

Volume 16 Number 2  
Summer 2003

# The **Skeptic**



## **Life from Non-Life: Must We Accept a Supernatural Explanation?**

*Also in this issue:*

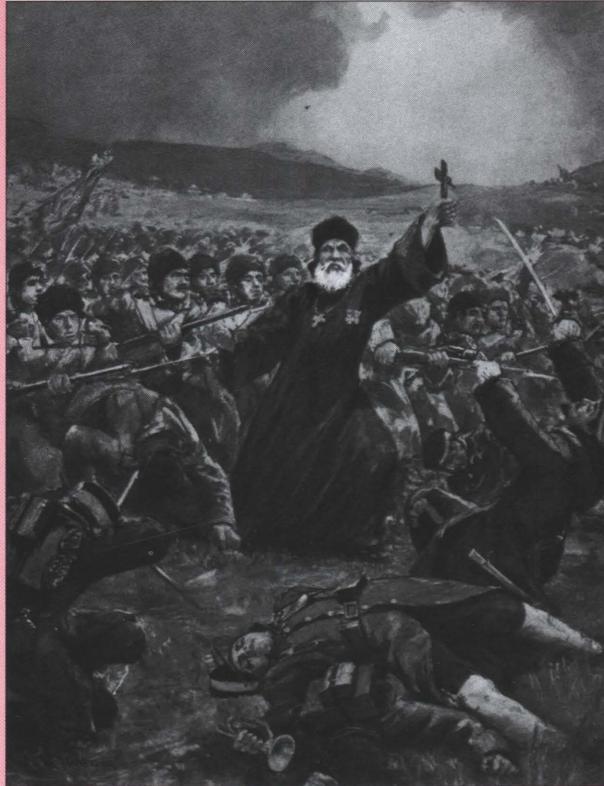
**What are we to make of  
Exceptional Experience? Part 2**

**Psychic Mediums: The Misfit World  
of Derek Acorah**

*Plus:*

**News. Book Reviews. Comment. Humour**

## *Hilary Evans' Paranormal Picture Gallery*



### **PRAISE THE LORD AND PASS THE AMMUNITION, BUT IT WON'T NECESSARILY HELP**

We can picture the scene in Heaven. God's secretary for Russian affairs bustles in – "There's this one just come in, sir. Mayday call – it really is May Day down there – from this Russian Orthodox pope. He's right in there with the troops, urging them on with his crucifix. Must be quite a guy, got a couple of medals on his chest not to mention a back-up crucifix... What would you like me to do, sir? Don't suppose you or the Blessed Virgin would care to make a personal appearance? No, both your engagement books are pretty full today ... but I could put the fear of God into these Japanese heathen with a bolt from heaven, cross in the sky, that sort of thing?" His boss ponders for a moment, then gives the thumbs down. "No, those uppity Russkies are starting to get up my nose, they could use a lesson in humility."

And so it comes about ... that it is the heathen Japanese, not the god-fearing Russians, who win the decisive battle of Kiu-Lien-Cheng, in the Yalu, on 1 May 1904.

**Hilary Evans** is co-proprietor of the Mary Evans Picture Library, 59 Tranquil Vale, London SE3 OBS.



## The SKEPTIC: Volume 16 Number 2 Summer 2003

ISSN 0959-5228

Editorial enquiries to  
**The Anomalistic Psychology  
Research Unit**  
Department of Psychology  
Goldsmiths College  
New Cross, London SE14 6NW  
United Kingdom

Subscriptions/sample issues  
**Mike Hutchinson**  
10 Crescent View  
Loughton, Essex IG10 4PZ  
United Kingdom

Email: [edit@skeptic.org.uk](mailto:edit@skeptic.org.uk)  
Web: [www.skeptic.org.uk](http://www.skeptic.org.uk)  
AOL Keyword: **skeptic**  
Tel.: 07020 935 370  
Fax: 020 7919 7873 **FAO Chris French**

Editors  
**Julia Nunn**  
**Chris French**

Editorial Assistance  
**Wendy M Grossman**  
**Steve Donnelly**  
**Toby Howard**  
**DLF Sealy**  
**Steve Yesson**

Founding editor  
**Wendy M Grossman**

Webmaster  
**Phil McKerracher**

AOL Area  
**Liam Proven**

Finance Manager  
**Mike Hutchinson**

Skeptics in the Pub  
**Nick Pullar**

Cartoons  
**Donald Rooum**  
**Tim Pearce**  
**Nick D Kim**

Special Consultant  
**Cyril Howard**

Special thanks for Internet services to  
**CIX and Net Names**

Graphic Design  
**Lisa A Hutter and Christopher Fix**

Illustrations  
**Mary Evans Picture Library**

All contents copyright unless otherwise marked.

©*The Skeptic*

The opinions expressed in this magazine are those of the authors, and do not necessarily represent those of the Editors.

## Contents

<b>Editorial</b>	
Julia Nunn and Chris French	4
<b>Hits and Misses</b>	5
<b>Skeptic at large . . .</b>	
Wendy M Grossman	7
<b>What are we to make of Exceptional Experience? Part 2: Ganzfeld Studies</b>	
David Marks	8
<b>Skeptical Stats</b>	11
<b>Life From Non-Life: Must We Accept a Supernatural Explanation?</b>	
Steve Stewart-Williams	12
<b>The Misfit World of Derek Acorah</b>	
Matthew Coniam	17
<b>Rhyme and Reason</b>	
Steve Donnelly	21
<b>Philosopher's Corner</b>	
Julian Baggini	22
<b>ASKE News</b>	23
<b>Reviews</b>	24
<b>Letters</b>	27

Published by

**CSICOP** and **Skeptical Inquirer**

International Headquarters

PO Box 703, Amherst, NY 14226 US (716) 636-1425



# Editorial

Julia Nunn and Chris French



HELLO AND WELCOME to issue number 16.2 of *The Skeptic*. In the second part of his three-part assessment of parapsychology, David Marks turns to the topic of *ganzfeld* experiments, in which a sender tries to send a randomly selected picture by psychic means to a receiver in another room, under controlled conditions. The ability of receivers to accurately describe the images, above the level of chance, has traditionally been viewed as reliable evidence of telepathy. One unusual, but very welcome aspect of *ganzfeld* research has been the collaboration between some sceptics and believers in producing guidelines for stringent investigations (as scientists, we know just how rare this is ...). David Marks describes the findings from recent research in the area, which have created shock waves in the parapsychology community.

Modern research also features in Steve Stewart-Williams article *Life From Non-Life: Must We Accept a Supernatural Explanation?* An oft-quoted argument in favour of the creationists is that life is too complex for it to have arisen naturally. Steve acknowledges this temptation, but in the light of some exciting new experiments, shows that science now has a plausible answer to the question of how life originated. Compelling stuff!

At the time of writing, it would probably be an understatement to say that the national mood is one of apprehension, as the war in Iraq gathers momentum. There is evidence that anxiety makes people feel out of control, and that superstition provides a sense of control – if an illusory one. During the Gulf war, for example, scientists found that superstitious and magical

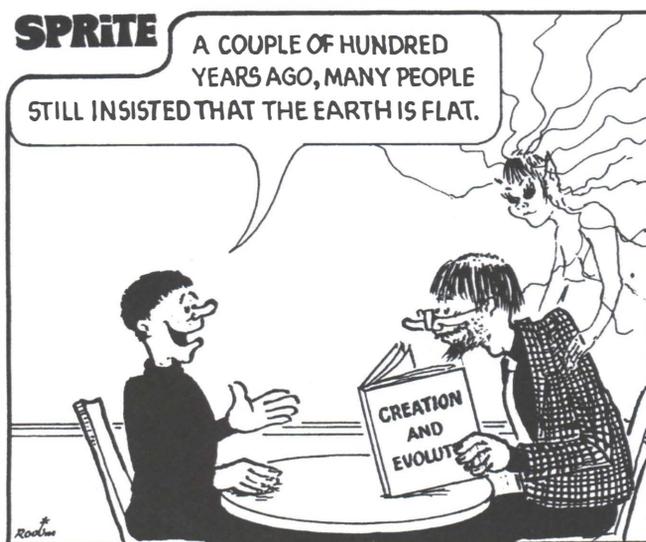
beliefs were more prevalent in regions exposed to missile attacks than in regions where there were no attacks. And now, in both the UK and the US, psychic mediums are enjoying increasing popularity. Matthew Coniam made us laugh, though, with his account of a medium's bad night in *The Misfit World of Derek Acorah*. Enjoy it while we brace ourselves for an onslaught of irrational thinking ...

