Journal of Scientific Exploration, Vol. 15, No. 2, pp. 167–182, 2001 0892-3310/01

The Scole Investigation: A Study in Critical Analysis of Paranormal Physical Phenomena[1]

MONTAGUE KEEN

School Barn Farm,
Pentlow, Sudbury, Suffolk CO10 7JN, United Kingdom
e-mail: Mkeen7225@aol.com

Abstract—A number of experienced psychical researchers investigated the activities of a mediumistic group in Scole (Norfolk, United Kingdom), that claimed to produce under spiritual guidance a wide range of physical phenomena. During a two-year-long study, lights, tape recordings and films bearing images, glyphs, poems, symbols and messages in several languages were produced. The investigators could find no evidence of deception or human interference. A lengthy report, published as refereed proceedings of the Society for Psychical Research, generated a controversy centring on the nature of acceptable scientific evidence. This is examined in the context of Bayesian and Humian criteria, and the author discusses popular fallacies in the treatment of unpalatable evidence.

Keywords: Scole — mediumship — psychic — physical phenomena — apports — thoughtography — miracles

Introduction

The publication by the Society for Psychical Research (SPR) in December 1999 of the Scole Report (Keen et al., 1999) on an examination of physical phenomena associated with a mediumship group has initiated a public controversy which reflects internal divisions within the Council of the SPR and has stimulated an examination of the question which affects a far wider range of anomalous occurrences: what constitutes acceptable evidence of the paranormal?

Late in 1994, the activities of this group, the Scole Group, named after the Norfolk village in which the principal séances took place in the cellar of the home of its leader, Robin Foy, came to the attention of some leading figures in the SPR who were interested in the application of scientific methods to the examination of mediums and mediumship. These individuals learned of the claims made by the Group, under the imposing title of the "New Spiritual Scientific Foundation," via the first issue of a newsletter. The newsletter reported on the activities of three middle-aged couples who appeared to have dedicated themselves to the revival of physical mediumship, the practice of which had, to all appearances, virtually died out.

Based on two years of regular séances, the Group's chief claims were that they had established contact with a "team" of spirit communicators compris-

ing, or in contact with, a number of former scientists. These had been accessed through one of the couples, a husband and wife team, both of whom entered swiftly into deep trance, remaining thus throughout the proceedings, of which they retained no conscious recollection. The purported discarnate contacts had facilitated the manifestation of spirit lights, moved furniture, created apports (objects appearing from no known source and by no known means), displayed shadowy figures described as angelic forms, and produced films, allegedly employing a novel form of energy not involving the traditional ectoplasmic extrusions[2] with their enervating and sometimes physically hazardous, and invariably contentious, associations. These films, the investigators were told, had been exposed in total darkness initially via cameras held by one or another members of the Group. Next came similar pictures, but these pictures were created from cameras that were apparently operated by spirit forces, independently of human contact. Finally, similar pictures had been produced independently of any cameras or any other equipment, simply from rolls of virgin film. These images were generally somewhat fuzzy representations of familiar photographs, portraits or abstract forms, in some of which could be seen mirror images of persons or animals and, occasionally, half-formed human faces.

Since I lived a relatively short distance from Scole, I was asked by my colleagues to investigate. The rough handling which claimants to the production of physical phenomena had received at the hands of psychical researchers in the first half of the twentieth century made the Group very cautious about opening their séances to members of the SPR, even though we were acting as individuals and not as representatives. But once confidence had been engendered, and a friendly atmosphere of cooperation and trust established (a prerequisite for such work), séances began at Scole in October 1995 with the six members of the Group plus three investigators. My two co-investigators, who subsequently became joint authors of our report, were the late Arthur Ellison, a former SPR president and an emeritus professor of electrical engineering, and David Fontana, a psychology professor, both of them having extensive practical experience in paranormal phenomena as well as familiarity with much of the voluminous relevant literature.

Our objective was to obtain evidence of a permanent nature which could be experienced or examined independently outside the séance room and which was not wholly reliant on subjective assessment, experience, memory or feeling: evidence which had been produced under circumstances which precluded human interference and which would satisfy external critics.

The sittings were held in a near-underground converted cellar in almost total darkness, save for the illumination cast at unpredictable times and luminosity levels. This cellar had a single door, accessible via a flight of steps from a bolted internal door. We were encouraged to search the cellar before and after each sitting. To enable observers to monitor any movement, all members of the Group wore luminous Velcro wristbands.

Background music was normally played throughout the sitting, save when communicators asked for the music to be changed or switched off or made

softer. All proceedings were recorded, and transcripts were prepared later. We sat around a central circular table with four crystals at the cardinal points and a glass dome in the centre, mounted on an oblong wooden stand supported by six thick Perspex cylindrical feet.

