conclusion that the claimed effects were probably caused by suggestion did not dampen public enthusiasm, and many investigators continued mesmeric research. Among the latter was Chastenet de Puységur, a former president of the Lyons Medical Society and a disciple of Mesmer. Puységur is best known for his discovery of the hypnotic trance (which was not part of Mesmer's original treatments). From the start of the mesmeric craze there were reports that mesmerism facilitated clairvoyance, "thought transference," and other psychic phenomena. Puységur was initially skeptical of such reports, but he was surprised to discover that one of his patients, Victor Race, not only obeyed his spoken commands while under hypnotic trance but also responded to unspoken ones. Eventually Puységur found that Victor could provide clairvoyant diagnoses of his other patients. One of Puységur's skeptical colleagues, J. H. Pététin—also a past president of the Lyons Medical Society—undertook some experiments of his own with Victor and was very impressed with the results.

The French Revolution of 1789 scattered the supporters of mesmerism, but by 1826 scientific curiosity about the topic had revived to such a degree that the Academies of the Sciences and of Medicine appointed a second commission of inquiry. Although the authorities expected that this second report would be as dismissive as the first, a number of striking demonstrations of the trance state as well as several very careful studies of clairvoyance caused the commission to come to rather different conclusions. The commission acknowledged that they could not precisely identify what the trance state was but that they were convinced that it was genuine. Moreover, they felt it could give rise to "new faculties which have been designated by the terms clairvoyance, intuition, interior prevision." Finally they urged the academies to encourage further research into "magnetism," which they regarded as a "very curious branch of psychological and natural history." The leaders of the academies were not pleased with the report and did nothing to follow the commission's recommendation.

The battle for acceptance of mesmerism and the "higher faculties" that it appeared to engender was not limited to France. Noted scientists all over Europe and Britain began to investigate these mysterious powers. For decades the controversy raged in scientific and medical circles before mesmerism was finally refined into what we

know today as hypnotism. In the meantime other developments were underway that were to contribute to the establishment of psychical research.⁶

Spiritualism

The teachings of Swedish savant Emmanuel Swedenborg are generally credited with providing a focal point around which coalesced the quasi-religious belief that living persons could converse with the spirits of dead persons. Swedenborg himself believed that many of his insights came from spirits, and after his death in 1772 something of a religious sect developed around his teachings. Over the next half century the Swedenborgians spread across northern Europe, Britain, and the United States.

Swedenborg's followers quickly discovered that the mesmeric trance seemed to facilitate the spirit communication they were seeking, even though the mesmerists themselves generally believed that the "higher phenomena" (clairvoyance, thought transference, and so on) were *natural* phenomena, with no particular connection to spiritual or religious entities. By the second quarter of the nineteenth century things began to change, and even some of the mesmerists' trance subjects began to claim that they were receiving communications from spirits.

Around the time all this was happening, the United States had become a fertile ground for the growth of new and unconventional religious movements. (Two religious movements still strong today—Mormonism and Adventism—sprang up during this period, in 1830 and 1831, respectively.) There was also tremendous popular interest in mesmerism, particularly in the increasing tendency for mesmerized clairvoyants to "teach" revelations attributed to various spirits. One of the better-known instances is the case of Andrew Jackson Davis of Poughkeepsie, New York. This poorly educated son of a leather worker was mesmerized when he was eighteen, at which time he discovered that he had clairvoyant powers. Soon he was regularly going into trances without the aid of hypnotism and allegedly receiving teachings from none other than Swedenborg himself, along with several other notables. He produced lectures on philosophical and scientific subjects that were published in several books

and were very well received by the public. One of these, *Principles of Nature*, was published in 1847 and went through thirty-four editions in less than thirty years.* The stage was thus set for a sequence of events that launched one of the most remarkable religious movements in the modern Western world.⁷

On December 11, 1847, the Fox family—John; his wife, Margaret; and two of their daughters, Margareta, fourteen, and Catherine, twelve—moved into a small wooden house in Hydesville, New York. The following March the Fox family began to have their nights disturbed by mysterious rapping and banging sounds with no apparent origin. On March 31, 1848, the family, fed up with the disturbances, resolved to retire early that evening and take no notice of the noises. But it was not to be an undisturbed night. In the words of Mrs. Fox's statement of April 11, 1848:

My husband had not gone to bed when we first heard the noise on this evening. I had just laid down. It commenced as usual. I knew it from all other noises I had ever heard in the house. The girls, who slept in the other bed in the room, heard the noise, and tried to make a similar noise by snapping their fingers. The youngest girl is about 12 years old; she is the one who made her hand go. As fast as she made the noise with her hands or fingers, the sound was followed up in the room. It did not sound any different at the time, only it made the same number of noises that the girl did. When she stopped, the sound itself stopped for a short time.

The other girl, who is in her 15th year, then spoke in sport and said, "Now do this just as I do. Count 1, 2, 3, 4," &c, striking one hand in the other at the same time. The blows which she made were repeated as before. It appeared to answer her by repeating every blow that she made. She only did so once. She then began to be startled; and then I spoke and said to the noise, "Count ten," and it made ten strokes or noises. Then I asked the ages of my different children successively, and it gave a number of raps, corresponding to the ages of my children.⁸

Mrs. Fox went on to ask if it was a human or a spirit making the

*The parallels with modern phenomena of "channeling" are obvious, not only in general form but also in the reaction to the messages. Modern "channeled" texts tend to enjoy enormous popular appeal and publishing success, even though more critical observers dismiss the material as bland platitudes derivative of well-known religious teachings.

noises. The raps answered that it was a spirit. Eventually the raps revealed the "spirit" was that of a thirty-one-year-old man who was buried beneath the house and who had left a family of five children, all still living, and a wife who had died two years earlier.

This all took place by 7:30 in the evening. The Foxes called in various neighbors and by 9:00 P.M. more than a dozen people were present. Several proceeded to question the spirit further and learned more details that seemed to describe a murder. The spirit rapper also seemed to know much about the neighbors as well, and one commented, "I think that no human being could have answered all the questions that were answered by this rapping."

As word of the occurrences spread, the Fox household began to draw crowds of onlookers. Impromptu committees were formed, and guards were posted in different parts of the house to try to catch any trickery. At first observers thought the Fox family had nothing to do with the noises, but later it became clear that the sounds were associated with the two younger girls. A publisher from nearby Canandaigua arrived in mid-April and collected testimonies from the principal witnesses, which he later published.⁹ More and more visitors besieged the sisters for communications with the spirit world. Eventually the Fox daughters (now including the eldest sister, Leah) went public, and in time they were giving demonstrations all over the country. Commissions were set up to investigate them, and the press jumped in as well. Most of the investigators were satisfied that the effects were genuine. Some, however, were not convinced. Three professors from the Buffalo School of Medicine claimed that the sounds were produced by the dislocating and "popping" of the girls' knee joints.¹⁰ The professors, as well as those who repeated this criticism, never explained how joint poppings could produce the range of sounds that echoed around large meeting halls in the girls' presence.

As the years went by, the Fox sisters' careers declined, partly due to increased competition from the growing ranks of professional mediums. By 1888 the two younger sisters had lost their husbands, were both alcoholics, and were nearly penniless. In October of that year Margaretta confessed that the rappings had been fraudulent all along. Although at the time Kate seemed to agree with this statement, she denied Margaretta's claims soon after. Later Margaretta herself retracted her confession, admitting to having taken a \$1,500

bribe to make it. This temporary confession provided their detractors with ample reason to dismiss the Fox sisters as charlatans. Other commentators have also produced evidence to show that the younger sisters had staged the confession at least in part to discredit their older sister, Leah, still a successful medium, with whom they had had a severe falling out over family matters.¹¹

Apart from the joint-popping theory, no one found any way of explaining the phenomena that the Fox sisters produced. Joint popping could easily be demonstrated, and those who had witnessed the rapping of the early years maintained that this was nothing like what they had heard. In addition, no one was able satisfactorily to explain how the raps were able to provide the answers so many questioners (often skeptical ones at that) had sought, including information the sisters could not have known or deduced.

