
SCIENCE VIEWS THE SUPERNATURAL—I

BY ALDOUS HUXLEY

*Huxley is a famous name in English letters and science. Those who have borne it have been gifted with brilliant, inquiring minds, and Aldous Huxley is no exception. He is perhaps best known in this country as author of *Antic Hay* and *Point Counterpoint*.*

WHAT WE NOW call supernormal phenomena show and have always shown a remarkable uniformity throughout the world. Thus, reports of fire walking come from Fiji, from India, from Japan, from Bulgaria. Every literature contains accounts of apparitions of the dying and the newly dead, stories of hauntings, of prevision, of second sight. Poltergeists always behave in the same way, as though obeying the laws of some mysterious code of ghostly bad manners. The adepts of almost all religions have been credited with extraordinary powers over matter; we are told that they can move objects at a distance, can raise themselves into the air, can produce extensive alterations in their own bodies. And so on.

The imagination is capable of such extravagant flights that the fact of a persistent uniformity is significant; it shows that there is some limiting factor that compels it to take the particular course it has taken and no other. Thus, the uniformity which we find in the myths of the world seems to be due to the similarity of human desires and human processes of thought. Myths are wish fulfillments and explanatory philosophies. But as wishes are everywhere much the same and as simple minds cannot help inventing similar explanations for what goes on in the world, it follows that all mythologies bear a strong family resemblance one to another.

With the phenomena we call supernormal

the case is rather different. Here we are dealing not with tales about the gods but with what are reputed to be facts of human experience. That the gods (or the demons or the spirits of the dead) are somehow responsible is of course assumed by almost all of those who recorded these supernormal phenomena in the past and by many who record them at the present time. But this is merely an explanation after the event. The event itself, if any event it really is, remains purely human and mundane; therefore, unlike the events recorded in myths, susceptible of scientific investigation.

Of the earlier efforts at such investigation it is unnecessary to speak. Inquirers like Glanvil in the seventeenth century did good work; but their notion of what constituted acceptable evidence was not, by modern standards, satisfactory. For our present purposes it may be said that the scientific investigation of the supernormal began in 1882, when the Society for Psychical Research was founded by F. W. H. Myers and Henry Sidgwick.

More than fifty years have passed since then, and the thick volumes of the Society's proceedings testify to the amount of work that has been done. Moreover, the work, as anyone who reads even a few of these many thousands of pages soon realizes, has always been careful, the evidence critically selected and of good quality.

Much fraud has been exposed, much irrelevant matter set aside. But these results, though excellent, are negative. What we are interested to know is whether this half century of patient research has had any positive result. In a word, what facts have been established? And, secondly, what is the significance of the facts, if facts they are? How can they be worked into the existing scientific world-picture?

The reality of at least one class of super-

normal phenomena has been demonstrated, it seems to me, beyond all reasonable doubt. Cryptesthesia, as Richet calls it, includes telepathy or thought transference, clairvoyance, psychometry, water divining, and all other forms of abnormal perception not passing through the ordinary channels of the senses.

II

WITHIN THE LIMITS of this article I can do no more than refer briefly to the evidence for only one of them — telepathy. Telepathy is either spontaneous or deliberately induced, and the evidence for its existence is drawn from well-authenticated records of its random occurrence and from experiments carried out by investigators working with specially gifted subjects. In cases of spontaneous telepathy the percipient frequently receives his message in the form of an hallucinatory image of the transmitter.

It is to be noted in passing that the transmitter is often able, apparently, to transmit without being conscious of the fact that he is transmitting. Conversely, the transmitter may make violent conscious efforts to send his message to a given percipient, without the smallest result. In the combination of transmitter and percipient, the important person is the percipient. If his sensitivity is insufficient or if his state of mind is unfavorable to reception, nothing will be perceived.

The Society for Psychical Research has collected a great deal of evidence about hallucinations having reference to the dying. That apparitions of the dying may appear to their friends at a distance is an ancient and universal belief. As the chances of a given person dying on a given day are known (the odds against any particular date are about nineteen thousand to one), it is easy to calculate what proportion of deathbed hallucinations may legitimately be put down to mere coincidence.

An examination of three hundred fifty authenticated cases showed that thirty corresponded with the death of the person perceived, a figure hundreds of times higher than that which could be accounted for on the basis of simple probability.