The initial voice was invariably that of the principal "control," Manu, who would greet us, offer elevating spiritual messages, advice and guidance, and then yield place to "Mrs. Emily Bradshaw," the chief communicator. The male medium was the channel for a number of reputed scientists. Conversation via these two mediums was very free, the atmosphere friendly and often jocular, and the concern of the communicating entities to comply with our requirements in the interest of evidentiality quite apparent. It was a source of considerable anxiety and regret that we were unable to get them to accept the introduction of infrared video cameras at this stage.

Of the many forms of physical effects we witnessed and described in our report, the light phenomena were the most immediately impressive because of what we considered to be the impossibility of a natural origin or mechanism. Points of light would appear from above, dart at great speeds around the small chamber, describe elaborate aerial patterns, alight on our heads, frequently responding to spoken or silent requests, appear to enter bodies, "dive-bomb" the table top with a sharp "ping" and emerge from below it, irradiate a table tennis ball which ran away from our grasp on the carpeted floor around our feet, and illuminate crystals, bowls and the interior of the glass dome, spreading light slowly through the six Perspex supports on which it stood. On one occasion a light settled on a crystal poised on the edge of the table inches from our hands, spread its effulgence throughout the crystal, which was then levitated before our gaze and gently placed in the base of a translucent kitchen bowl, from which Ellison, sitting on my right, was invited to retrieve it and then replace it. This he did. On being asked to repeat the process he found his fingers closing over the shape and essence but not the substance of the crystal, and his fingers touched each other. The glowing crystal remained clearly visible, and no hand or instrument could have effected this without visible detection. The entire experiment was repeated for my benefit, the crystal having mysteriously rematerialised for the purpose, and was then repeated once more to satisfy Fontana on my left. The light itself was more than once enclosed in the hands of sceptical sitters, and the lights were sometimes sufficiently strong and durable, occasionally lasting from 15 to 20 minutes, to enable us to observe other phenomena.

Not only the experimenters themselves, but virtually all visitors who reported on their experiences after having attended special seminar sittings for up to ten participants, confirmed that they had felt touches, usually in places that were physically inaccessible to any member of the Group. The experimenters reported many instances during which they saw shadowy floating figurines—angelic beings, in the Group's terminology—appearing in front of them, visible in the dim light provided by apparently animated entities and accompanied by gentle brushes against hands or face, as of gossamer, brushes for which no mechanism was apparent.

Several of the conversations we had with the "spirit team" over the next few months yielded evidence, none of it conclusive in isolation, which was difficult to reconcile with the primary hypothesis of subliminal memory or secondary personalities. This was especially noteworthy when comments or statements arose from our own initiative and could not have been prepared in advance. Thus, when Walter Schnittger, an automative engineer and collaborative investigator, discussed the mechanism by which spirit forces were able to transmit messages, albeit very inadequately, onto a blank tape in a recorder from which the microphone had been removed, there followed a technical discussion affecting the thermal limitations on the operating efficiency of semiconductors, which made more sense to him than to the rest of the lay audience (there were six observers on this occasion). Similarly, when Ellison cross-examined the communicators about the electrical and constructional requirements for a type of crystal set using germanium, a set which he was being asked to design and later to modify, he received prompt and authoritative answers via the male medium, who was a carpenter by trade.

Unless the samples of the photographic evidence which we had seen before our investigation were to be disregarded as total fabrications, it was clear that a learning process was at work. Since we ourselves remained unaware of the precise nature, origin, duration or consequences of the constraints under which the communicators appeared to labour, we too had to proceed pragmatically. Our experiences confirmed the essentially exploratory nature of the processes employed. We were not experimenters in control of the parameters, as in a laboratory. The experimenters were for the main part unknown forces operating in defiance of conventional physical laws but apparently eager to assert their intention to help us satisfy the severest protocol within their competence. We were guests allowed to sit in on what was essentially a domestic circle, one of scores reputed to exist in the United Kingdom, but the only one willing to allow experienced investigators to participate.

The production of films, which were the chief but not the only tangible effect created, did not conform to a rigidly determined procedure. The spirit team did not so much acquiesce in the investigators' bringing and controlling their own film as to positively commend this course. Since the initial expectation was that films could be produced only after a gestation period extending over a week or two, it was necessary to agree on the sort of security container in which to house unopened rolls of virgin film. An initial experiment with an approved treble-thickness plastic security bag produced a few anomalous markings on a roll of 35-mm Polaroid colour film, but nothing intelligible or artistic. Nevertheless, the procedure followed was such that it precluded any form of interference or substitution. The black plastic, we were told, was difficult to penetrate. Consequently, we later used a small hinge-lidded padlocked box made by one of members of the Group. Sometimes the unopened film container tubs, with their unexposed rolls of film inside, were found to contain images when the rolls were developed immediately after the séance, and it was soon apparent that the process of what can only be described as spirit

thoughtography could be completed during a single session. As a result, the investigators could normally have the film in or under their own manual control from the time it was bought to the moment at which it was developed. Later, the spirits agreed to try out a wholly new type of film, Kodachrome 200 (x36 exposures); the development of this film took place independently at Kodak's laboratories in Wimbledon, London. This was equally successful.

