

What's Wrong with the Paranormal?

by Richard Dawkins

An almost unrecognizably hacked-about version of this appeared in the Sunday Mirror (London) on Sunday 8th Feb 1998, under the headline "Aliens are not among us."

Science tells us what we have reason to believe. Not what we have a duty to believe. Not what experts, in their pontificating wisdom, instruct us to believe. Not what some admired authority, like Albert Einstein or Stephen Hawking, believes. No, science tells us what there is good reason to believe.

History shows lots of examples where the best science of the day was wrong, superseded by later centuries. There's much that science still doesn't know. We're quite happy to admit this. But it's a challenge. We don't just collapse with, "Oh well, it must be a miracle which we weren't meant to understand." Instead, it's, "OK, we don't understand it yet. But we're working on it."

Now, how about the paranormal? What does it mean? It's been defined as 'things that science cannot explain.' That means 'Cannot explain and never will', which is much stronger than 'Hasn't yet solved'. Once it was mysterious how bats find their way in the dark. Now we know. They use echoes of squeaks too high for us to hear. Nobody wants to say that bats were once paranormal but aren't any longer. And there's nothing necessarily paranormal about faith-healing. Or visitors from outer space. I'll bet there are creatures on other worlds. One day they may come here, though that is hugely less likely. And if they do come, it's even less likely that they'll look like us or want to abduct our women

To call something paranormal means that it is for ever impossible for science to explain. It's a miracle. Like a perpetual motion machine, or a man pulling a train along by his teeth. Are there any authentic examples of such miracles? No. The philosopher David Hume pointed out that we should accept a miracle only if the alternative – hoax, lie, illusion or whatever – would be even more miraculously unlikely. Usually such alternatives are all too likely.

A recent poll showed nearly 50% believing in thought-reading. Actually, if telepathy ever were convincingly demonstrated, I'd treat as a fascinating problem that science doesn't yet understand, like radio once would have been. But let's talk about it anyway because, like astrology, if there were any evidence for it (there isn't) it would be difficult for present day science to explain.

I can understand why so many people believe in telepathy. We've seen it 'demonstrated' on television. Or we've read about 'uncanny' experiences: say a mother suddenly has an overwhelming presentiment that her son in Australia is in danger – and later discovers that indeed he was. Let me explain why we ought not to be impressed by such 'evidence'.

First the television 'demonstrations'. These are just conjuring tricks. Not even very clever tricks. In one show compered by David Frost, a father and son team from Israel did the following act. The father appeared to 'transmit' numbers to his blindfolded son. When the time came for the 'thought transference', the father shouted out something, like "Can you do it son?" And the son croaked out the answer, "Five" or whatever it was. He was always correct. Since he was blindfolded, it had to be telepathy, right?

Wrong. There are any number of simple codes by which the father could have transmitted the number 5. The word count in his apparently innocent shout is one possibility. If the information to be transmitted had been 6 instead of 5, he might have shouted "Well, can you do it son?" If it had been 4, he could have shouted "Can you do it?" If 3, "Go ahead, son." Instead of gaping with amazement, David Frost should have tried the simple experiment of gagging the father as well as blindfolding the son.

It doesn't matter exactly what trick this pair used. We've all seen better acts from conjurors at children's parties. Then we're told he's only a conjuror, so we don't 'think paranormal.' It's only because David Frost is there, gasping and goggling, that we take it seriously.

I don't know how conjurors do most of their tricks. I'm often astounded by them. I don't understand how they pull rabbits out of hats or saw boxes in half without harming the lady inside. But I don't believe it's paranormal, and nor do you. We all know there's a perfectly good explanation which the conjuror could tell us if he wanted to (understandably enough, he doesn't). So why should we think it a miracle when exactly the same kind of trick has the 'paranormal' label slapped on it by a television company?

If telepathy (or levitation, or lifting tables by the power of thought etc) were ever scientifically proved, its discoverer would deserve the Nobel Prize and probably get it. So why fool around doing party turns on television, instead? The reason is obvious. These performers are only doing tricks, and they know very well that they couldn't get away with it under scientifically controlled conditions.