Experiments in deliberate telepathy have been numerous. The most recent and successful

are those recorded by an American psychologist, Dr. J. B. Rhine,* in his book, *Extra-Sensory Perception*, published this year by the Boston Society for Psychical Research. Dr. Rhine made his tests with cards. In some cases these were first seen by the transmitter, and the percipient derived his extrasensory knowledge of them from the transmitter's mind. In other cases the cards were not looked at, there was no thought transference, and the percipient was expected to "see" them directly.

The result of the tests seems to leave no doubt as to the reality of telepathy on the one hand and clairvoyance on the other. Dr. Rhine found among students of Duke University a number of suitable subjects. None of them, however, seems to have been as highly gifted as those telepathists of genius who occasionally make their astonishing appearance among us. To work with one of these exceptionally gifted persons is an extraordinary and even rather disquieting experience. Of the nature of thought transference we are ignorant. All we can be sure of is that it is not a form of wireless. It seems to be a purely mental phenomena.

The reality of cryptesthesia in its various forms may, I think, be regarded as established. (Water divining is regarded as so unquestionably a reality that landed proprietors, business firms, and even government departments will pay money to dowzers, in the confident belief that they are making sound investments.)

When we come to what are called the physical phenomena, we find ourselves on unsafer ground. The question that confronts us is this. How far are human beings able to affect matter directly, by means of their minds? For purposes of this investigation, matter must be divided up into three classes — matter included in the subject's own body, matter in the bodies of other human beings, and the matter of which the rest of the world, animate and inanimate, is made up.

In the past it was supposed that mind affected the matter of its body only in a few easily defined ways — as when, for example, mind willed that the hand should be lifted and the muscles duly performed the act. But

* EDITOR'S NOTE: — See "Are We 'Psychic' Beings?" December FORUM; "The Practical Side of Psychism," January FORUM; "After Death—What?" February FORUM.

recently the psychologists have made it clear that the influence of mind over its body is much greater than was supposed a couple of generations ago. There seems to be no doubt now that the symptoms of most diseases can be produced by the mind — that we are ill, in many cases, because, for some obscure and unrealized reason, we want to be ill. At one time it was thought that only functional diseases could be produced by the mind.

But inasmuch as derangement of function produces a corresponding derangement of the organs involved, it is now seen that the mind can actually produce organic disease. Moreover, it has been shown that, if you suggest to a man under deep hypnosis that (for example) the piece of stamp paper you are sticking to his hand is not stamp paper but a blister plaster, a blister will actually rise at the spot. The *Malade Imaginaire* turns out to be really and physically ill. It will thus be seen that the “supernormal” action of a mind on the matter of its body differs from its “normal” action not in kind but only in degree.

That saints should receive the stigmata is a mysterious and astonishing fact but not much more mysterious, not more astonishing than that doctors should be able to raise blisters on their patients by means of suggestion and that the patients should be able by some process of subconscious autosuggestion to endow themselves with practically all the ills, outside a few infectious diseases, that flesh is heir to. If the accounts of certain supernormal physical phenomena are true, then the mind’s capacity to affect its body is even greater than the modern psychologist supposes it to be.

But are they true? To review all the evidence would be impossible. I will confine myself to a few brief comments on the curious phenomenon of fire walking.

III

FIRE WALKING, as I have remarked before, is a rite practiced in almost every part of the world by peoples as widely different in race and culture as the Hindus, the Japanese, and the Maoris. These rites have frequently been witnessed by competent European observers, many of whom actually followed the native worshipers across the expanse of red-hot stones

