

BELIEVE IT OR NOT

Most mainstream academics will have nothing to do with studies of the paranormal. But a substantial bequest intended to finance research into the supernatural has tempted the dons of Darwin College, Cambridge. EDWARD FOX describes how they have managed to keep the money and their credibility



Charles Honorton and Caroline Watt, researchers at the Parapsychology Unit of Edinburgh University, demonstrating the 'Automated Ganzfeld Testing System', designed to demonstrate the existence of ESP



There are few callings stranger, and less conducive to ease of mind in a rational person, than parapsychology, the pursuit of obscure psychic phenomena. Commitment to this arcane field is like joining a church, not least because the word "believe" is of vital importance. One either believes in these phenomena or one does not. Signs of proof have flickered too weakly to change made-up minds. We might be standing on the threshold of a new era of consciousness; but then again, we might not. It depends on whom you believe.

The origins of modern parapsychology lie in the Victorian fashion for spiritualism. In 1882, the Society for Psychical Research was founded, to investigate the claims of popular mediums who said they could communicate with the souls of the dead. Parapsychological fashion has moved on, and now interest has focused on the pursuit of "psi", the chimeric physical principle underlying ESP (extra-sensory perception) and telekinesis (the power to move objects without touching them). Perched uneasily between religion and science, and on the margin of academic acceptance, parapsychology is a field that has always depended on the patronage of individual enthusiasts.

So it was with some dismay that the parapsychological community in Britain regarded the coming into their midst of Dr Nicholas Humphrey, a theoretical psychologist best known for his work on the evolution of human consciousness, and an ardent sceptic. Last month, Humphrey took up a new senior research fellowship in parapsychology at Darwin College, Cambridge. For four years he will be paid £25,000 a year from the Perrott-Warrick fund. The fund is named after FD Perrott and FW Warrick, two obscure members of the Society for Psychical Research and administered – thanks to a sympathetic Trinity professor, CD Broad – by Trinity College, Cambridge. It was established in 1931 to support persons over 21 interested in investigating "the existence of supernormal powers of cognition or action in human beings" and "the persistence of the human mind after bodily death".

Previous Perrott-Warrick grant-holders include, from 1970 to 1972, DJ Ellis, the author of *The Mediumship of the Tape Recorder* (a study into how tape recorders might pick up the voices of the dead), and, in the late Seventies and early Eighties, Carl Sargeant. Sargeant's experiments in telepathy, conducted while he held the Perrott-Warrick studentship, were picked apart in the *Journal of Parapsychology* so thoroughly by Susan Blackmore, an apostate parapsychologist, that he abandoned parapsychology.

Iain Stewart

The first person since 1943 to write a PhD on parapsychology at Cambridge University, Sargeant now lives in Nottingham and creates programmes for "dungeons and dragons" computer games.

Because of the uncertain value of the work produced by Perrott-Warrick-funded students, and because of the limited career prospects for those with an academic background in parapsychology, the executors of the fund thought the money would be better used for a "senior level appointment", to be awarded to a research fellow with a proven track record. According to Professor Horace Barlow, currently visiting professor in psychology at Princeton and the head of the committee of Perrott-Warrick electors, administration of the fund was passed from Trinity to Darwin College both because Trinity had no tradition of senior research fellowships tied to a particular subject, and to avoid anticipated arguments with Trinity's governing body over creating a senior post in so controversial a field. Through the agency of Dr Donald West, an emeritus fellow of Darwin, retired forensic scientist, long-time member of the Society for Psychical Research, and secretary to the Perrott-Warrick committee, negotiations were opened to accommodate the new fellow at Darwin.

But the governing body of Darwin looked with horror on the prospect of the appointment of someone who might cause the college to be associated with what one Darwin fellow, the philosophy professor Hugh Mellor, interviewed by the *Guardian*, called "spooks, ectoplasm and card games".

In a move that combined intellectual fairness with Machiavellian shrewdness, Dr Geoffrey Lloyd, Master of Darwin, appointed Professor Mellor to the college committee responsible for selecting the new fellow. Dr Humphrey, says Professor Barlow, was then informed of the new fellowship. Humphrey was "between things"; he had lately completed a fellowship in philosophy at Tufts University in the United States, and had just published a book, *A History of the Mind* (Chatto & Windus, 1992). He applied for the position, and was unanimously accepted by the fellows of Darwin.