When summer draws to a close, and the long, autumn evenings loom once again, why not fill those dusky hours by writing for *The Skeptic*? We are always keen to hear from contributors with a new ideas or a fresh perspective. If you want to write, please email your contributions (if possible) as Word attachments to [edit@skeptic.org.uk](mailto:edit@skeptic.org.uk). We can't promise you will become so famous that door-stepping is a problem, but you will have the satisfaction of seeing your name in print, and knowing your words have been read by many. And before you know it, it'll be spring again!

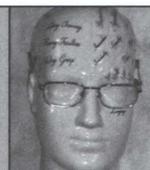
If you haven't already booked a place at the 11th European Skeptics Congress, hurry ... to either the ASKE website (<http://www.aske.org.uk>) or the ESCO website (<http://www.esco.org>) to register. The congress will be held in London, September 5-7, and promises well-known speakers from Europe and the USA, together with events such as workshops for testing psychic claims and teaching critical thinking. Subscribers to *The Skeptic* get a discount!

As always, we have our regular columnists, plus the letters, cartoons, and review sections.

With best wishes until the next issue, Julia and Chris



## Hits and Misses



### Bugs: the memory

Apparently a distressing number of Americans can be convinced that they met Bugs Bunny at Disneyland, proving once and for all that it is indeed possible for police or therapists to plant false memories in people's minds. Elizabeth Loftus, whose work on false memory syndrome is impressive, reported at the annual meeting of the American Association for the Advancement of Science that her recent experiments show that about a third of people are susceptible to such implantation. The experiments involved coming up with memories that could not possibly have happened and developing methods for implanting them. Apparently successfully: using Loftus's methods, about 36% of people will claim they shook hands with Bugs at Disneyland.

How do we know they didn't? Bugs is Warner Brothers.

### Bigfoot is dead

Ray Wallace, the businessman who popularised the legend of Bigfoot, died in December – and his surviving relatives promptly admitted to press and public that Bigfoot began as a practical joke.

Back in 1958, according to the *Scotsman*, Wallace used some 16-inch wooden moulds to create huge footprints to fool a bulldozer operator. The story got picked up, and Wallace ran with it, getting his wife to dress up in a monkey suit for 'Bigfoot' photographs, and direct-



*Never mind your big foot print, he just run over my big toe!*

ing rodeo rider Roger Patterson to film the famous 1967 footage of what appeared to be a large creature walking. Wallace never admitted outside his family that he'd made the story up.

### Science in the courtroom

One of the arguments sceptics often encounter when we make the case for double-blind testing of medical treatments is that lots of traditional treatments were never tested in this way. You might say, why should that stop us from applying those methods now? And we'd agree with you. But in the meantime, it's also true that there are plenty of bits of science used in everyday life that have never been peer-reviewed.

This is just as true in the courts. It's surprising to discover, for example, that scientific evidence for the common belief that each person's handwriting is unique, or at least exceptionally special to that person, didn't exist. Now it does: a team at SUNY Buffalo used computers to analyse hundreds of features of writing samples with a view to constructing software tools to help experts in court cases. A 1993 Supreme Court decision held that in order for expert testimony to be admitted in court cases, scientific proof must exist in the form of research and the peer-review process for that expertise.

If handwriting analysis – though not graphology – seems likely to survive more rigorous examination, lie detectors do not. Polygraphs have rarely been admissible in court in the US. In fact, the first place we ever saw their accuracy questioned was the 1985 London CSICOP conference, where Al Seckel explained their problems. The American Academy of Sciences, however, concluded in a government-sponsored study that lie detectors are so inaccurate and vague that they represent "a threat to national security." Spies aren't caught by lie detectors. But the Pentagon tests about 73% of employees in deciding whether or not to give them access to certain levels of information or to hire them for specific jobs.

The best known lie detector failure of recent years was the 1999 case of Wen Ho Lee, a scientist at Los Alamos who was accused of passing secrets to China on the basis of the results of a series of polygraph tests. He was later fully exonerated.

### Bad science

Scientists are human beings, too, we know this. But it's still dismaying to see yet more reports of scientific fraud. In September, Jan Hendrik Schön, who seemed on course to become the renowned Bell Labs' seventh Nobel Laureate, was shown to have reused the same data sets in seven different pieces of research. Not only no Nobel Prize: no respect, no job, and, as a consequence, no Green Card, meaning no home, either. For

the rest of us, no more molecular computers, at least for now. Schön's work on microscopic computers, which were thought to promise the ultimate in miniaturisation, had appeared in ultra-respectable, peer-reviewed journals such as *Science* and *Nature*; he published 80 papers in the two years leading up to his outing in September 2002. Schön claimed to have created a transistor out of a single molecule. Schön told the panel who investigated his work that he still thought his work could be reproduced – without the fraud – in the future.

Perhaps that is why he did it. Perhaps he simply believed that his work would ultimately be right, so he might as well announce now that it *was* right, get the credit and the glory before someone else could, and fill in the details later. Even Gregor Mendel did that sort of thing (we now know).

In reporting on the incident, *The Times* noted that *Nature's* physical sciences editor thought it was possible Schön's affiliation with Bell Labs meant his work was not questioned as much as it would have been if, say, he had been working in a less famous and respected location. The obvious solution – blind the test, so reviewers do not know the origins of the work they're reviewing – is difficult, if only because as fields become more and more specialised anyone who is expert enough to review a paper probably already knows who's doing that type of work.

Sadly, the likelihood is that there will be more and more such reports. A study carried out at the University of Minnesota estimated that one in three scientists sometimes plagiarises material and some 15% of all researchers admit to withholding unfavourable data. Fraud seems to pop up most often in cases where scientists work alone doing work that's difficult to reproduce. Physics, until Schön, was thought to be largely invulnerable. But Schön's supervisor had left for a job in Switzerland, and Schön was working with new materials in a device that could take another scientist as long as a year to replicate. Moreover, if papers are sent to different reviewers, they will not have the overview necessary in a case like Schön's to spot the graphs and charts that have been reused. Scientists reviewing papers would do well to remember Randi's maxim that the more extraordinary the claim, the more extraordinary the proof must be.

The University of Minnesota study does give sceptics some ammunition when we are criticized for considering the possibility of fraud in paranormal research – a habit of mind that believers often think is nasty and cynical. Why should researchers into the paranormal be *more* honest than physicists?

## Mad science

Well, the deadline has passed, and Clonaid has failed to

produce a DNA sample to show that the baby 'Eve' is in fact a clone.

Clonaid, for anyone who lived in a cave in late December, is a company set up by the Raelians, a religious group founded in 1973 by former French jour-



nalist and race car driver Claude Vorilhon. Vorilhon (now Rael) says aliens asked him to set up an embassy to welcome back to earth the aliens who populated this planet in the first place – by cloning themselves. Vorilhon and Clonaid executive Brigitte Boisselier claim the DNA testing was stopped when they were subpoenaed to appear in a Florida court, which was considering putting the baby under court protection.

There was, of course, a lot of insane coverage. First: could it possibly be true? Second: was it responsible journalism to make it front-page news everywhere? There is nothing more amusingly self-referential than major media making a huge amount of noise about whether it is responsible to give so much coverage to the story that's filling their hours/pages. And then reviewing each other's coverage, and complaining about how the *other* media are sensationalizing the story. And so on.

But the interesting thing here is that the Raelians are a group for whom believing in cloning is really necessary. Without it, there would be no humans at all. (Which is an interesting question: if aliens populated the earth by cloning themselves, when and why was sexual reproduction invented?) Maybe the reason they cancelled the DNA tests is simply that they don't want to know it's not true.

Thanks to this issue's clippings contributors: **Rachel Carthy, Sid Rodrigues, Stuart Campbell, Tom Ruffles, Ernest Jackson, the Wizard's Star List, Skeptic News, Sid Rodrigues, Phil McKerracher.** *The Skeptic* would like to remind clippings contributors to use the magazine's current address, listed on p. 3, rather than the old PO Box address, which has been phased out.

## Skeptic at large . . .

Wendy M Grossman



### Whatever remains, Watson, however improbable...

"WHY ARE PEOPLE so stupid?" my friend Matt asked me over pizza. The story unfolded. It seems that he and his significant other had gone to the kind of weekend gathering where lots of rich, famous, or interesting people (I believe you only have to qualify in one of these categories, although obviously being in all three helps) get together to entertain each other. There had been panels, which I gather were fine. But at meals everyone took turns hosting a table, and you picked the table you thought would be most interesting. (Now, don't everyone try to sit at Bill Clinton's table.)

And that's where the trouble started. Matt immediately discovered that no matter whose table he picked and no matter how apparently erudite and sane the person sitting next to him might be – the wife of the CEO of a leading book publisher, for example – he would inevitably find himself listening to him or her swap names and experiences of homeopaths, pet psychics, and astrologers, or questionable theories about crystals, 'toxins', and 'forces'. What, Matt wanted to know, caused all this?