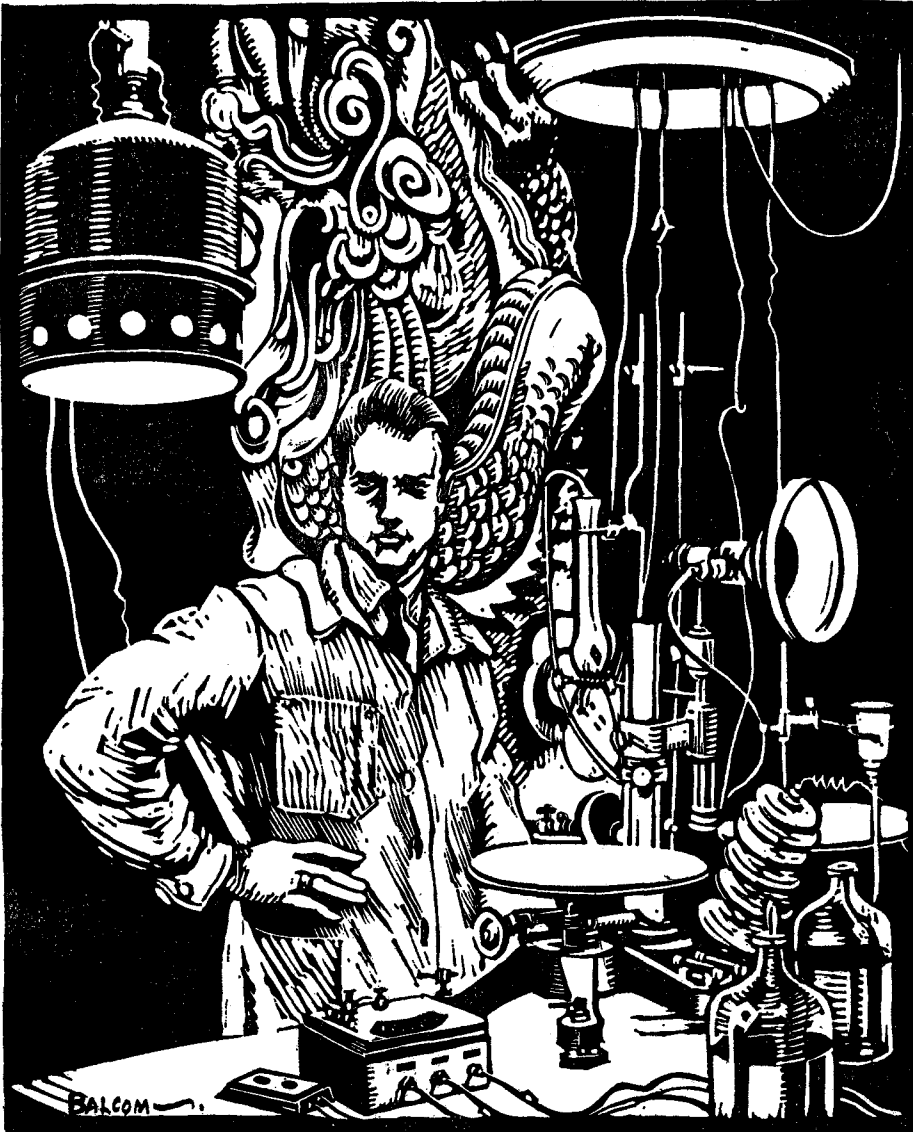
or burning charcoal prepared for the celebration of the ritual.

Andrew Lang collected several reports of fire walking and published them in the fifteenth volume of the *Proceedings of the S.P.R.*; and this year, in *The Listener*, several more recent cases were described and illustrated with photographs. After reading these accounts, one is forced to believe that certain people are able by some unexplained mental process to immunize their bodies against the effects of intense heat. But this is not all. The rank and file of the native worshipers and the European observers are able to walk unscathed through the fire because they are in some way under the protection of the priestly organizers of the rite.

Yet more remarkable is the fact that, according to several of the accounts, the immunity to heat is extended not only to other human bodies but also to inanimate matter. Trailing garments belonging to the fire walkers are not scorched, though the heat of the stones or charcoal is sufficient to cause a dry branch to burst into flame. If the accounts of fire walking are reliable, we have evidence that certain minds can cause altogether abnormal modifications in all of the three classes of matter — the matter composing the bodies that belong to these minds, the matter of other human bodies, and the matter of which the rest of the world is formed.

I have selected fire walking as my main example of a supernormal physical phenomenon for the good reason that it is an event about which it is very difficult to make involuntary mistakes. A man who says he has walked over glowing charcoal so hot that a dry branch brought into contact with it bursts into flame is either speaking the truth or telling a lie. There is almost no psychological possibility of his merely thinking that he walked over something which he merely inferred to be hot. Fire walking has one great advantage over almost all other manifestations of supernormal physical phenomena: it is easy to observe and lends itself to unequivocal experimental test.

Most physical mediums refuse to work except in the dark or by a dim, red light, which, experiment shows, reveals practically nothing. I have attended a certain number of séances and I can assert that, after sitting for half an



hour in a dark and very stuffy room, listening to a gramophone playing the same tune over and over again, I am not prepared to accept even my own testimony of what occurs. I know that, in these circumstances, I shall almost certainly observe badly and remember inaccurately. The lamentable fallibility of human testimony has been demonstrated by many psychologists, and a few years ago experiments were carried out by the S.P.R. to test the reliability of trained and untrained observers in the séance room.