Rather than conduct experiments into ESP and other psychic phenomena, as previous beneficiaries of the Perrott-Warrick fund had done, Dr Humphrey intends to examine why people believe in things that are logically, physically and even theoretically impossible in the first place.

The appointment of Dr Humphrey managed to satisfy the terms of the bequest

(namely that its grant-holders should investigate psychical phenomena) while reassuring the majority of Darwin fellows that, as Dr West put it in a letter to the *Journal of the Society for Psychical Research*, "the subject matter was just myth and superstition... The only possible interest was to discover why some people could be induced to believe impossible things."

Nicholas Humphrey is an uncompromising rationalist, who opposes religion as strongly as he does belief in the paranormal. As an undergraduate at Cambridge in the mid-Sixties, Humphrey edited the student magazine *Granta*, the only scientist ever to do so. Since then he has taught at Oxford and Cambridge, and, in 1981, delivered the BBC's Bronowski Lecture on the hydrogen bomb. "If I can do some good in the world," he says, "it would be in attacking religious belief. Believing in nonsense is a bad thing. A rational, sceptical view of life is useful; one should never let one's guard down. The world would be a better place if people questioned everything."

Now 49, Humphrey was born into a family of scientists: his father was a professor of

medicine at London University, his mother is a practising psychoanalyst. His grandfather AV Hill won the Nobel Prize in the Twenties for physiology, and the economist John Maynard Keynes was his great-uncle. "I was taught to be extremely sceptical about religion from a very early age... At one stage I thought I would get God to prove himself. I was fishing, and I said, 'OK God, I'll give you ten minutes to help me to catch a fish.'" Nothing happened.

His work up to now has been on the evolution of human consciousness and the brain. "Minds", says Humphrey, "are functional systems, designed by natural selection to serve a clearly defined role in the lives of the animals that possess them." They don't fly off to heaven or hell or anywhere in between after we die, and they are incapable of speaking from beyond the grave, communicating telepathically, or of making the television change channels without using a remote control device. As Dr Donald West observes, "He [Humphrey] believes the mind produces consciousness in the same way that the kidneys produce urine."

Parapsychologists, on the other hand,

tend to believe in Mind as an absolute, a kind of indestructible energy that survives the body after death. The idea is deeply rooted in the 19th-century spiritualism out of which modern parapsychology was born.