So, I did two things, one good, or at least normal, and the other slightly evil.

First, I explained to him the stuff we all know. Belief in the paranormal has nothing to do with intelligence. Someone like, say, Cherie Booth, is clearly not stupid – no one becomes a barrister without at least a couple of brain cells to rub together. Yet, we see over and over again write-ups mentioning her crystal pendant, her healers, and, most recently, her 'lifestyle consultant', Carole Caplin, who seems to be advising Booth on everything from what to wear every time she leaves the house to what questions to submit to the spirit world by fax. (By fax? Doesn't the spirit world have telepathy yet?) Booth is, of course, not the first highly visible woman to have these sorts of 'advisors', although she is arguably one of the brightest.

And no, it's not a biological woman thing. Plenty of men believe in wacky stuff – you have only to look at Michael Jackson's plastic surgery-ravaged face to know this – but they don't get quite the same publicity over it. If there is a disparity in paranormal belief between the sexes – and if I remember correctly, polls do not support this theory – it is most likely because many women are still deterred from studying science. Through the 1960s and 1970s, as we learned to question authority to a far greater extent than before, a lot of trust in science dissipated. This was, I think, exacerbated by the public's blaming science for the development of such scary technologies as bombs, military build-up, and nuclear power plants. Medicine, the scientific area that affects people most intimately, involves increasingly scary technology and less and less the

human touch that makes people trust doctors. The feminist movement, when it came along, should have embraced science; the fact that it largely didn't is in my view probably its biggest failure.

So I explained all that, and then I did the evil thing.

One of my Christmas presents last year was a four-DVD set of Basil Rathbone's Sherlock Holmes movies. On one of the discs, there is, included as an extra, a very rare 1927 newsreel of an interview with Sir Arthur Conan Doyle. I played it for Matt.

Now, I mean, who knew there was even filmed footage of Conan Doyle in existence? I certainly didn't; it never even occurred to me to realize he was still alive when film cameras were in use. You can tell he wasn't experienced at this type of interview. He's an elderly gent with a moustache and dog sitting rather stiffly on a bench. You get the sense that he may have thought it was like being shot with a still camera, and if he moved too much the film would be blurred. His faint Scottish accent merely makes his style of speech sound more formal. Any questions the interviewer may have asked were cut out: the film is solely of Conan Doyle talking in a stream, explaining his views on the two topics he was most often asked about.

The first, of course, was Sherlock Holmes. That part is predictable: the Edinburgh doctor he knew, the thought of a detective using science to solve crimes, the success of the stories.

But the second was the paranormal. Now, I knew Conan Doyle was a supporter of spiritualism. What I did not know was that his interest in that subject was kindled around the time he came up with the first ideas for Sherlock Holmes. By the time of this interview, which took place about three years before he died, Conan Doyle had spent more than 40 years obsessively researching the paranormal, visiting mediums all over the world. "I am not speaking," he says in the film, "of what I think, or what I believe. I am talking about what I *know*." He makes it plain that his vast experience on the subject means he can dismiss the attacking arguments of anyone who has spent less time in this type of study.

In other words, he says all the things we've all heard believers in the paranormal say many times. It's as if Sherlock Holmes were his equivalent of the picture of Dorian Gray – the fictional detective took over all the rational thinking, leaving him free to exercise flights of fancy. The experience of watching this film, if you, like me, have known the Holmes stories well ever since you were very young, is quite bizarre. Matt was quite horrified, and I'm not sure he's ever going to be able to look at Holmes the same way again.

Still, Holmes gets a lot of mail at 221B Baker Street. Perhaps a letter suggesting he educate his creator is in order.



**Wendy M Grossman** is founder and former editor (twice) of *The Skeptic*, and author of *From Anarchy to Power: the Net Comes of Age*. Wendy M Grossman also writes for *Scientific American*. Her web site is at <http://www.pelicancrossing.net>.

# What are we to make of Exceptional Experience? Part 2: Ganzfeld Studies

In the second part of his three-part assessment of parapsychology, **David Marks** focuses on the *ganzfeld* technique.

## Ganzfeld ESP ability

IT TOOK 25 years to investigate remote viewing (see Part 1 of this article, in *The Skeptic*, 16.1). In turning our attention to the subject of the *ganzfeld*, I can be briefer. The term '*ganzfeld*', a German word meaning 'total field', refers to the mild sensory deprivation created by the environment described below. The field is a core part of the parapsychology literature and has been intensively researched in at least ten different laboratories in the USA and Europe for about the same length of time as remote viewing. The *ganzfeld* research has gained an almost symbolic importance for the parapsychology field as the best case for the existence of psi. The results obtained in the *ganzfeld* allegedly appeared in multiple studies by different investigators with participants who were not especially selected or gifted as psychics. It is the main focus for discussions of parapsychology in a leading psychology journal (*Psychological Bulletin*) and it has increasingly been viewed as a genuine and uncontroversial finding. Until now, that is.

*Ganzfeld* experiments involve two participants, a sender and a receiver, located in separate rooms. The receiver is in a *ganzfeld* that is usually created by wearing translucent ping-pong ball halves taped over the eyes with a red floodlight directed towards the eyes producing an undifferentiated visual field. White noise is played through headphones to produce an undifferentiated auditory field. To reduce internal 'noise' in the form of somatic sensations, the receiver may be taken through a series of progressive relaxation exercises. The sender is then shown a target picture or video clip that has been randomly selected from a large pool of possible targets. The sender is asked to try to send the information about the picture or video to the receiver by psychic means (telepathy). The receiver is asked to receive this information and to report any images, thoughts or feelings that occur during the trial. The receiver is then given a randomly ordered set of four stimuli, the target plus three decoys. The receiver chooses the one that s/he believes best matches the images that came into his or her mind. If the receiver chooses the correct target it is recorded as a hit. If the receiver chooses the wrong target it is recorded as a miss. The mean chance expectation (MCE) is 25 percent. A statistically significant deviation above MCE is suggestive of an anomalous effect consistent with psi.

A plausible case for the existence of psi in the *ganzfeld* was made by Bem & Honorton (1994). The authors concluded that *ganzfeld* data supported the existence of "anomalous processes of information or energy transfer such as telepathy or extrasensory perception that are currently unexplained in terms of known physical or biological mechanisms" (p. 4).

The *ganzfeld* research is unique in parapsychology for the way in which believers and sceptics have worked together to agree a protocol for properly controlled

## Instead of the usual stand-off between the two camps, the two 'psides' joined forces in a search of the truth

investigation (Hyman & Honorton, 1986). Instead of the usual stand-off between the two camps, the two 'psides' joined forces in a search of the truth. This resulted from the leadership of two principal figures, the late Charles Honorton and Ray Hyman. Each having independently reviewed the *ganzfeld* literature and reaching differing conclusions (Hyman, 1985; Honorton, 1985), Honorton and Hyman wrote their joint communiqué. The authors concluded: "...we agree that the final verdict awaits the outcome of future experiments conducted by a broad range of investigators and according to more stringent standards" (Hyman & Honorton, 1986, p. 351). One of the progressive outcomes of this joint communiqué was a set of guidelines concerning methodology. One hopes these guidelines for *ganzfeld* research were implemented and the quality of studies improved as a consequence.

In this section I briefly review the *ganzfeld* research collected after the publication of Hyman and Honorton's (1986) guidelines. Not only should the methodology have improved beyond the earlier studies, which were heavily flawed (Hyman, 1985), but the results should not be dependent on a small band of investigators. When a small number of well-insulated people and organisations are responsible for a programme, the research can go badly off the rails. It is of crucial importance, as Hyman and Honorton (1986) pointed out, that a broad range of investigators

attempt to replicate exciting findings so that they can be more easily accepted as a scientific 'fact'.

Milton and Wiseman (1999) systematically reviewed the *ganzfeld* literature since the Hyman/Honorton joint communiqué, from 1987 to February 1997. Milton and Wiseman included all studies that used the *ganzfeld* technique in a new meta-analysis. Their review covered the main parapsychology journals and the proceedings of the Parapsychology Association.

Milton and Wiseman's (1999) trawl of the literature found 30 studies in 14 papers by 10 principal authors from seven laboratories; the database included 1,198 *ganzfeld* trials. They computed a *z* score for each study by comparing the number of hits with the number expected by chance using the binomial test. This is a standard statistical measure of how far each result differed from the chance level. In cases where the outcome was not in hit-and-miss form, a *z* score was computed using whatever other statistic had been employed. When more than one outcome measure had been employed they computed an average *z* score.