The images were extremely varied and covered all or most of the length of the roll. Variation in production conditions arose when, on occasions, the Group used film from a supply given to them by the Polaroid Company (the film was expensive, and the Group by no means affluent) or when a novel type of film was used and left unprotected at Scole while the entities "sussed it out."

One of the earliest of these Polaroid films was developed immediately after a sitting during which the work and character of Frederic Myers was discussed, and admiration for his pioneer work in psychology and psychical research was expressed by those on both sides of the grave. On the film were quotations in French and Greek, together with a stanza of an oddly precognitive poem describing the survival of the human soul even when worlds eventually collapsed into what are now called black holes. These all turned out to be extracts from part of an encomium to Myers published by the SPR shortly after his death in January, 1901, and written by his close friend and colleague, Sir Oliver Lodge. The poem was by Myers and was written in the 1870s. The first word appearing on the film was "Diotima," the name given to a fictitious prophetess in Plato's dinner-table essay, *The Symposium*. It gave a clue to the link between the current series of experiments and one of the earliest examples of the cross-correspondences (Verrall, 1906), briefly discussed later, and it was apparently intended to indicate to the investigators that the spirit of Myers, a founder and former president of the SPR, was still attempting to provide further evidence of survival of human consciousness.

Later rolls included an apparently unpublished poem in antique German script; a clear plan of instruction intended for Ellison to enable him to modify the germanium device—a sort of primitive crystal set—that he had earlier constructed to their specifications but which had not worked well enough; and cursive script on films, spread over two different types of emulsion in two successive sittings, on which were written fragments of an ephemeral amendment which Wordsworth made to one of his Lyric poems in 1802.

At least some of these films were created under conditions which precluded any opportunity for substitution or chicanery, in the considered view of the investigators, unless they themselves were to be embraced in the accusation of deliberate falsification. It was not possible to attribute any of this to unconscious deception or the product of subliminal activity, if only because the creation of these films would have required careful, expert advance preparation and the active collusion of the conscious members of the Group, as well as the equally conscious collaboration of the two ostensibly entranced mediums, in effecting spurious communications on matters relating to both past and future films.

The publication of the report was preceded by the appearance of a popular and widely publicised book about the Group (Solomons & Solomons, 1999) and their history. What has happened since has the familiar significance of Sherlock Holmes' dog that failed to bark in the night: no one has come forward with evidence to support the suspicion of deception. Nothing has been revealed about the Group which might lend credence to the claim that they were deceiving their audiences. A glowing award would await the probing journalist able to pick up a single damaging piece of evidence.

Before they were able to demonstrate a fresh type of physical evidence to the three principal investigators, this time using a video camera in the light, the Group experienced interference with their experiments. They eventually lost contact with their communicators and were asked by some fresh entity to desist from sitting together as a group, although before that date, and for the benefit of one of our close collaborators, they had succeeded in producing a short series of video images from blank cassettes housed in a video camera focussed on a mirror angled at the cellar roof. Reports of this breakdown, and of the consequent abandonment of further sittings, were seized on by critics as evidence that the trail had gotten too hot, and the Group had prudently decided to quit before they were unmasked. But there was no evidence to support this and every indication that the Group's members shared the dismay of the investigators at the premature and unexpected termination of what they clearly regarded as a momentous series of experiments.

Discussion

A preliminary presentation of the main evidence by the principal authors to members of the SPR Council had attracted from senior figures in the Society some criticisms which were later embodied in formal reservations published with the main report. These were followed by a rejoinder from the authors, together with strongly supportive commentaries from the two referees. Most of the criticisms centred on the alleged absence or inadequacy of safeguards against deception on the part of the group under investigation. Much ingenuity was employed to suggest ways in which some of the phenomena might have been effected normally, albeit with considerable cunning and skill. The authors argued that no amount of expertise in the deceptive arts could account for the wide range of phenomena experienced and that in some cases the controls were as complete as even the most demanding sceptic could reasonably require.