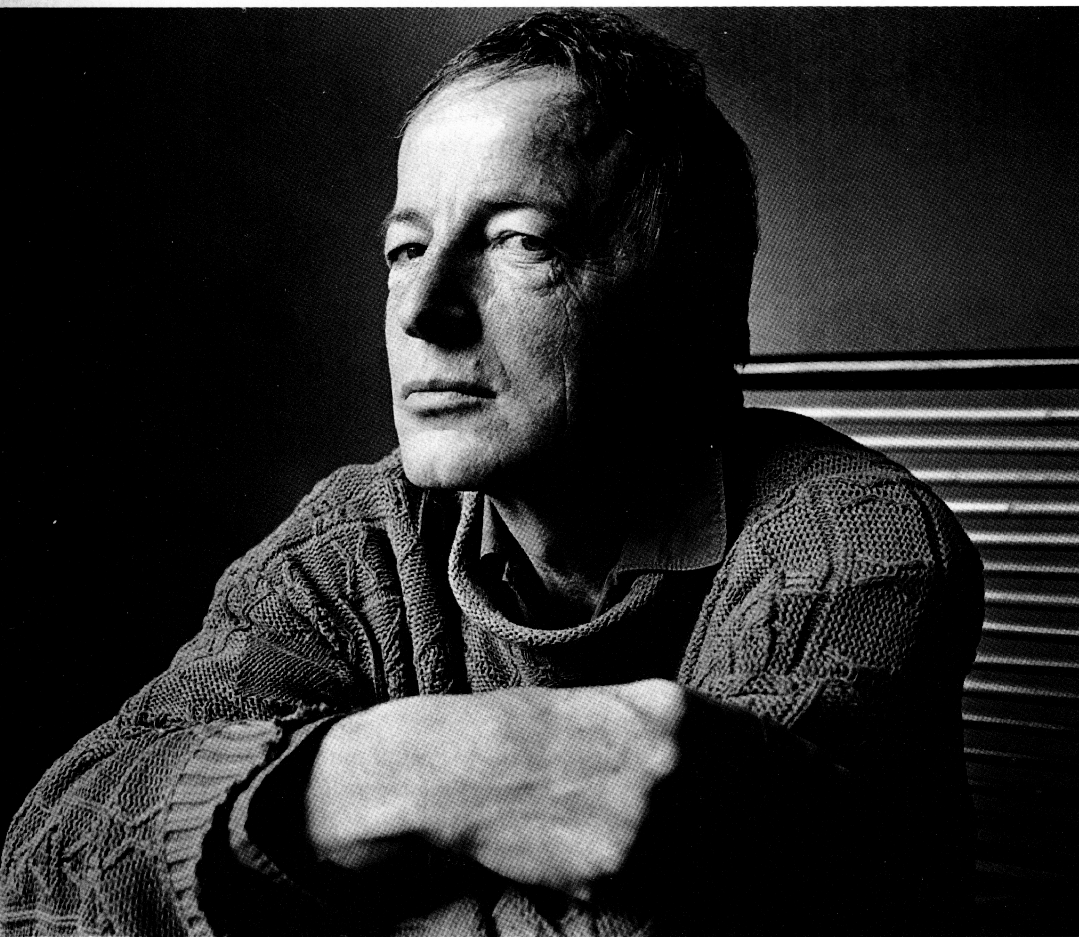
Despite his non-transcendental view of the mind, Humphrey has long been interested in the bizarre miscellany of phenomena that accumulate under the heading "paranormal". In 1987 he made *Is Anybody There?*, a television documentary on the subject, and in his study he keeps a spoon bent by Uri Geller, the Israeli mentalist.

Dr Humphrey doubts he will stop people believing what he believes is impossible. Conspicuous among those believers in the impossible is Brian Josephson, a physicist at the Cavendish laboratories in Cambridge. In 1973, at the age of 33, Josephson won the Nobel Prize for physics for a discovery concerning the behaviour of superconductors, and became Britain's youngest Nobel laureate. Since then his interests have become more metaphysical. He reads Oriental philosophy, especially the Hindu Vedas, practises transcendental meditation, and has developed an interest in parapsysics (the physics as opposed to the psychology of the paranormal). Josephson fiercely opposed the appointment of Humphrey.

"Ordinary physical processes work only at the speed of light, but there are other processes that link things directly," Josephson says, opaquely. "I am interested in putting Mind into physics. Mind is something that creates Order, and there are more sources of Order than we know about. The task is to find ways of proving this hypothesis... You can't understand what happens in nature without assuming that things are interconnected... People derived their expectations of nature from classical physics, but then quantum physics came along. He [Humphrey] doesn't understand the physics."

Brian Josephson grumbles that the decision to appoint Nicholas Humphrey was "a private agreement among sceptics", and violated the spirit of the Perrott-Warrick bequest. In August he wrote a letter to the *New Scientist* complaining about "the ill-informed attitudes displayed by those involved with the decision". He is still somewhat suspicious of Humphrey although the two had a peace-making lunch together after the *New Scientist* letter was published. At the meeting, Josephson undertook to desist from further public criticism of Humphrey but, on the evidence of our conversation, hasn't quite managed it.

"Brian Josephson is being very unfair,"



Dr Nicholas Humphrey, a sceptic and the newly appointed research fellow in parapsychology at Darwin College, Cambridge

Madeleine Waller

says Dr West. As a Darwin fellow and member of the Society for Psychical Research, Dr West is, after all, partly responsible for Humphrey's appointment. "A critical examination is as relevant as anything else and may promote the subject. I don't think experimenters have anything to fear from a careful examination of their methods."

The experimenters of whom Dr West is probably thinking are most notably to be found in the Parapsychology Unit of the Psychology Department at Edinburgh University. The unit was founded in 1985, with a bequest from Arthur Koestler, who had died two years earlier (Koestler's own out-of-body experiences in a Spanish prisoner of war camp in the Thirties had given the writer a lifelong interest in psychic phenomena). Today, mainly because of the sensational results of experiments into ESP conducted by Charles Honorton, an American researcher, the unit is at the cutting edge of parapsychological research.