The results, published in the fortieth volume of the Society's proceedings, are really appalling. When the test was over, sitters were asked to answer in writing a series of simple questions about what had actually occurred during the half hour of the séance. The examination papers were marked by the person who

had arranged the details of the test. Out of a possible total of 100 the highest recorded mark was 61, the lowest 6, the average 34. The mistakes made were not merely mistakes of omission; several observers described remarkable phenomena which had never occurred at all. Thus, some of them declared that they had seen colored lights, others that they had heard raps. There were no raps, and, except for some dabs of luminous paint, no lights.

These experiments show that it is really a complete waste of time to attend or read about any séance at which the supposed physical phenomena are not automatically recorded by fraud- and fool-proof instruments and at which the medium is not under

complete control. Up to date very few properly controlled experiments with physical mediums have ever been made. One medium appears to have demonstrated his ability to interrupt a beam of infrared light passing between two points beyond his normal reach; and another medium has, in daylight and under laboratory conditions, caused pendulums enclosed in a glass case to vibrate. For the rest, we must be content to suspend judgment.

Hauntings are psychical phenomena that occur spontaneously and do not require the intervention of a medium. There is some tolerably good evidence for the ancient belief that in certain places noises and apparitions may be persistently heard and seen.

Poltergeists — those imps of mischief that delight in petty destruction — occupy an intermediate position between hauntings and the

physical phenomena directly due to mediums. It is a fact of observation that the apparently supernatural smashing of crockery and furniture, characteristic of poltergeist activity, is almost invariably associated with a young person, generally a girl and often rather feeble-minded, of about the age of puberty.

IV

WE NOW COME to the problem of survival after death — or, to be more accurate, to the problem of communication between the dead and the living. For, of course, there is nothing illogical in the belief (it is that of all orthodox Christians) that souls survive bodily death but are not able to communicate with the living. Survival cannot be directly observed; it is a working hypothesis used to explain other phenomena. We regard a scientific hypothesis as “true” if it explains the greatest possible number of facts in the simplest possible way.

Thus, many people believe that the observed facts of “cross correspondence” between messages received by several automatic writers working independently is most simply explained on the hypothesis that a disembodied spirit is dictating to the various mediums disconnected fragments, which when put together reveal the existence of an intelligible literary whole. Others, on the contrary, think that such phenomena are most economically explained in terms of telepathy between living minds. Both hypotheses involve their supporters in considerable difficulties.

If there is survival, what is it that survives? The soul, comes the prompt reply. But what precisely is the soul? For the ancients the disembodied soul was a poor, miserable entity condemned, when deprived by death of its material instrument, to lead an ineffective existence in the dimmest of hereafters. This

Homeric soul bears a close resemblance to what one of the acutest of contemporary philosophers, Professor Broad, calls the “psychic factor” — a certain intangible something which, in conjunction with matter, constitutes the mind and which, when separated from matter, may preserve certain mental qualities but remains inferior to mind.

The Christians regarded the soul as immortal; but they insisted that, after the Second Coming, it would once more be associated with matter. “As the soul separated from the body is naturally imperfect, the consummation of its happiness, replete with every good, seems to demand the resurrection of the body.” So writes a modern Catholic theologian, Father Maas, S.J. Like the Catholics, most Protestants profess to believe in this resurrection.

But it is worthy of note that the doctrine has now become extremely unfashionable and that many Christians who think themselves orthodox tend more and more to fall into the Manichaeian and Albigensian heresy of regarding the future life as wholly immaterial. Many spiritualists, on the other hand, seem to think that, at death, the departed soul makes use of some form of attenuated matter. (See the description of the next world in Sir Oliver Lodge’s *Raymond*.)

The view that survival is purely spiritual seems to find some support in the fact that the spirits (for I assume for the sake of argument that the entities that manifest themselves at séances are spirits) reveal themselves in most cases as being distinctly inferior in mental capacity to the living men and women they once inhabited. If the soul is what Homer, Professor Broad, and, with qualifications, even orthodox Christians imagine it to be — a thing which can attain perfection only in conjunction with a body — this decline of power after death is precisely what we should expect.

Mr. Huxley will continue his discussion of psychic research in the May FORUM.