While it would unduly extend the length and distort the purpose of this paper to detail precisely the criticisms advanced or defences employed, the nature of the criticisms is similar to that employed in relation to other phenomena currently designated by the innocuous euphemism of "anomalous." It is quite legitimate to make much of the fact that most events described occurred in darkness, that mediums as well as the conscious members of the Group were not kept under physical restraint or subject to bodily examinations, that

the use of infrared photography or thermal imaging devices was not acceptable and that we did not get a series of similar productions (e.g., of the films) under precisely determined and wholly satisfactory evidential conditions. But set against this are a number of inherently unquantifiable circumstances which weigh positively in the evidential scales. One is the total absence of financial or other motives, including the desire of some members of the Group to maintain anonymity. More persuasive is the total lack of any trace of deception at any time by any member of the Group over a period of four or five years, despite the presence of hundreds of witnesses in six countries. Since nearly all the non-paranormal explanations presuppose movements on the part of one or more members of the Group which would invite risking observation and hence exposure, the absence of any such reports is itself significant evidence.

A closer look at the critics' arguments reveals some fairly fundamental misconceptions. One is the confusion between evidence and expectation. No doubt we all have some idea of how we would expect to behave when, translated to the next world, we set about the task of making our survival over there known to sceptical investigators over here. The ringing of bells, vibration of tables, flashing of lights and projection of voices through trumpets have struck many as seriously lacking that degree of gravitas one might reasonably expect from those whose solemn mission is proclaimed to be the transfer of this world's lamentably materialistic philosophy to a more ethereal plane: hence, the conclusion that these acts all too trivial and frivolous to be authentic. Even the playing of popular hoi polloi jingles strikes a discordant note among those who consider a Brahms chorale or a Bach cantata better evidence of spiritual elevation.

Such preconceptions run through several major criticisms. It was found that most of the apparently obscure but accurate references to passages or events described in long-forgotten early proceedings of the SPR, going back to the early 1900s, could have been taken from a book written by Sir Oliver Lodge in 1909. The implication is that this supports a fraud hypothesis. But if Lodge, who was assiduous in his efforts to prove survival during his lifetime and who has been constantly reported as communicating about it since his death in 1940, was indeed among the leading spirit scientific communicators, it seems perfectly reasonable that he should draw on his own memory of his own book. Similarly, when it was found that the several hermetic symbols appearing on one film appeared to have derived from somewhat crude tracings from a popular coffee-table book of alchemical symbols by Maurice Bessy, this was given as evidence pointing suspiciously to deception. But no one attempted to explain why discarnate communicators, facing heaven knows what difficulties, should not choose the easiest means of impressing their thought-images on film, bearing in mind that paranormality is conferred by the circumstances in which such images appear, not by the images themselves.

Critics have all failed to face what must be the most formidable objection to any variety of fraud hypothesis: that all the evidence must be taken together. All the positive evidence was based on observation and records; all the nega-

tive evidence was inferential. There was reluctance to accept the Bayesian bundle-of-sticks approach; yet we were clearly presenting an accumulation of evidence which could only yield growing probability levels. This was made easier by the fact that all previous investigations into physical mediumship have been concentrated on a single individual, who was sometimes assisted by a relative or manager. It is vastly more difficult for six people to sustain deception for long periods, before constant public scrutiny, and without a single false move or statement. Such a collective deception would have had to embrace an enviable competence in the magical arts, feats of memory, technological know-how, ventriloquism, and physical agility, enabling well-rounded figures to squeeze undetected behind chairs and feet in a crowded room, while maintaining the precise accents, idiosyncracies and inflexions of speech characteristic of the purported discarnate entities.

All this helps to make the issue uncomplicated: it was either all fraud or all genuine. There is really little scope for a favourite hypothesis, that on occasions and under pressure fraudulent phenomena would be produced, but otherwise it was genuine, or vice versa. Far too much advance planning, coordination of effort and timing, conning and rehearsal would be required. It is barely conceivable that, of the dozen or so rolls of film which were produced with or under the surveillance of the investigators, the Group would have gone to the trouble of running the enormous risk of faking one or two, but not the rest, especially since the techniques required to create one film could not necessarily be used, or planned in advance, for another in which the protocol was marginally changed.

Peter Sturrock dealt decisively with the Bayesian argument in his examination of applied scientific inference (Sturrock, 1994), as had Colin Rollo before him (Rollo, 1967). The post-Scole debate has confirmed another major weakness in the principal criticisms: the common tendency to require the paranormal to comply with the expectations and to observe the rules appropriate to the normal. This generates a criticism which is both widespread and unremarked. One might instance the occasion when, having referred to "direct voice," I was told by Foy that this terminology was now considered outmoded, and he added that, when they inadvertently used it themselves, they had their knuckles rapped. At that precise instant, the middle knuckle on my right hand, in which I was holding a pen poised over a notebook lodged on my lap under the edge of the table, received a playful rap, despite the fact that total darkness, no less than the immediacy of the rebuke, would appear to have made this little feat impossible. But if it is regarded as axiomatic that vision is essential for such accuracy, and light a prerequisite to vision, the critic who is glued to normality must perforce either disregard this or attribute it to imagination. So far they have preferred the former. Similarly, a sceptical commentator on the out-of-body experience has fortified her conviction that it must be a chemically or electrically induced aberration of the brain by arguing that "it is very hard to see what the astral body, spirit or soul is, how it can see if it does not have light-absorbing eyes." This approach makes all claims of distant viewing, the

evidence for which is now as overwhelming as any in the paranormal field, by definition impossible.