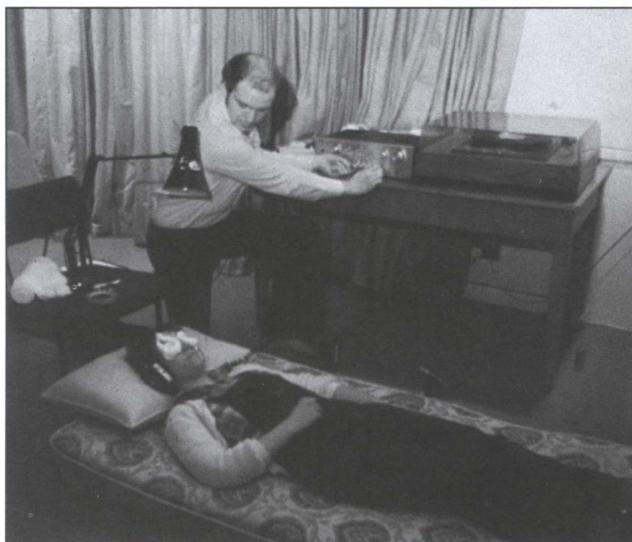
This procedure is the accepted, standard method for converting findings from different studies into a common metric or measure of the effect. However, there are two more stages to the process. First, from the *z* scores it was necessary to compute the effect size by dividing *z* in each case by the square root of the number of trials. This generates what is termed the 'effect size' of the study. Second, a probability was accumulated across all studies in the analysis using the Stouffer method.

The average effect size for the 30 studies was only 0.013 with a *z* score of only 0.70 and a probability score of only 0.24. This result means that the *ganzfeld* effect was so small that it did not differ statistically from chance. Milton and Wiseman's study, published in the prestigious *Psychological Bulletin*, has already created a few waves in the parapsychology pond.

As if this result was not damaging enough, the investigators went on to examine critically three out of five other claims made by Bem and Honorton (1994) and to determine their methodological rigour. What they found is even more startling. The new *ganzfeld* studies, 1987–97, examined three out of five variables that Bem and Honorton had suggested were statisti-

cally related to high psi scoring rates in *ganzfeld* studies. These three variables were:

1. Trials with dynamic targets (videos) had been more successful than trials with static targets.
2. Novices who reported prior psi experiences in everyday life scored more highly than those who did not.
3. Novices who reported studying a mental discipline such as meditation or yoga scored more highly than people who did not.



*The receiver in a ganzfeld study*

Milton and Wiseman's analysis found only one of these variables to be significant of the new studies (no. 2). However, when they looked into the original studies examined by Bem & Honorton (1994) they discovered that there appeared to be no good evidence to support this in the first place. The two papers in which this 'novices with mental training' effect was allegedly found contained one non-significant effect (Honorton & Schecter, 1986) and one reversed effect

(Honorton, 1997). The same problem appeared in respect of another of Bem and Honorton's 'discoveries' about psi, that high-scoring novices were also high on "Feeling and Perception on the Myers-Briggs Type Indicator" (Briggs & Myers, 1957). This was another 'discovery' that appeared in the first study and then disappeared in the second.

Milton (1999) extended the meta-analysis to include nine further well-controlled *ganzfeld* studies run between February 1997 and March 1999. This longer series of 39 studies managed to reach significance ( $p = 0.011$ ) but, when a single highly significant study by Dalton (1997) was excluded, the Stouffer *z* score was only 1.45 and  $p = 0.074$  (not significant). Thus, there is no evidence of a consistently replicable *ganzfeld* effect across a 12-year period of well-controlled *ganzfeld* research. Every now and then, one or two strikingly significant studies appear, but this does not constitute replication. The occurrence of one highly significant study in a general run of non-significant studies, in fact, sets alarm bells ringing. Dalton's study with an effect size that is significantly higher

than the general run suggests the need for an in-depth investigation of Dalton's protocols.

Milton (1999) comments on the current situation as follows: "studies that appear to form the group proposed by Bem and Honorton (1994) to form a crucial test of the evidence for psi in the *ganzfeld* have clearly failed to show replication of an above-chance effect across experimenters and only show statistical significance if one extremely successful study is included."

In addition to the non-significant meta-analyses, other criticisms of the studies included by Bem and Honorton have also arisen, including inadequate randomisation of targets and judging sets (Hyman, 1994), possible sensory leakage of target information (Wiseman, Smith, & Kornbrot, 1996), and lack of replication (Milton & Wiseman, 1999).

**References**

Bem, D. J. & Honorton, C. (1994). Does psi exist? Replicable evidence for an anomalous process of information transfer. *Psychological Bulletin*, 115, 4-18.

Briggs, K. C., & Myers, I. B. (1957). *Myers-Briggs Type Indicator Form F*. Palo Alto, CA: Consulting Psychologists Press.

Dalton, K. (1997). Exploring the links: Creativity and psi in the *ganzfeld*. In: *The Parapsychological Association 40th Annual Convention: Proceedings of Presented Papers* (pp. 119-134). Durham, NC: The Parapsychological Association.

Honorton, C. (1985). Meta-analysis of psi *ganzfeld* research. *Journal of Parapsychology*, 49, 51-91.

Honorton, C. (1997). The *ganzfeld* novice: Four

predictors of initial psi performance. *Journal of Parapsychology*, 61, 143-158.

Honorton, C., & Schechter, E. I. (1986). *Ganzfeld* target retrieval with an automated testing system: A model for initial *ganzfeld* success. In: *The Parapsychological Association 29th Annual Convention: Proceedings of Presented Papers* (pp. 399-414). Durham, NC: The Parapsychological Association.

Hyman, R. (1985). The *ganzfeld* psi experiment: A critical appraisal. *Journal of Parapsychology*, 49, 3-49.

Hyman, R. (1994). Anomaly or artefact? Comments on Bem and Honorton. *Psychological Bulletin*, 115, 19-24.

Hyman, R., & Honorton, C. (1986). A joint communiqué: The psi *ganzfeld* controversy. *Journal of Parapsychology*, 50, 350-364.

Milton, J. (1999). Discussion paper: Should *ganzfeld* research continue to be crucial in the search for a replicable psi effect? Part I.

Discussion paper and introduction to an electronic-mail discussion. *Journal of Parapsychology*, 63, 309-333.

Milton, J., & Wiseman, R. (1999). Does psi exist? Lack of replication of an anomalous process of information transfer. *Psychological Bulletin*, 125, 387-391.

Wiseman, R., Smith, M., & Kornbrot, D. (1996). Exploring possible sender-to-experimenter acoustic leakage in the PRL *autoganzfeld* experiments. *Journal of Parapsychology*, 60, 97-128.

*In the third and final part of his critical review of parapsychology, to appear in the next issue, David Marks considers the evidence for detection of unseen staring and ESP in pets.*



*The sender in a ganzfeld study*

**David Marks** is a Professor of Psychology at City University, London. He is author of the sceptical classic *The Psychology of the Psychic* and a CSICOP Fellow.

**SKEPTICS IN THE PUB**

Speakers:  
TBA

*Skeptics in the Pub* is an evening held once a month (in a pub, strangely enough) for anybody who has an interest in, or is sceptical about, the paranormal. Each month an invited speaker gives a talk on their chosen specialisation. The talk is followed by an informal discussion in a relaxed and friendly pub atmosphere. You can find out more about the meetings on *The Skeptic* website: <http://www.skeptic.org.uk/pub>. This includes directions and maps to the Old Kings Head pub in Borough, where we meet. Alternatively, please contact Nick Pullar: 07740 450 950, [nickp@coleridge.co.uk](mailto:nickp@coleridge.co.uk). The meeting begins at 7:30 pm and there is a suggested donation of £2.00.