Until his untimely death last week at the age of 46, Honorton spent his entire professional life single-mindedly researching into parapsychology. After 12 years working on ESP in dreams at Maimonides Dream Laboratories (a now-defunct unit of the psychiatry department of Maimonides Medical Center, Brooklyn), he spent ten years as the director of Psycho-Physical Research Laboratories in Princeton, New Jersey, an institution dedicated to research in parapsychology; it was funded, until his death three years ago, by James McDonnell, head of the McDonnell Douglas Corporation. Honorton was at Edinburgh for one year.

Honorton's reputation as a researcher stemmed from a series of experiments between 1983 and 1989 designed to demonstrate, in laboratory conditions, the existence of ESP. Honorton carried out the experiments using a technique he called the Automated Ganzfeld Testing System.

Here's how the system works. A "receiver" (of telepathic messages) is seated in a reclining chair in a soundproofed room ("an Industrial Acoustics Corp IAC 1205A Sound-Isolation Room, consisting of two four-inch sheet rock-filled steel panels... separated by a four-inch air space, for a total thickness of one foot," specified Honorton), with headphones playing white noise (a soft hiss) over the ears and halved ping pong balls taped over the eyes. A strong red light shines on to the receiver's face, creating the visual impression of a featureless red void, or *Ganzfeld* – an "unpatterned field". (Red light also helps to keep the receiver alert.) These conditions produce "cortical arousal"

and an altered state of consciousness in which, without being put to sleep, the receiver is deprived of sensory stimuli.

In another soundproofed room, a "sender" looks at slides or one-minute videotapes containing a variety of vivid images. The sender then attempts telepathically to transmit one image, randomly selected by computer from a group of four, to the receiver. The receiver speaks into a microphone, describing what he or she is seeing.

After the target image has been transmitted, it and the other three from which it was randomly selected are shown to the receiver. The receiver is then asked to identify the image he or she "saw". The correspondence between the description given in the sensory deprivation room by the receiver and the image he or she has just identified is evaluated by the experimenter.

In 1990, claiming a success rate of 34.4 per cent, Honorton published the results of these experiments in the *Journal of Parapsychology*: in 355 sessions, 241 volunteer subjects "correctly identified... to a statistically significant degree" the transmitted image on 122 occasions. Though most of Honorton's volunteer subjects were sympathetic to the idea of ESP, and, wherever possible, senders and receivers were friends or relatives, I found his results persuasive evidence of the existence of ESP.

According to Honorton, the Automated Ganzfeld Testing System works because it recreates the conditions in which ESP experiences naturally occur. His experiments are the only ones from the field of parapsychology to be mentioned in *Introduction to Psychology*, the most widely used undergraduate psychology textbook in English.

On my visit to the Edinburgh unit last month, Honorton showed me a videotape recording of some of the most successful correspondences between transmitted and described images. The receiver's voice was tracked against the images being transmitted, so one saw what was being sent at the same time as hearing what was being received. The correspondences were eerily close, with an inexactitude that suggested fuzzy transmission across the mental airwaves, the authentic shakiness of a naissant technology, like the first scratchy telephone call.

In one example quoted by Honorton in his 1990 article, a sender transmitted the following image: "Santa and Coke. This is a Coca-Cola Christmas ad from the Fifties, showing Santa Claus holding a Coke bottle in his left hand; three buttons are visible on Santa's suit. Behind Santa and to his left is a large bottle cap with the Coca-Cola logo leaning against an ornamented Christmas tree."

This is what the receiver reported seeing: "... There's a man with a dark beard and he's got a sharp face... There's another man with a beard. Now there's green and white and he's in bushes and he's sort of colonial. He looks like Robin Hood and he's wearing a hat... There's a billboard that says 'Coca-Cola' on it... There's a snowman again and it's got a carrot for a nose and three black buttons coming down the front... There's a white beard again. There's a man with a white beard... There's an old man with a beard..." In effect, a garbled version of the kitschy Coca-Cola ad.

According to Honorton, the Automated Ganzfeld Testing System works best with people of an extrovert and artistic disposition: some students at the Juilliard School of Music and Drama in New York did particularly well. Vivid imagery is used because it "transmits" better; video images were more successfully communicated than stills.