Having said that, some 'paranormalists' are skilled enough to fool most scientists, and the people best qualified to see through them are other conjurors. This is why the most famous psychics and mediums regularly make excuses and refuse to go on stage if they hear that the front row of the audience is filled with professional conjurors.

Various good conjurors, including The Amazing Randi in America and Ian Rowland here, put on shows in which they publicly duplicate the 'miracles' of famous paranormalists – then explain to the audience that they are only tricks. The Rationalists of India are dedicated young conjurors who travel round the villages unmasking so-called 'holy men' by duplicating their 'miracles'. Unfortunately, some people still believe in miracles, even after the trickery has been explained. Others fall back on desperation: "Well maybe Randi does it by trickery", they say, "but that doesn't mean others aren't doing real miracles." To this, Ian Rowland memorably retorted: "Well, if they are doing miracles, they're doing it the hard way!"

Why, when he could earn a living as an honest conjuror, would someone pass himself off as a 'paranormal' miracle-worker. I'm sorry to say the answer's very simple. There's more money in it, and it's more glamorous. What jobbing conjuror could hope to break into television, with David Frost as fawning master of ceremonies? Or earn fat 'consultation fees' from oil companies for 'psychic divination' of where to drill? Or have Princess Diana drop onto your lawn by helicopter?

How about the uncanny experiences we read about? Say, dreaming of a long-forgotten uncle, then waking to be told that he died in the night. There's no trickery here. The people who have these experiences are sincere, and who can blame them? It can be very weird. It's just that most of us are bad at probability theory. An American scientist who had a spookily prophetic dream sat down next day and did some sums. He estimated the odds that, by chance alone, an experience as uncanny as his would happen to a person in any one night. It came to a low probability, as you'd expect. But, given the population of the United States, he worked out that approximately 300 people would be experiencing coincidences at least as weird as his, every day. Only those who have those experiences bother to remember them, or write to the newspapers. That's why we hear about them. Nobody writes to the paper and says: "I dreamed that my uncle had died. And when I woke next morning, would you believe it, there was nothing wrong with him."

How about performers who seem to 'sense' that somebody in the audience had a loved one whose name began with M, owned a Pekinese, and died of something to do with the chest – 'clairvoyants' and 'mediums' with 'inside knowledge' that they 'couldn't have got by any normal means'? I haven't space to go into details, but the trick is well known to conjurors under the name 'cold reading'. It's a subtle combination of knowing what's common (many people die of heart failure or lung cancer), and fishing for clues (people give the game away when you are getting warm), aided by the audience's willingness to remember hits and overlook misses. Cold readers also often use narks, who eavesdrop conversations as the audience walks into the theatre.

When done well, cold reading can be impressive, but it's perfectly well understood and there's nothing miraculous about it. There are excellent books which explain cold reading and lots of other 'paranormal' tricks, including Bizarre Beliefs by Mike Hutchinson and Simon Hoggart (Prometheus Books) and Why People Believe Weird Things by Michael Shermer (W.H. Freeman). To see the lid taken off astrology, water divining, faith healing, levitation and much else, read Flim-Flam by James Randi (Prometheus Books). For beautifully-written reflections on the richness of science and the poverty of the paranormal, everyone should read Carl Sagan's The Demon Haunted World (Hodder Headline). Oh, and in case you've ever been impressed by spoonbending, the American conjurors Penn and Teller explain on the Internet exactly how that's done:
<http://www.randi.org/jr/ptspoon.html>. (link does not seem to be there anymore - John C)

The paranormal is bunk. Those who try to sell it to us are fakes and charlatans, and some of them have grown rich and fat by taking us for a ride. You wouldn't fall for a smooth salesman who offered you a car without an engine. So why be fooled by paranormal con-artists? What they are selling you doesn't work. Send them packing and drive them out of business.

Home
John Catalano