To those of us who became accustomed to the unmistakable voice and idiosyncratic personality of Mrs. Emily Bradshaw, during sittings with the Scole Group, which came through whether we were in England, Spain, Switzerland or California, several thousand miles away, the notion that a spirit which has manifested at a house in Norfolk, England, cannot present herself in Los Angeles without buying an airmail ticket and behaving like any normal person seems risible. But such is the implication of the normality approach.

No less common is the assumption that, because the purported communicators do not behave as we would expect, do not give us the winning lottery number, the resolution of Fermat's last theorem or the date on which the next seismic heave strikes the San Andreas Fault, they must be figments of the medium's brain, gleaning information from a vast store of cryptomnesic memories and masquerading as a separate personality clothed in garments fabricated by imagination and projected by vocal chords trained to impersonate a novel diction. But this theory collapses immediately when one can produce a single piece of information which is not, and could never have been, available to the medium.

The assumption underlying this criticism has very widespread implications. Among the most frequently reproduced photographs designed to illustrate the obviously fraudulent nature of so-called ectoplasmic images of the past are those of somewhat grotesque and crude paper masks. They are featured in Baron von Schrenck Notzing's celebrated series of tests on a medium known to history as Eva C. (Schrenck Notzing, 1923). But a study of the elaborate precautions taken by the medical investigator and his two qualified colleagues shows that, if Eva had contrived to smuggle in the mask during the séance of August 7, 1912 (to take one example), she would have had to have packed and concealed about her body a plastic mask of natural size, a head shape of paper or textile fabric, and a quantity of a substance, the size of a hand, which would leave traces on her dress. In spite of all the precautions, including prior examination of her bare body, hair, mouth and ears, and despite the fact that she had been sewn into a séance costume which was found after the sitting to have remained unopened, the medium would have had to pack this equipment in or on her body, open it up, use it before the cameras, fold it all up again and conceal around her bare body so that it would remain undetected despite a subsequent body search. Such precautions, which extended to hand-holding and the unexpected shining of torches and taking of flashlight plates, has had not the slightest effect on those who consider it obvious that no genuine spirit would want, even if it was able, to project an image with such manifest signs of crude human fabrication.

The Scole phenomena suffered from this same implicit assumption. During the final sitting when all three investigators were present at Scole, Fontana placed a blank tape in a Panasonic tape recorder from which the microphone had been removed. The aim was to see whether it could record a discarnate

message while the recorder was held in Fontana's hands. At a given signal, the start button was pressed, to coincide with a tape recording operated by Foy and recording normally. The former both emitted and recorded, reportedly as a thank-you present to me, passages from Rachmaninoff's second piano concerto, along with a voiceover declamation, but it recorded nothing of our exclamations of surprise, or our discussions with the communicating entities—all of which, together with the anomalous music, were heard on Foy's simultaneously recording tape. The view of two experts was that, in the circumstances described, the music could not have been picked up from a radio transmission, although even if this had been the case I would still have found it difficult to believe that anyone could have guessed the unique significance for me of this particular piece of music. However, the recording did give every sign of having been crudely faked, rather like the film with alchemical symbols. There appeared to be a normal human breathing rate, noises like those made when the microphone is accidentally knocked, wow and flutter characteristic of the use of a poor-quality sound source, and a reverberating sound typical of recording at a distance. But since no one has yet been able to explain just what characteristics spirit-made films would have to possess to distinguish them from man-made artefacts, or what noises a spirit-made tape would have to make to qualify as a discarnate product, this conclusion is clearly unsound.

How Appropriate Is Hume's Dictum?

The central issue generated by the appearance of the Scole Report was what constitutes acceptable evidence of the paranormal. Inevitably this has stimulated a debate based on the philosopher David Hume's famous essay on miracles (Hume, 1748), in the course of which he defined this much-quoted, and still widely accepted, criterion:

> No testimony is sufficient to establish a miracle, unless the testimony be of such a kind, that its falsehood would be more miraculous than the fact which it endeavours to establish.