Honorton was a grave, serious man, who clearly found journalists, along with the flaky eccentrics drawn like moths to this subject, part of the cross he had to bear in his pursuit of science. "There is a one billion to one chance against these results being right," he told me. "Even the critics have acknowledged this, so we have a victory of sorts. They have no alternative but to accept them. These results can't be plausibly explained away by arguments about coincidence."

As for Nicholas Humphrey, Honorton said, "He's a very charming fellow. I look forward to interacting with him."

While at the Edinburgh unit, I took an improvised clairvoyance test. Modern parapsychologists tend to be embarrassed by having to use such 19th-century terms, smacking of Madame Blavatsky and her spirit-trumpet. While telepathy is extrasensory communication between two minds, clairvoyance is the power of one mind to discern objects not present to the senses. I sat under subdued lighting in a soundproofed room while the experimenter, Caroline Watt, a parapsychologist working in the unit, projected slides on to a screen in an adjacent soundproofed room. The slides were either of blank rectangles or of a powerful, emotionally affecting image (a giant spider, a knife cutting fingers off a hand, a jewelled skull). I had to tell through clairvoyance which type of slide – blank or affecting – was being shown on the screen in the next room.

My score was 13 out of 24. Given that there is a one in two chance of randomly identifying the type of each slide shown,

my score was one point above average. Although far from conclusive, this was enough to make me believe I had clairvoyant powers. The longer I spent at the Parapsychology Unit, the more I became convinced that Honorton was right and that Humphrey's scepticism was misplaced.

After my return from Edinburgh, I called Dr Humphrey in Cambridge. "Nick," I said, "I've decided to throw in my lot with the parapsychologists. What I saw has convinced me and there's nothing you can say that will make me change my mind."

"I can understand why you might be baffled," he said, in his engagingly reasonable way, and then proceeded to restore my sense of doubt. "It's like watching Uri Geller bend a spoon. Of course, it looks totally psychic... If it's the detail that impressed you, I'd suggest the reason that the receiver got so much of the detail of the Santa picture right might simply be he's seen it before. After all, it was an advertisement. Or else he might have had it described to him by one of the other receivers.

"And Honorton doesn't quote the results which don't serve his purpose. If he's going to quote this kind of example, he should also quote others where the subject gave a result which matched some of the other targets, but not the one being 'sent'."

Another explanation for Honorton's sensational results, he went on, might be the fact that, because of a poorly soldered connection, the soundtrack of the video clips was physically leaking through the receiver's headphones at a very low volume, during much of the experimental series. If the receiver could have heard this, even subliminally, it would have given clues.

Honorton claimed that once this fault was discovered and eliminated from the experiment, even better results were obtained. Humphrey argues back that this improvement was statistically insignificant.

"But if he's right, it's a miracle; it's the most amazing finding in the history of science," says Humphrey.

Charles Honorton found this sort of criticism exasperating. Last month, addressing a meeting of the Society for Psychical Research in London, he said, "I have been dealing very conscientiously and spending a great deal of my time over the past ten years dealing with critics of this field, and I have a suggestion for the critics, especially those who are funded in this area [Nicholas Humphrey, for example], and that is, do research. If you're concerned about some of these problems, do your own studies."

Parapsychology is never going to cease to be a controversial subject, no matter how

conclusively or convincingly the existence of psi (the philosopher's stone – or, if you like, the cold fusion – of parapsychology) is demonstrated. Scientific controversies are resolved through negotiation as much as through agreement on proven evidence, but positions in this case are too firmly held to allow for middle ground, even if a middle ground were logically possible.

Besides, paranormal studies have a tendency to attract charlatans. It seems psychologically necessary for some people to want to demonstrate paranormal powers. This phenomenon, though separate from the question of whether or not these powers exist, is fatally entangled with it.

Sitting at his kitchen table in a terraced house in Cambridge, Humphrey ponders a place for psi in a rational universe.

"In the kind of multiple universes suggested by quantum physics, there is bound to be one particular universe in which paranormal coincidences occur. Why should we be living in that very special universe? Maybe because belief in the paranormal is life-sustaining in some way, and so in an alternative universe we'd have died out through natural selection."

I was surprised to hear him say it. ●