Whatever one believes about the Fox sisters, there can be no doubt that they launched Spiritualism as a religious movement. Although Spiritualism never developed the formal belief system or hierarchical organization characteristic of conventional religions, its central tenet was simply that the human personality (in the form of a soul or spirit) survives bodily death and that dead persons can communicate with the living through specially gifted individuals known as mediums. Perhaps the most amazing thing about that religion was its phenomenal growth. Within a few years there were hundreds of practicing mediums. Only five years after the Hydesville affair an English observer claimed that there were not less than thirty thousand "recognized media" in the United States, with more than three hundred "magnetic circles" in Philadelphia alone. At the movement's height most large cities in Britain and the United States had Spiritualistic "congregations," only a few of which survive today.

Mediums

The enthusiasm for Spiritualism brought forward small armies of practicing mediums, persons who claimed they could facilitate communication between the natural and the spirit worlds. The more spectacular of these were the *physical mediums*, whose repertoire included physical effects in addition to the usual communications from the dead to the living. Tables and objects would move, un-

touched musical instruments would produce sounds and melodies, and strange lights might be seen, among other things. Not surprisingly the ranks of the mediums included all manner of persons, ranging from well-meaning amateurs to calculating charlatans who exploited the gullibility of bereaved clients. In general the physical mediums of Spiritualism's heyday enjoyed a most unsavory reputation—except for a few. Over the years there emerged several men and women whose abilities impressed the more critical investigators of the time. However, investigators usually found that even some of the best would resort to cheating when given an opportunity. There was only one exception to this pattern: D. D. Home.

Daniel Dunglas Home (pronounced "Hume") was born in Scotland in 1833 but was brought up by an aunt in Connecticut. As a child he had precognitive visions, and at the age of seventeen raps began to be heard in his presence and furniture was observed to move. His aunt thought it was the work of the devil and put him out of her home, but with the Hydesville happenings in recent memory he was quick to find people who were willing to avail themselves of his paranormal gifts. He began to give séances, and his reputation quickly spread.

Early in his career Home was examined by two experienced investigators of Spiritualism: William Cullen Bryant, the noted journalist and critic, and Prof. David Wells of Harvard. Along with two other Harvard colleagues they paid a visit upon Home with the specific intent of exposing any trickery they might find at one of his séances. As became Home's custom, the investigations were permitted to take place in a well-lit room and the investigators were given every opportunity to inspect the room and the table about which they would sit. During the sitting the table began to move around in all directions, violently at times, even with Wells sitting on it. At one point the table reared up on two legs when no one was in contact with it. The investigators reported:

Three gentlemen, Wells, Bryant and Edwards, seated themselves simultaneously on top of the table, and while these men were so seated, the table started to move in various directions. After some time the table was seen to rise completely from the floor and floated about in the air during several seconds, as if something more solid than air was upholding it.

The investigators concluded their testimony with "this one emphatic declaration—we have the certainty that we were not imposed upon and neither were we the victims of optical illusions."¹² Thus began what is undoubtedly the most amazing career in the annals of psychical research.

The record of Home's activities over the next decade or so is voluminous and includes testimonies from numerous literary, scholarly, and scientific figures. Two extended reports of Home's phenomena—based primarily on notes taken during or immediately after events—were published, including one by William Crookes, a noted British physicist, chemist, inventor, and Fellow of the Royal Society, who was a respected pillar of the scientific establishment and highly critical of Spiritualist claims when he began his investigations.