# Skeptical Stats

1. Number of facial expressions that can be displayed by K-bot, the world's most sophisticated humanoid: **28**
2. Number of motors in K-bot's 'face': **24**
3. Number of electric toothbrushes on the Japanese market that are designed to plug into a computer's USB port: **1**
4. Age by which the motility of men's sperm has typically decreased 60 percent: **40**
5. Amount of a pre-nuptial insurance policy taken out to cover legal expenses of a British couple's pets (42 rats, 26 guinea pigs, 16 hamsters, five cats, three gerbils, and two rabbits) in case of divorce: **£25,000**
6. Percentage of Britons identifying themselves as Jedi in the 2001 census: **0.7**
7. Number of fictional characters granted an honorary fellowship by the Royal Society of Chemistry: **1**
8. Number of British authors who will receive part of the 2003 £6.2 million Public Lending Right payout: **19,064**
9. Price commanded by a pair of Mr Spock ears worn by Leonard Nimoy in the movie *Star Trek VI: The Undiscovered Country*: **£1,880**
10. Percentage of British mobile phone users unable to remember any of the numbers stored in their phones' memory: **38**
11. Number of students in Britain taking degrees in environmental health in 1996: **300**
12. Number of students in Britain taking degrees in environmental health in 2002: **50**
13. Cost of a 21-day promotional subscription to a service offering daily 'inspiring' SMS messages: **£4.50**
14. Amount of Eli Lilly heir Ruth Lilly's bequest to *Poetry* magazine: **\$100 million**
15. Percentage of American packaged foods that contains genetically modified ingredients: **70**
16. Licence plate of an Eastbourne-based Ford Capri said to be the cause of bad luck and hauntings: **ARK 666Y**
17. Number of Gaelic-speaking ghosts recorded on tape by a radio crew in a vault beneath Edinburgh's South Bridge: **1**
18. Number of Britons who participated in Richard Wiseman's 'Mind Machine' ESP experiment: **27,856**
19. Number of members worldwide of the International Flat Earth Research Society: **nearly 4,000**
20. Percentage of all people who have ever lived that are alive today: **10**
21. Price of a 'mobile cap' with a layer of woven silver intended to deflect radio waves away from the brain: **Norwegian Krona 385**
22. Number of women who have accused Steven Spielberg of spying on her contacts with aliens: **1**
23. Amount paid to the Hare Krishnas to settle a lawsuit by House of Fraser for insulting advertisements: **£25,000**
24. Percentage by which gum-chewers' memory retained information better than non-gum-chewers in a study at the University of Northumbria: **35**
25. Amount paid by the companies behind US psychic 'Miss Cleo' in settlement to the Federal Trade Commission: **\$500 million**

**Sources:** 1,2 [http://news.bbc.co.uk/1/hi/in\\_depth/sci\\_tech/2003/denver\\_2003/2769741.stm](http://news.bbc.co.uk/1/hi/in_depth/sci_tech/2003/denver_2003/2769741.stm); 3 [http://www.watch.impress.co.jp/akiba/hotline/20030222/etc\\_habrashi.html](http://www.watch.impress.co.jp/akiba/hotline/20030222/etc_habrashi.html); 4 *Business Week* 2003-02-17; 5 *Daily Telegraph* 2003-02-16; 6 National Statistics Bureau; 7 *Scientific American*, January 2003 (it was Sherlock Holmes); 8 *PLR News*; 9 Sotheby's, December 2002 [http://search.sothebys.com/jsps/live/lot/LotDetail.jsp?sale\\_number=W02906&clive\\_lot\\_id=39](http://search.sothebys.com/jsps/live/lot/LotDetail.jsp?sale_number=W02906&clive_lot_id=39); 10 ICM via SimSafe press release; 11,12 *Guardian* 2002-10-24; 13 [www.ivillage.co.uk/www.inspireyourlife.com](http://www.ivillage.co.uk/www.inspireyourlife.com); 14 *The New Yorker* 2002-12-02; 15 *Business Week* 2002-11-11; 16. *The Sunday Times*, 2003-01-12; 17 *The Scotsman* 2003-01-17; 18 *Times Higher Education Supplement* 2002-11-15; 19 *Times Educational Supplement* 2002-09-06; 20 *Sunday Telegraph* 2002-11-10; 21 CNN 2002-11-19; 22 *New York Post* 2002-10-21; 23 *Independent* 2002-03-02; 24 *Guardian* 2003-03-14; 25 *Washington Post* 2002-11-18

Thanks for assistance to Rachel Carthy.

Both Hits & Misses and Skeptical Stats depend heavily on reader contributions of clippings, story leads, and odd statistics. Please send contributions to [news@skeptic.org.uk](mailto:news@skeptic.org.uk) or via post to the address on the masthead (p. 3). For this issue, thanks to Tom Ruffles, Ernest Jackson, Steuart Campbell and Rachel Carthy.

Skeptical Stats is compiled by **Wendy M Grossman**.

# Life from Non-Life: Must We Accept a Supernatural Explanation?

Scientists are far from being able to explain exactly how life on earth began. Must we accept that life has a supernatural origin? **Steve Stewart-Williams** investigates ...

ONE OF THE great mysteries of the universe is captured in the following simple question: which came first, the chicken or the egg? Most people probably first encountered this question in childhood – and gave up trying to answer it soon afterwards. To all those who have wrestled with the question, I am pleased to report a definite answer can now be given: the egg came first. This becomes clear when you consider that chickens evolved from an earlier egg-laying bird species. But of course, I am missing the point. The question is not supposed to be taken literally. The real question is: “How did life begin?” If eggs only come from chickens, and chickens only come from eggs, how did the whole cycle get started? The question of life’s origin is the most fundamental question in biology, but it is also biology’s greatest unsolved mystery.

Various attempts have been made to solve this mystery. The attempts can be divided into two main classes: naturalistic explanations and explanations that view the origin of life as a supernatural event. This article explores the debate between these two sides, focusing in particular on the modern scientific account of life’s origins, and the creationist response to this account. On one side of the debate are those who hold life could not have come about simply through the natural workings of the laws of physics and chemistry. Instead, it is claimed, life must be a product of the intervention of a supernatural being or force. In western cultures, the best-known example of a supernatural explanation for life’s emergence is the traditional Judeo-Christian view that God created the earth and all life around 6,000 years ago, each species a separate and unchanging creation. This is the thesis of creationism.

On the other side of the debate are those who believe the origin of life was a natural process. Naturalistic explanations of life’s genesis extend back at least to the time of Aristotle, who was one of the first



*Did God create the earth and all life around 6,000 years ago?*

in a long line of thinkers to accept the theory of *spontaneous generation*. According to this theory, life – or at any rate simple forms of life – arise spontaneously and regularly from non-living matter. To early observers, there appeared to be good evidence for this view. For example, it does seem that maggots form spontaneously from rotting meat. In the nineteenth century,

**However, you cannot have selection without having something to select, and thus Darwinian evolution can only occur once life already exists**

however, experiments by Louis Pasteur finally showed that even the simplest microscopic life forms do not generate spontaneously from dead matter (Black, 1998). As Robert Shapiro, a professor of chemistry at New York University, explains, it is now known “life comes only from previously existing life, like a flame that can be divided, and spread, but once extinguished, can never be rekindled” (Shapiro, 1995). In light of this discovery, some early scientists attempted

to dissolve the origin mystery altogether by suggesting life is eternal. But this suggestion runs into difficulty because, according to modern cosmology, the universe itself is not eternal. Being part of the universe, life could thus not be eternal either.

So, if life does not arise naturally from inanimate matter and is also not eternal, must we accept it is the product of intelligent design, the product of divine intervention or some mysterious vital force? Such a conclusion would be premature, as we have yet to consider modern science's answers to the question.

The largest single scientific breakthrough in the field of biology was Darwin's theory of evolution, and few would hesitate to name this theory as the scientific counterpart to the creationist account of life's origins. The theory begins with the observation that individuals within a population differ and some of this variation has a genetic basis. If an inherited characteristic increases the likelihood that the genes giving rise to it will be passed on, those genes will tend to increase in frequency. Less successful genes will decrease in frequency and ultimately disappear. This process is known as natural selection. Evolutionary theory beautifully explains both change within a species and the origin of new species. However, you cannot have selection without having something to select, and thus Darwinian evolution can only occur once life already exists. The theory of evolution as stated above is silent on the issue of how life originated in the first place. Those who accept that science provides a more accurate account of life's origin than does creationism should know, then, that the theory of biological evolution is *not* the scientific counterpart to the creationist position.