A PAGE FOR POETS

CONDUCTED BY HENRY GODDARD LEACH



President, Poetry Society of America

TUNING UP

AMERICA is writing verse again. The other Sunday I opened an old tin box in the family closet and found that it contained bundles of letters, tied in gay ribbons, dating from the early decades a century ago. These notes were all acceptances or regrets to dinners and parties, and the reason that they had escaped the scrap basket was that they were all written in rhyme. Apparently it was a special courtesy to your hostess in that very polite age to reply to her gracious invitation in verse. Those were the days when we were tuning up for Longfellow and Lowell, for Whitman and Poe. And it seems that at this present time we are tuning up for something important in poetry again. Apparently every American village, every school has its poetry group of shy but joyous rhymesters. Verse seems to be one of our releases from the headachy adding machines of the New Deal. If you have delicate ears you can detect in your neighborhood a buzzing undertone of amateur metrists as insistent as the whir of cicadas in your orchard on a hot August day.

"When is a poem a poem?" I once asked Vachel Lindsay, and he answered, "When it is enjoyed and accepted by the community; when the local blacksmith and the carpenter, the doctor and the schoolteacher all agree that they like it and want to keep it." And he deplored the judgment which rejects verses that do not succeed in becoming nationalized through publication in our million-circulation magazines. Happily organs for the more local publication of verse are now springing up all over the country. On my desk I have some sixty tabloid magazines devoted almost exclusively to verse.

Poetry: A Magazine of Verse announces that more than a thousand organizations, representing over five million people, will co-operate in the ninth annual celebration of Poetry Week, the fourth week in May. The founder of Poetry Week, Mrs. Anita Browne, has recently established the headquarters of a National Poetry

Center in the Radio City Building of Rockefeller Center. Another announcement electrifying to poets is the organization by Mrs. Hugh Bullock, with the aid of an advisory board of poets, of an American Academy of Poets. The Academy hopes to provide annual fellowships of as much as \$5,000 for American writers.

At Smith College the girls have revived a sixteenth-century custom. They print their verse in Rhyme Sheets and have them hawked on the campus by criers with hand bells. But these girls also employ twentieth-century methods. Selections from their verses they broadcast from Springfield, to put them over not only on the campus but to the country at large.

So poetry in America also marches on.

ANNIVERSARY ODE

OH POETRY *Society of America*,
Protector of Apollo's esoterica,
But yesterday I knew you in the nursery,
And now it is your Silver Anniversary!
Your vigor and vitality embolden one
To wager that you'll celebrate your
golden one.
Long may you help the Muses and the
Graces

To teach the colts of Pegasus their paces!
Such was the happy salutation of Arthur Guiterman, former President of the Poetry Society of America, to its twenty-fifth annual dinner in New York City on January 31.

The perennial officer of the Poetry Society is the Corresponding Secretary, tireless friend of all poets, Miss Margery Mansfield, 516 East 78th Street, New York. Edwin Markham is the perpetual Honorary President. This year Margaret Widdemer is the Honorary Secretary and the Vice-Presidents are Joseph Auslander, Leonora Speyer, and Padraic Colum.

INTERSCHOLASTIC POETRY CONTEST

THE RESULTS of THE FORUM's 1935 Interscholastic Poetry Contest will be announced in the May issue. Seven hundred ninety-three entries were received. They came from 197 schools in 37 states, Alaska, and the District of

Columbia. Of course, most of them are pleasant and commendable exercises in verse and not necessarily pure poetry.

DOGS, ETC.

SOME MONTHS back this editor returned some verse submitted by a Philadelphia poet, Mary Borland, with the truculent advice that she try an airplane trip to Yucatan or, failing that, practice standing on her head in her own backyard. Nothing daunted, this versatile poet submitted a new sheaf of verse illustrating moods of "stand-on-the-headitiveness." The delighted editor promptly accepted a poem which will shortly appear, "On the Kennelly-Heaviside Layer." But the editor did not wish to be labeled bizarre in his choice of subjects. In fact he has recently been successful in publishing poems on cows and other barnyard animals. So he wrote Mary Borland suggesting a poem about a dog. She replies, "Could you give me a hint — do you want a metaphysical dog, a comic dog, a tragic dog, a Laura-Benetesque dog, a pastoral or sheep dog, a sentimental Victorian dog?" What is more she submitted several specimen studies for poems on dogs, of which I beg her leave to quote two:

One Swift Kick (To a Pet Griffon)

Had I not walked on so blindly,
Had I thought to look behind me,
Had I chatted less politely,
Had I known you meant to bite me.

You had never had a chance
To nip me in the Sunday pants.
One swift kick, and then we'll sever
I sincerely hope forever.

On the Death of Clorinda's Pug

Bring dog-tooth violets, dog-roses red.
Poor Pug is dead.
He ate
A well-filled plate
Three times a day,
And in my arms he snored his life away.
Alas! all flesh is grass,
And even well-beloved pugs must turn
at last to clay.