The range of phenomena observed during Home's séances was truly amazing, all the more so since his séances were usually given in good light. In addition to the raps, which were common, musical instruments of various kinds played melodies, and strange moving lights were observed. Levitations were frequent. Among the most spectacular effects was that of fire handling, or incombustibility, which Crookes and many others witnessed. Crookes observed as Home walked over to the coal fire and picked up "a red-hot piece nearly as big as an orange." Home then cupped his hands around it and blew until it became white-hot and Crookes was able to observe flames licking around his fingers. When Crookes examined Home's hands afterward, he found them "soft and delicate." On another occasion Home stirred embers of a fire into flame and then, "kneeling down, he placed his face right among the burning coals, moving it about as though bathing it in water."¹³

Perhaps most important for the development of psychical research were the series of experiments Crookes conducted with Home. Assisting Crookes were Dr. William Huggins, an astronomer and Fellow of the Royal Society, and Sergeant Cox, a barrister who served as observer. One of these experiments tested Home's ability to play an accordion without touching the keys. (Instruments playing themselves were a frequent feature of Home's séances.) Under Crookes's careful observation the accordion played "a well-known sweet and plaintive melody." A second experiment tested Home's ability to deflect a specially designed balance beam.¹⁴

In 1871 Crookes published his experiments (in considerable de-

tail, with drawings and diagrams), but inevitably his report attracted the derision of many of his colleagues. Undaunted, Crookes patiently published rebuttals to all their criticisms and went on to conduct additional experiments using even more sophisticated apparatuses designed to prevent or detect ordinary physical forces. These experiments employed automatic recording devices to guard against the charge that Home hypnotized all the observers, causing them to misread their instruments. Furthermore this time Crookes confirmed the effects with another medium who was not a professional.

Not long after his work with Crookes, Home's health—which had never been very good—deteriorated, and on the advice of his doctors he moved south to the Mediterranean. He never returned to England. Crookes, for his part, continued his psychical research for several years, but he eventually gave it up as his orthodox research began to consume more time. As if to belie those who had snidely insinuated that he was getting senile or losing his scientific acumen, Crookes went on to develop his radiometer, and some years later he produced the Crookes tube, a high-vacuum tube that facilitated the discovery of X rays.

Despite all his detractors—and there were many—never did any creditable report emerge that Home had used trickery. To this day the best that Home's critics can do is simply conjecture how some of his phenomena *might* have been produced fraudulently. But when these conjectures are compared with the voluminous, detailed eyewitness testimony, they are shown to be feeble indeed.

The Society for Psychical Research

In January 1882 a group of scientists and scholars gathered in London to discuss the scientific investigation of Spiritualism and the formation of a learned society to facilitate these investigations. On February 20, with Prof. Henry Sidgwick, a highly respected (and politically well-connected) Cambridge University philosopher, at its head, the Society for Psychical Research (SPR) was formed. Its aim was "to investigate that large body of debatable phenomena designated by such terms as mesmeric, psychical and spiritualistic." It was pledged to do this "without prejudice or prepossession of any

kind, and in the same spirit of exact and unimpassioned inquiry which has enabled Science to solve so many problems, once not less obscure nor less hotly debated."¹⁵

The founding of the SPR fundamentally changed the nature of psychical research. Prior to 1882 psychical research was largely pursued as an avocation or part-time interest, with the resulting unevenness in quality and haphazard dissemination of results. The leaders of the SPR moved quickly to establish standards of evidence for case studies and methods for experimental research. Almost immediately the SPR began publishing a scholarly journal and the proceedings of its scientific meetings in order to provide an outlet for its work and that of other scientists around the world. In short, psychical research was becoming a *science*, with disciplined experimental methods and standardized methods of description, established by some of the finest minds of the day.

The leaders of the SPR plunged into research with vigor. Within a few years of the society's inception, the research output was filling about 550 pages each year.

The SPR was notoriously tough in its investigations. The poet William Butler Yeats, a one-time member, complained, "It's my belief that if you psychical researchers had been about when God Almighty was creating the world, He couldn't have done the job."¹⁶ This critical approach was evident in one of the first investigations undertaken by the SPR, that of Madame Blavatsky. As a recent immigrant living on New York City's Lower East Side, Blavatsky took up Spiritualism and became the founder of the Theosophical Society, a mystical religion that numbered nearly one hundred thousand adherents at its peak in the late 1880s. Since much of her support came from Britain and her admirers included many British notables, when she visited London in 1884, the SPR organized a committee to examine the psychical manifestations that she had become known for. The SPR's verdict was harsh: Madame Blavatsky was described as "one of the most accomplished, ingenious, and interesting imposters in history." With the publication of an official report the Theosophical Society went into a decline.¹⁷