Before looking in some depth at what modern science *does* say about how life began, it would be helpful to sketch a brief overview of what is known about the history of life on earth. Contrary to the creationist view that each species is a separate and unchanging creation, the fossil record, structural similarities between species, embryological evidence, and evidence from molecular biology show unambiguously that species have evolved from one another (Ayala, 1997). And ultimately, it is now believed, all life on earth can be traced back to a single microbe, a blob

of chemicals too small to be seen with the naked eye. This microbe was not the first life form, but the latest common ancestor of all known life – including not only all animals, but also plants and even bacteria (Davies, 1998). We're all one big family (albeit a dysfunctional family in which the family members have a nasty habit of eating one another). The key



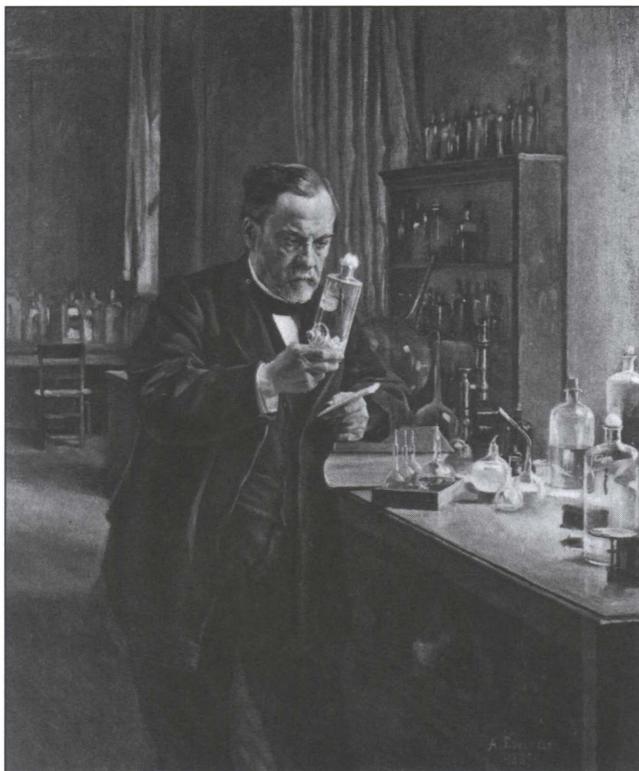
*Aristotle accepted the idea that life arises spontaneously from non-living matter.*

point here is that to explain the origin of life, it is not necessary to explain the origin of each separate species. All known species stem from the same original life forms, and it is these original life forms that origin-of-life researchers must explain.

Most scientists today think the emergence of the first life can be understood in purely naturalistic terms. Thus, the spontaneous generation of life from non-life must have occurred at least once. Scientists believe this occurred billions of years ago, when the young earth first became habitable. They view it as a long period of increasingly complex chemical reactions – a period of chemical evolution that preceded biological evolution.

At this point, one of the creationists' less sophisticated arguments crops up. The argument is this: modern science has had to reintroduce the doctrine of spontaneous generation, but Pasteur's experiments showed this doctrine to be false (Taylor, 1999). This argument reflects a simple misunderstanding. Pasteur's experiments did *not* show that life could not emerge from inanimate matter under any circumstances. They showed only that spontaneous generation does not occur now, or in the manner it was originally thought. Spontaneous generation was originally believed to be a rapid process that still occurs regularly today. Now it is thought the origin of life

was an extremely slow process, and that it could only have occurred in the distant past, when the planet was uninhabited and there was thus no competition from other life forms. Whereas it was once believed spontaneous generation produced life forms such as exist at present, it is now thought the first life forms were far simpler than any we know today.



*Pasteur showed that even the simplest life forms do not generate spontaneously from dead matter.*

Experimental research into the emergence of life from non-life made an explosive debut in 1953, when details were published of an experiment that aimed to simulate the conditions of the early earth, the conditions in which life began. Stanley Miller, a graduate student working under the chemist Harold Urey, created a miniature ocean and atmosphere in a glass flask. The atmosphere consisted of gases believed to compose earth's atmosphere billions of years ago. The chemical reactions that produced life would also have required energy. As an analogue to this essential ingredient, Miller applied a constant electrical charge to his mixture. He then left it for several days. The results were very encouraging. Miller found that the mixture contained amino acids and other fundamental building blocks of life (Miller, 1953). The initial experiment was flawed in a number of ways. Nonetheless, further investigation has revealed that, given the right circumstances, many of the basic molecules essential to life form naturally and inevitably. This does not happen only on earth. For instance, organic molecules, such as amino

acids and sugars, have been found in meteorites, and such molecules are known to form in clouds of interstellar dust (Maurette, 1998; Orgel, 1997). To many, this line of research seemed to provide proof that matter naturally tends in the direction of life.

The problem is, though, that creating the basic building blocks of life is the easy part. The real mystery is how they were arranged to form the first living things. According to early theorists, the building blocks accumulated somewhere – in a pond or the ocean, for instance. Eventually there was a rich concentration of organic chemicals, a 'primordial soup'. The chemicals in this soup collided randomly with one another, forming progressively more complex molecules. Finally, after millions and millions of years, chance processes produced the first self-replicating molecule. Once reproduction came onto the scene, Darwinian evolution took over, ultimately producing all the complex organisms that have inhabited this planet. (I am, of course, making a very long story very short.) There is now wide agreement, however, that even the simplest self-replicating molecule could not come about purely through random collisions of molecules in a chemical soup. As the astronomer Fred Hoyle once remarked, this is about as likely as a Boeing 747 being assembled by a tornado sweeping through a junkyard.

This is a point commonly seized upon by those who argue life must have had a supernatural origin. Lane Lester expresses the essence of the argument when he suggests that "life is too complex to arise through natural processes," and thus that "the origin of life had to be by supernatural creation" (Lester, 1994). Again, how-

### **Does anyone who favours a naturalistic view do so only on the basis of blind faith in an unproved theory?**

ever, this conclusion would be premature. A number of theories have been developed that attempt to bridge the gulf between the building blocks of life and the first life forms. Some researchers, such as Robert Hazen of Harvard University, suggest rocks played an important role (Hazen, 2001). Hazen argues that mineral surfaces could have provided the scaffolding on which progressively larger and more complex molecules were gathered and strung together. Suggestions such as this one reduce the extent to which we have to rely on chance as an explanation for how highly organized chemical

structures could originate. Chance would still be involved, but not at such implausibly high levels.

Still, it is one thing to explain how complex molecules could be strung together, but quite another to explain how molecules capable of replicating themselves could form. When we look at even the simplest forms of life that exist today, or study the intricate machinery of cellular replication, the creationist argument that life is too complex to have come about through the operation of blind natural laws starts to look temptingly plausible.

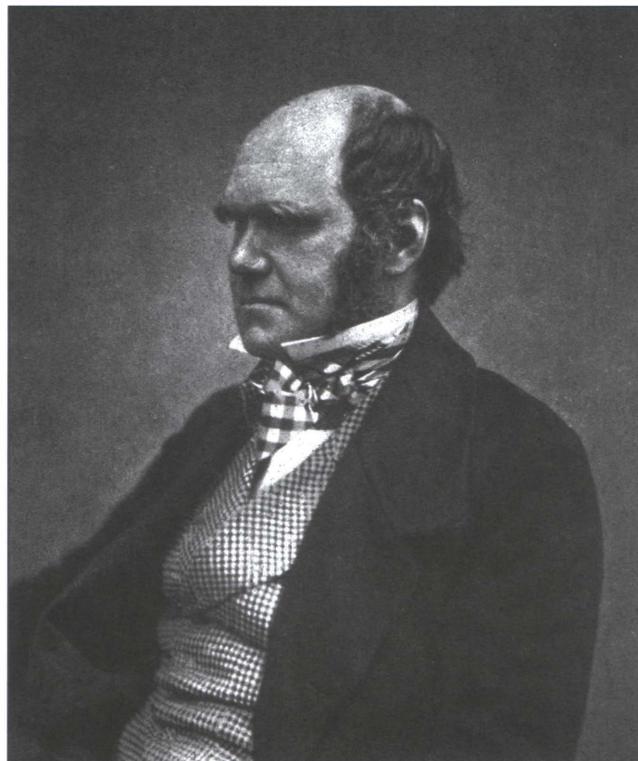
The solution is that the first replicating molecules were much simpler than any modern life form – much simpler even than a single cell found in a modern life form. The complexity of modern organisms becomes explicable when it is considered that it emerged from simpler forms over periods of time too large to imagine. Researchers have even made some educated guesses about what some of these simple early life forms might have been. James Ferris, of Rensselaer Polytechnic Institute in New York, explains that many now suspect the first life forms were “based on ribonucleic acid (RNA), a simpler chemical cousin of DNA” (Ferris, 1999). According to the ‘RNA world’ hypothesis, there was a stage in the development of life in which self-replicating RNA molecules predominated (Orgel, 1997). In support of this idea, recent evidence suggests RNA can form on the surface of clays, pieced together from simpler ingredients. And in an exciting new line of research, scientists have shown that RNA synthesized in the laboratory can replicate and evolve new chemical properties (Ferris, 1999). This is probably the closest scientists have yet come to creating life in the laboratory. Taken together, these findings offer a plausible answer to the question of how life originated.

As I noted at the beginning of this article, however, the origin of life is still biology’s greatest unsolved mystery. Many puzzles remain, and there are still vast gaps in the scientific account of how life started. Whenever such gaps appear, advocates of creationism are quick to announce the failure of science, and this failure is surreptitiously taken as proof of the truth of their own beliefs. As long as any gaps remain, this approach will be available. So, if we want to reach any conclusions in the absence of a complete scientific explanation, we cannot focus solely on the specific arguments made by creationists against the scientific account. We must also deal with this general line of reasoning.