Hume was writing specifically on miracles in terms of their role as one of the supporting props of religious belief. He was not addressing reports of what we now consider to be fairly routine paranormal occurrences, grouped under the heading of extrasensory perception. His attack was on theological bigotry. To many engaged in psychical research, and to those who assert the existence of psi phenomena, they are simply manifestations of a natural order which transcends and subsumes that governing the material world. Hence, they cannot therefore properly be considered miracles simply on the grounds that they do not conform to our materialistic expectations or accepted rules or on the grounds that we cannot understand the mechanism by which they operate. Hume's objection to what he defined as miracles was not that they contradicted reason: he had thrown reason out of the window long before as a tool to

prove anything. Nor was it good enough to say that miracles affronted the law of causation. Hume had already demolished that theory, leaving it to Immanuel Kant to resurrect it. Miracles were impossible, Hume argued, because they were *against uniform experience*. No one had ever experienced lead floating on air or dead men coming to life. It was not that these things were intrinsically impossible: merely that there was no reliable evidence that they had ever happened. There had, in his view, never been any event thus contrary to uniform experience and attested to by a sufficient number of men,

> of such unquestioned good sense, education and learning, as to secure us against all delusion in themselves, of such undoubted integrity, as to place them beyond all suspicion of any design to deceive others.

Today, any such criterion would be rightly considered inadequate to satisfy doubts about the paranormal. Good will, high levels of education, integrity of witnesses, numbers of such observers and the like are insufficient: what we want is a procedure aimed at excluding fraud, not just large numbers of witnesses of high education and impeccable integrity. Or if we are concerned with those manifestations which appear to depend entirely on human witness, then we expect supporting and independent evidence from contemporaneous photographs or videos, from observable changes in the electromagnetic field, from the records of a radar screen, fingerprints from alien visitors, or wax images of materialised forms, as the case may be. It is precisely the absence of these types of evidence, or the unreliability of what physical evidence there is, which continues to bedevil the UFO-logical, abduction and crop circle phenomena.

The evidence loosely defined under the rubric of paranormal phenomena which has accumulated since Hume's death, and of which the Scole material is a recent but a minute part, has provided examples in abundance to satisfy Hume's reasonable doubts. Yet despite the number of eminent scientists whose cautious investigations and thorough-going protocols had by the early years of the last century convinced them of the existence of telepathy, clairvoyance and precognition, often against their strongest instincts and gravely to the detriment of their public reputations, resistance to the concept remains as passionate as ever. One of the reasons for this is the almost total neglect of any evidence other than that which is produced under procedures familiar and acceptable to scientific investigation, susceptible to statistical evaluation, and subject to replication. It will doubtless come as a shock even to many parapsychologists aware of the achievements in this field, most recently and ably documented by Dean Radin (Radin, 1997), to learn that very little of both substance and novelty has been discovered in the past seventy years which is not found in the mass of experiments and experiences recorded in the first half dozen volumes of the *Proceedings of the Society for Psychical Research* in the 1880s. Had he been around to study and perhaps play some role in the collec-

tion and evaluation of that evidence, the subject of so much expert and objective study, Hume would almost certainly have changed his tune, or else his principles.

To Hume, a miracle was a violation of the laws of nature, and he has come to be regarded as the patron saint of skeptics, if the oxymoron is allowed. A closer look at some of his arguments might better elevate him to the status of patron saint of dissemblers, however. For, despite the oft-quoted criterion of acceptability, he was honest enough to cite a then-popular example of St. Medart's miracles which had indeed the requisite number of judges of unquestioned integrity, and which had been attested, on Hume's own admission, by witnesses of credit and distinction, and which had never been refuted, even by those who had most to lose by accepting their miraculous nature. I have no idea whether St. Medart did perform the miraculous feats ascribed to him, but the evidence ought to have satisfied Hume's plausibility requirements, unless he had ruled out miracles as intrinsically impossible. And this his philosophy did not allow him to do.

Such ambivalence is far from uncommon. Hume must have been well aware of the celebrated occasion when his older and eminent contemporary, Swedenbourg, accurately described at a party in Gothenburg on the evening of July 19, 1759, the progress of a great fire in Stockholm, on the other side of the country some 300 miles distant, and how it had been halted only three doors away from his own house, all of which proved correct when news came by normal means two days later. The event was the talk of Gothenburg. Swedenbourg was a very prominent figure throughout Sweden. There was no lack of corroboration. The event was acutely embarrassing to Kant, who investigated it and found himself unable either to deny it or to accept it. But if the event described is by definition impossible, or de facto impossible if we adopt the shifty rationalisation which Hume had to embrace, we are obliged to call all the witnesses liars or victims of mass hallucination. That is precisely, if unintentionally, the implication of the Scole critics, whose concern is with perceived deficiencies in the precautions against fraud. They necessarily imply deception, not merely by those under surveillance but on the part of the investigators themselves, since some of the most impressive evidence turns on their honesty, not just on their competence.