It would be incorrect to think that all the early SPR researchers did was to chase after mediums, exposing the vast majority of them as frauds. They did enough of that, of course, but it was by no means all that occupied their time. Charles Richet, professor of physiology

at the medical school of the University of Paris and a future Nobel Prize winner, conducted a number of experiments for clairvoyance using ordinary playing cards. In 1884 he published a paper on the application of probability statistics in experiments of "mental suggestion." In an 1889 paper he reported on experiments with a hypnotized subject whose task was to identify playing cards enclosed in opaque envelopes.¹⁸ Not only did Richet pioneer the methodology that Rhine was to use to great advantage about forty years later, but he also observed the curiously unstable nature of the subject's clairvoyant ability, something that plagues psi research even today.

A variety of other experimental studies were conducted over the years, but the most enduring contribution of this era was the collection of apparition cases that was eventually published as *Phantasms of the Living*. One of the several SPR investigative committees—the Literary Committee—was charged with collecting reports of psychic experiences, which they did through private inquiries as well as announcements in the press. The committee was particularly impressed with the number of "crisis apparitions" that they received. These were cases in which a percipient sees (or hears) an apparition of a distant person who at that time is experiencing a trauma or crisis (injury or, often, death).

The committee made a monumental effort to verify and corroborate each case. Letters were written (some ten thousand in one year alone), witnesses interviewed, official records examined, and libraries combed. The amount of research is staggering, and the documentation (still in the SPR archives) comprises forty-two boxes of material. In 1886 the SPR published the results of the massive study and in so doing established a methodology for casework and evaluation of eyewitness testimony still valid today. The committee's conclusions challenged the spirit hypothesis by arguing that these crisis apparitions are really hallucinations by the percipient that are generated by some sort of telepathic message from the person in the crisis. To this day the 1,300-page *Phantasms* remains the starting point for all case studies in parapsychology.

The enormous enthusiasm and energy of the SPR's founders could not last, and as these early giants died, the quantity of research declined. By the early part of the twentieth century psychical research had quieted down considerably. Certainly work continued, with important experiments being conducted in Holland, in France,

and at several universities in the United States. But what parapsychologist John Beloff has called the Heroic Age of psychical research had passed, and the young science had to await the emergence of a new figure to rejuvenate it.¹⁹

J. B. and L. E. Rhine

Undoubtedly the best-known name in parapsychology is that of Joseph Banks Rhine, but in fact his career is not easily separated from that of his wife, Louisa E. Rhine. While J. B. (as he was always known to his colleagues) became the charismatic leader of a revolutionary new science, this probably would not have happened were it not for the intellectual and emotional support of "Louie," a very capable and innovative researcher in her own right.

J. B. Rhine and Louisa Weckesser were friends from their teenage years, when they found they shared a common interest in deep religious questions and a dissatisfaction with the traditional answers of organized religions. Following undergraduate work at different colleges (and a World War I stint in the Marines by J. B.), they were married in 1920. Both then went on to complete Ph.D. degrees in botany at the University of Chicago.

J. B. obtained a good position at the University of West Virginia, and both he and Louisa were at the start of promising careers in botany, but it was a lecture they had heard in 1922 while still in Chicago that made them start wondering if their careers should take a different direction. Sir Arthur Conan Doyle, creator of Sherlock Holmes, had been on a speaking tour promoting psychical research and Spiritualism. Doyle's sincerity and the list of distinguished scientists about whom he spoke deeply impressed the Rhines. After much thought, in 1926 J. B. gave up his West Virginia post and a career in botany to begin training in philosophy and psychology for a career in psychical research.

In the summer of 1926 the Rhines arrived in Boston, a city that had two attractions for them. One was the medium Margery Crandon, who had been the subject of controversial investigations for some years. The other was the presence of William McDougall at Harvard University. McDougall was a distinguished British psychologist who strongly supported psychical research. As luck would