A first response is that gaps in today’s science may be filled tomorrow. Where there are gaps in our knowledge, we should admit our ignorance, not resort to the unsupported answers of ancient peoples who were even more ignorant than we are. It should be noted, however, that it is quite possible there will *always* be major gaps in the scientific answer to the

question of life’s origin. Ferris notes scientists “may never know the exact answer because the evidence for this very primitive life has probably been destroyed by the more efficient life which evolved from it” (Ferris, 1999).

There is a second, stronger response to the creationist tactic of supporting their position by pointing out holes in the scientific account: deficiencies of one theory do not constitute proof of any other theory. If



*Darwin's theory of evolution is silent on the issue of how life originated in the first place*

they did, which alternative theory would the deficiencies support? Why creationism and not another account altogether? Still, we should not ignore the fact that science can only begin to explain how life originated. This raises an important question. Given that science may never be able to specify the *exact* natural processes that produced life, is there any reason to favour the general position that life came about through natural processes over the view that life is the result of divine intervention? Or, as some creationists have argued (e.g. Lester, 1994), does anyone who favours a naturalistic view do so only on the basis of blind faith in an unproved theory?

I suggest there are several good reasons to favour a naturalistic view. For a start, the assumption that the universe can be explained in naturalistic terms is consistent with everything else we know about the universe. The naturalistic assumption has paid great dividends in the past, leading to impressive breakthroughs in our understanding. This track record jus-

tifies making this assumption when exploring uncharted territories. There is another reason to hold a naturalistic view of the origin of life over a supernatural one, even in the absence of a complete scientific account or conclusive evidence. No one would dispute that the existence of life is a mystery that needs to be explained. The order and complexity found in living things is amazing and incomprehensible. However, to say life was created by God does not reduce the mystery, it increases it. It accounts for the existence of life, but does so by positing something even *more* mysterious, amazing, and difficult to explain: a being capable of creating life. Creationists point out, quite reasonably, that the origin of life through natural processes seems unlikely; they respond by suggesting something even more unlikely.

Several conclusions can be drawn from the foregoing discussion. Despite the limitations and gaps in the scientific account, there is good reason to accept the general position that life emerged as a product of natural causes. Although the exact details remain elusive and maybe always will, it is reasonable to believe life developed from non-living matter through a natural process in which chemistry slowly evolved into biology. After this period of chemical evolution, the process of biological evolution began, ultimately producing all the billions of species that have inhabited this planet – including one strange species that can ponder such issues as these.

**References**

Ayala, F. J. (1997). The theory of evolution. In *Encyclopedia Britannica* (pp. 855–883). Chicago:

Encyclopaedia Britannica.

Black, J. G. (1998). *Microbiology principles and applications*. Upper Saddle River, NJ: Prentice Hall.

Davies, P. (1998). *The Fifth Miracle: The Search for the Origin of Life*. Victoria, Australia: Penguin.

Ferris, J. P. (1999). How close are scientists to knowing the origin of life on earth? *Scientific American: Ask the Experts: Biology*. Retrieved 31 October 2001, from <http://www.sciam.com/askexpert/biology/biology15.html>

Hazen, R. M. (2001). Life's rocky start. *Scientific American*, 284(4), 62–71.

Lester, L. P. (1994). The history of life. *Creation Research Society Quarterly*, 31(2). Retrieved 7 November 2001, from [http://www.creationresearch.org/crsq/articles/31/31\\_2a.html](http://www.creationresearch.org/crsq/articles/31/31_2a.html)

Maurette, M. (1998). Carbonaceous micrometeorites and the origin of life. *Origins of Life & Evolution of the Biosphere*, 28, 385–412.

Miller, S. L. (1953). A production of amino acids under possible primitive earth conditions. *Science*, 117, 528–529.

Orgel, L. E. (1997). *Origin of life on earth*. Retrieved 31 October 2001, from <http://www.geocities.com/CapeCanaveral/Lab/2948/orgel.html>

Shapiro, R. (1995). Where do we come from? In J. Brockman & K. Matson (eds.), *How Things Are: A Science Tool-Kit for the Mind* (pp. 29–36). London: Phoenix.

Taylor, P. S. (1999). *Where did life come from? Is evolution the best scientific answer?* Retrieved 7 November 2001, from <http://www.christiananswers.net/q-eden/origin-of-life.html>

**Steve Stewart-Williams** teaches at the School of Psychology at Massey University. His academic interests include the placebo effect and the philosophical implications of evolutionary psychology. Correspondence is via email ([anonymous1@extra.co.nz](mailto:anonymous1@extra.co.nz)), or the School of Psychology, Massey University, Palmerston North, New Zealand.



# The Misfit World of Derek Acorah

Matthew Coniam witnesses a bad night for a psychic medium

LIKE ALL SALESMEN, so-called ‘psychic mediums’ exist to meet a need. Take away the need and you take away their livelihood. But, as a glance at the small ads in the back of any newspaper will swiftly confirm, there are surely far more mediums out there, all competing for the naïve pound, than there are potential punters. So in the Darwinian struggle to succeed in the psychic marketplace, just what do you need to stay ahead?

Remember that Darwin tells us that unnecessary expenditure of energy and resources is wasteful and will count against you in the long run – in other words the animal fittest for long-term survival is the one that is just fit enough. The rabbit that just manages to outrun a fox is better off than the one that outpaces it by a mile but uses more energy. So how fit does the fittest psychic need to be?

We know that some of them are incredibly clever – so clever that real effort and ingenuity is needed to work out how they do it. But what of your average, workaday psychic? How good does he need to be to outrun his fox successfully: to fill a small theatre, say, and then to leave his punters sufficiently happy and impressed to enable him to continue making his comfortable, if sinister, living?

To test this question, I attended an evening of spiritualism and clairvoyance earlier this year at London’s Lewisham Theatre, a small venue in a small borough, but at £7.50 a seat one had every right to expect its star to deliver the goods. The psychics were an excitable bouffant-haired Liverpudlian in a sparkling red suit and matching shoes and his good friend Sam, a dead person we could not see (and who presumably does not get a cut of the profits). The show was called *The Mystic World of Derek Acorah* (Acorah being the one in the suit).

I wasn’t expecting miracles. On such a low-profile outing as this I expected this Acorah fellow to be a clever rabbit – one that does just enough. But to my amazement Acorah proved not only to be less than brilliant but not even competent. But the biggest, and saddest, surprise was the fact that for large sections of the audience this didn’t seem to matter at all.

Acorah is a new kind of medium. Not for him the genteel, link hands and “Is there anybody there?” approach. He enters to the sound of Jeff Wayne’s *War of the Worlds* and an American voice-over; he leaps up

and down, grinning and whooping like a televangelist, bringing his glad tidings to “the lovely people in this lovely audience”. And he’s canny with it: he sells books and DVD’s, has his own website, hosts the TV show *Most Haunted* on *UK Living* (which is, by satellite standards, hugely popular), and was even hawking his own magazine, *The Acorah Messenger*.



Who says you can't get a drink in heaven?

This latter is a delirious mix of the inane and the tragic, all written in breathlessly illiterate excitement. For instance, Acorah’s *Important Message For Us All* on the front cover claims that:

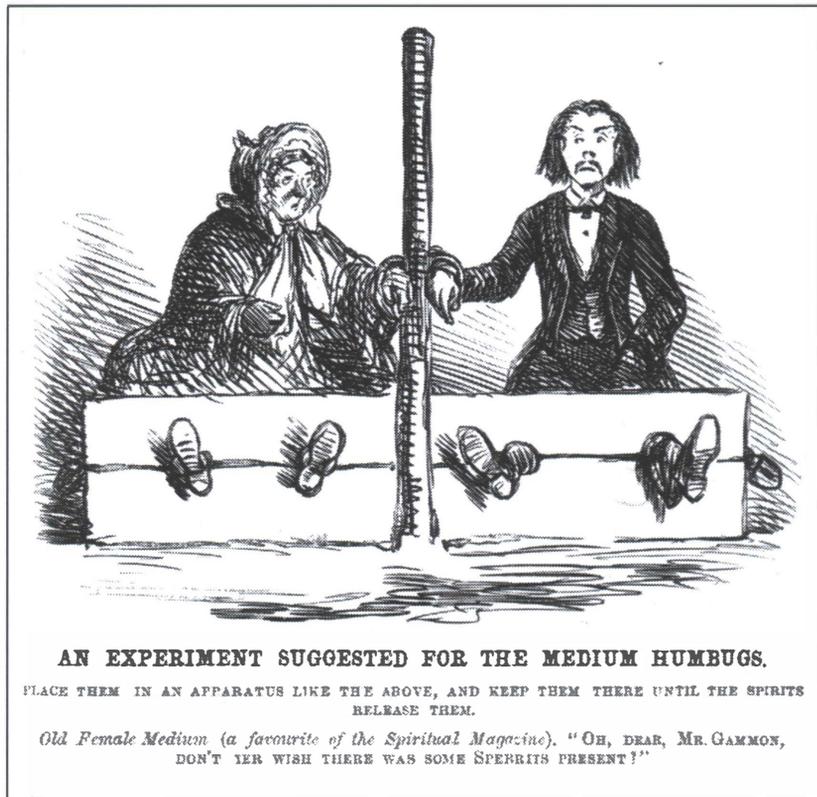
*“I have been asked by higher spiritual beings to help with a smoother transition of Mother Earth... This Spring Equinox I have been asked to gather as many people together, for a meditation to help our planet, in groups all over the world at sacred sites if possible – if not where ever you feel is best for you, by meditating in groups we enhance the power of the meditation many times more than the people present.”* (Sic throughout).