Hume's yardstick of acceptability is essentially subjective. It proposes a balance of plausibility: only if the "natural" explanation is even more farfetched could he accept a miracle, at any rate, in theory. But if, instead of employing the tendentious word "miracle," which generates insoluble semantic difficulties, we apply this yardstick to extrasensory perception or demonstrations of psi, we find it not at all difficult to accept. Where resistance to the mere concept of psi, or ESP, is fundamental, in that it is an impregnable obstacle, it is pointless to apply the criterion, indeed pointless to continue the discussion. Someone raised in a household where reports or experiences of what we might call the paranormal were so commonplace as to be unremarkable would not need much persuading to reject in favour of the paranormal an ex-

planation based on overheated imagination, mental delusion, deliberate lying, psychedelic drug-taking or infectious hysteria. Someone else, steeped in militant atheism and clinging as strictly to the doctrines of materialism as the zealot adheres to a literal interpretation of the Bible, would need much more persuading and could be relied upon to erect all manner of barriers and to employ the most desperate arguments to account for the evidence.

There is nothing unique about ESP in this context. To a great or lesser extent, the same reaction, and the same process of resistance, applies throughout science, whether related to the acceptance of meteorites or the phenomenon of hypnotism in earlier days or to the memory of water (Benveniste) or the discovery of "cold fusion" (Fleischman and Pons) in these days. There is one important difference, however. Resistance to Benveniste's demonstrations or the cold fusion claims begins to weaken not simply with repeated replications but as some rational explanation to account for the modus operandi emerges from the mists and is found not to undermine but only to extend the framework of scientific knowledge. With ESP, however, we seem to have a more direct and serious conflict. It appears not simply to go beyond prevailing orthodox concepts but to be irreconcilable with them.

For the most part, those of us engaged in psychical research are not in the business of marvelling at unrepeatable wonders; still less are we in the business of relying on the word of witnesses, however authoritative, well educated, wise and disinterested they may be. We know too much about delusions and illusions and the weaponry of skeptical dismissal. We are primarily concerned with tangible evidence, the recorded statements emerging from persons in an altered state of consciousness producing verifiable information in circumstances which deny access to it by any normal means: information which is sufficiently specific and copious (or both) as to rule out chance coincidence or guesswork. But that is not what Hume was thinking about, or could have been aware of, and his dictum must be judged in the light of the phenomena which he was assessing, and about whose effect on the gullible he was rightly worried.

So then we can accept Hume's yardstick as sensible when evaluating claims of the miraculous in the context of the circumstances of the 1750s, at the dawn of the era of rationalism. But apply it to the host of paranormal claims today, and it is seen to be substantially irrelevant as well as inadequate. Its assumption that evidence depends only on the integrity, number, educational attainments, etc., of witnesses has little or nothing to do with a meta-analysis of the results of 148 ESP experiments which yield a probability against chance expectation of more than a billion to one (Radin, 1997). If repetition on that scale does not constitute what Hume defined as uniform experience, it is difficult to know to what evidence his clarifying dictum might apply.

Would Hume, or his modern equivalents, find it easier to reject this level of probability than, by accepting it, to implicitly acknowledge the "miracle" of distant viewing? He might choose to escape this dilemma by professing ignorance amid the increasingly arcane disputes among experts over statistical in-

terpretations and randomisation reliability. But what if he were invited to assess the outcome of Drayton Thomas's hundreds of book-tests (Thomas, 1922), in which the only relevant considerations, once safeguards against deception were in place, were not the integrity of scores of well-educated witnesses but the likelihood that a voice emerging from a comatose medium would know the contents of something printed on the sixth line of the 123rd page of the fifth book on the third shelf from the left in someone's library, or the substance and position of an obituary notice in the following day's issue of *The Times,* when the type had yet to be assembled? It would not help Hume to rely on his requirement of uniform experience when so high a proportion of such tests proved accurate. But it does raise the issue of what constitutes uniformity, for here we have another familiar objection to the evidential value of what are commonly called spontaneous phenomena: they simply do not lend themselves to repetition, let alone replication.

Hume, however, was almost certainly referring to events which were or had become so commonplace as no longer to be considered remarkable. Had he been able to note the regular and widespread communications over the last century and more from or through mediums to people who, being of sound mind and even education, would affirm that correct information, inaccessible by any normal means to the medium, had been dispensed, or had he been able to study the opus of mediums like Gladys Osborne Leonard, Geraldine Cummins or Eileen Garrett, he would surely have considered his criterion of plausibility duly satisfied. In all probability he would have taken refuge in the halfway house to which his twentieth-century disciple, the sceptical Frank Podmore, resorted. This action was grudgingly taken in order to acknowledge the evidence for telepathy, but then to heap on to this hitherto disregarded mental attribute a host of additional features (Podmore, 1910). Essential among these would be precognitive clairvoyance. This would explain how a medium was able to predict where the missing will would be discovered. What he was describing, Hume would be obliged to contend, was simply his current prevision of the moment when it was later unearthed. If this explanation failed to fit the facts, for example, where there was only information but no image to precognise, one would have to go further by presuming that the medium had free access to the so-called Akashic records, whence every thought is forever stored.

That explanation, more familiarly described as the super-psi hypothesis, has been given short shrift by such authoritative commentators as Alan Gauld (Gauld, 1982) on sound Humian grounds, namely that it imposes too great a strain on one's capacity to believe. Gauld's celebrated examination of some of the drop-in communicators who intrude into domestic séances and give strikingly detailed information about their former existence, addresses and grievances (Gauld, 1971) places similar strains on efforts to attribute to the minds of one or more individuals detailed information about a long-dead person whom none of the individuals involved in the séance could have known or heard about.

More challenging still for the skeptics is the formidable series of automatic writings known as the cross-correspondences, in which fragments of intrinsically meaningless phrases or messages were written down by different mediums independently in different countries at different times over a period of more than thirty years, phrases which made sense only when the pieces were later put together. With very few exceptions, this has been met with the skeptics' most formidable and unanswerable response: silence.

It is instructive to see the manner with which in practice scientists do treat evidence of the paranormal. We have many examples of it when strange events are reported or re-enacted in television programmes describing various supernormal claims. There were several in this category in a recent UK television program on *Mysteries.* One of the more striking was the report of a young Druse boy who insisted on meeting someone of whom his parents had never heard but who was eventually tracked down in another village the boy had never visited. The boy knew his way around, embraced his apparently unknown friend as "his" son in a former incarnation, identified clothing that had belonged to "him" before his death in action in Lebanon two weeks before the child's birth, and even correctly stated that "he" had left a cigarette in a pack in a shirt. The expert wheeled on to give an alternative explanation, Dr. Chris French, spoke of the long time gap before an investigation had taken place and how fertile imagination, plus a climate of belief in reincarnation, could account for it all. The explanation is feasible only if the several family witnesses, as well as the boy himself and his former "son," were all deliberately lying, without apparent motive or incentive. If this were an isolated case we might be persuaded that this explanation was more likely than the event it purported to explain, but it is anything but isolated, as students of Ian Stevenson's work well know.

As Sir William Barrett, quoting F.C.S. Schiller (Barrett, 1922), observed: "A mind unwilling to believe or even undesirous to be instructed, our weightiest evidence must ever fail to impress. It will insist on taking that evidence in bits and rejecting item by item. As all the facts come singly, anyone who dismisses them one by one is destroying the condition under which the conviction of a new truth could ever arise in the mind."

Notes

[1] This paper is based on a presentation made by the author at the Amsterdam conference of the Society for Scientific Exploration, October 2000.

[2] Ectoplasm is "a seemingly lifelike substance, solid or vaporous in nature, which allegedly extrudes from the body of a medium and can be transformed into materialized limbs, faces or even entire bodies of spirits." (Rosemary Ellen Guiley's definition in *The Encyclopaedia of Ghosts and Spirits* [2nd ed.]. New York: Facts on File, Inc. 2000). It has been extensively investigated, photographed, and even analysed in a laboratory (by Dr. von Schrenck Notzing as part of his investigation of Eva Carrière).

References

Barrett, Sir W. (1922). Introduction. In Thomas, C. D. *Some New Evidence for Human Survival* (pp ix–xxiv). London: W. Collins.

Gauld, A. (1971). A series of drop-in communicators. *Proceedings of the Society for Psychical Research, 55,* 273–340, and supplementary note, *Proceedings of the Society for Psychical Research, 57,* 311–316.

Gauld, A. (1982). *Mediumship and Survival*. London: Heinemann.

Hume, D. (1748). Philosophical Essays, including an essay on miracles.

Keen, M., Ellison, A., & Fontana, D. (1999). The Scole Report. *Proceedings of the Society for Psychical Research, 58,* 150–452.

Podmore, F. (1910). *The Newer Spiritualism*. London: T. Fisher Unwin.

Radin, D. (1997). *The Conscious Universe*. San Francisco: Harper.

Rollo, C. (1967). Thomas Bayes and the bundle of sticks. *Proceedings of the Society for Psychical Research, 55,* 23–64.

Schrenck Notzing, B. von. (1923). *The Phenomena of Materialisation.* London: Tr. Fournier d'Albe, Kegan Paul.

Solomons, G., & Solomons, J. (1999). *The Scole Experiment*. London: Piatkus Books.

Sturrock, P. (1994). Applied scientific inference. *Journal of Scientific Exploration, 8,* 491–508.

Verrall, M. (1906). On a series of automatic writings. *Proceedings of the Society for Psychical Research, 20,* 1–432, but see especially under "Symposium Incident," pp. 241–248, 250, 268, 271, 272, 275, 299–301, 310–318, 327, 414, 424, 425, 429.