Elsewhere a piece on dream interpretation begins:

*“Dreams what do they mean? The meaning of dreams. What are dreams telling us? If you*

*have ever asked yourself any of these questions, then you are not alone in trying to sort out problems that are in our everyday lives, or are they?"*

Another testimonial describes the spiritual return of a dead cat ("No-one is quite sure why Suki chose January 5th of this year to come for a visit"), still another – which I haven't read because I didn't want



Punch cartoon, 1864: It was suggested that mediums should be put in stocks until they were released by their friends, the spirits.

to spoil it – is titled *Humbled By The Shiitake Mushroom*.

There is also a page of people to pray for (such as "Mark in Tooting who finds it hard to forgive others", "Peter in Catterick who has a brain tumour" and "Silva in Spain with a painful shoulder") and a delightful page on the subject of red – Derek's 'Colour of the Month' – which features an explanation of how colour affects our bodies, a guide to where to use red objects in the home, a helpful list of red foods and a recipe for chilli con carne.

Live on stage, Acorah seems to lack entirely this almost endearing amateurism. He's all business, and he's got every exit covered. First he explains that he is just an instrument and, though the spirits never lie, sometimes he might "make little mistakes" in the translation. Knowing that we have not come to his show to hear bad news, he reassures us that "there is no ill-health, no poorness, no negative unhappiness in God's land."

This is familiar New-Age-speak, but Acorah's constant use of it is bewilderingly complicated by weird

reinventions of normal English. At one stage he struggles to describe the way in which spirit lights surround our mortal bodies before explaining, for no apparent reason, that "I don't like to use the word 'hovering'." A little later he explains that some spirits, eager to announce themselves while he is still communicating with others, are "what we call 'pushy'." One person is asked if they knew someone who "would have achieved a height of five-foot-nine".

Acorah doesn't seem too fond of internal consistency. First a grieving widow is told that spirits communicate with loved ones "in their own good time", then we learn that "there's no time in the world of the spirit". ('World of the spirit', incidentally, was a constantly-used Derek-ism: perhaps he doesn't like saying 'spirit world'.) One minute a dead old man complains that you can't get a drink in heaven, the next we are told that another is drinking pots of tea. (Or is it only alcohol that God prohibits? Who knows? Certainly not Derek, but then he *is* only an instrument.)

The routine itself is just what you would expect. The names of the dead are offered to the entire audience. Once someone has identified the person Acorah asks questions and then makes cautious guesses based on the likelihood of discrete types of people having certain broad characteristics. Always, of course, he is aided by the audience's desperate desire to believe him, as when the question "Is there a Dorothy?" is met with

an amazed cry of "My mother's second name was Dorothy!" So here we have a woman identifying herself to her daughter not as mum or mother, but by her second name.

**One person is asked  
 if they knew someone who  
 "would have achieved  
 a height of five-foot-nine"**

Once Derek has his victim trapped, the spiritual information he then imparts is always incredibly bland: the American intro's assurance that we will be staggered and amazed is hardly justified by the ensuing series of tawdry revelations about people who are having trouble at work or considering doing some decorating at some time in the future.

Another of his ways is to open up a conversation, perhaps link one member of the audience with a certain dead relative, then break off into some tedious and lengthy anecdote about a crazy thing that happened to him once. I confess the point of this baffled me at first, but of course it is to give the victim extra time to think about *everything* connected with that relative, and thus give Derek as broad as possible a range of associations in their mind to link his guesses to.

This is lazy, insulting stuff virtually guaranteed to prove “successful”. Yet, to what was clearly mounting panic on Acorah’s part, time and time again his careful guesses proved thuddingly wrong. Surprisingly, he rarely had clever escape lines planned to carry him out of these situations, falling back instead on hoary old excuses (“Some come through clear, some less clear, I can’t help that”) and bland mystery. I lost count of the number of times when Acorah’s speculations drew embarrassed blanks only to be re-offered as symbolic portents of things to look out for in the future: “Is there a link with Wembley?”

“No.”

“Is there someone around you who is a Gemini?”

“No.”

“Will you put those two together for me later and have a think about it? Wembley and Gemini – watch out for them!”

His other-worldly advice proved equally vague. One person was asked if they were dealing with solicitors, their lucky yes giving Derek one of the night’s few good hits. Not wanting to lose the effect, he followed with the painfully safe “Is there worry attached to it?” and then, with crashing bathos: “They are saying it will be resolved”. Just that – no details, not even an indication of whether it will be resolved to their satisfaction or not. This kind of thing demands not just balls of brass, but also utter contempt for one’s audience. They applauded regardless.

Time and again Acorah’s modest attempts to make lucky connections rebounded on him. One member of the audience was asked if they wanted to move. Connoisseurs of bad mediums will recognise this as one of the safest openers imaginable, as it applies, or can be made to apply, to almost anyone. Yet the answer was a resounding “no”. Back-tracking, Derek wondered if they wanted to change jobs. *No*, they didn’t. In that case, had they changed jobs recently? *Yes*, they had. “Yes!”, Derek yelled in what he obviously felt was triumph.

An equally obvious opener – “does anybody in the

family suffer in the stomach?” – was met with a “no” and simply abandoned by Acorah, who presumably could not believe his bad luck. (Almost everyone has somebody in their family with a bad stomach, just as almost everyone knows someone who is unhappy at work, died of a heart problem, or is worried about their health – Acorah used all of these dusty standards.)



Punch cartoon, 1862: *But just how bad do mediums have to be to find themselves unemployed?*

After abandoning this mysterious stomach he received a vision of a pack of dogs – does the member of the audience like dogs? *No*, they do not. Does somebody in their family like dogs? *No*. Desperate, Derek announced that the dogs were ‘symbolic’. Symbolic of what, he was asked. Unbelievably, he replied that the dogs symbolised that “someone in the family will get a dog”.

This back-peddalling reached occasionally surreal heights of comic ingenuity. Pretending to be consulting with a woman’s dead mother, he asked “Is someone bugging you?” With yet more cruelly bad luck, the reply came back in the negative. Undaunted, Derek puts on his seer’s cap and replies “Mum says watch your friendships!”

Did Mum die of cancer? Again, it is highly possible, but again it comes up wrong. Did someone in your family die of cancer? Even more possible – virtually a dead cert. *Yes*, her sister. “Oh”, says Derek, “cause I’m getting two of them!”

A little emboldened by this narrow escape, Derek tries “Who’s Dave or David?”

“I don’t know.”

“Watch that name come up!”

Then later: “Is William a family member?”

“Yes.”

“Do you come into his company much?”

“No.”

“Mum says go and visit!”

Then: “Who’s Margaret?” *An auntie*. “In spirit?” *No, still alive*. “Gran’s talking about her!”

**I have never seen  
nothing get a round of  
applause before.  
Beckett would have  
been envious.**

Then: “Who’s Janet?” Not a close acquaintance, but she does vaguely know someone of that name at work. “Mum says that on Monday she’s gonna tell you some really juicy gossip!”

Is this the kind of information *you* would wish to pass on to your loved ones if you were dead and given the chance to talk to them again?

No question, though, as to what is the night’s most audacious – and contemptuous – *coup de theatre*. It is the moment when Acorah proudly announces that the late Doris Stokes has materialised on stage. He points to an empty corner, and the whole audience breaks into applause. I have never seen nothing get a round of applause before. Beckett would have been envious.

I began to write down every occasion when Acorah missed completely, but gave up after twenty-five or so, as it soon became clear that any amount of howling inaccuracy could be instantly blown away by a single lucky shot in the dark. After one particularly dry patch he lied to a crying old lady that her dead husband was saying “A rose for my rose” in his ear, and asked if that meant anything to her. Before breaking down completely she answered that her name was Rose. Rather than share my repulsion at this exploitation, the audience loudly gasped in amazement, then applauded. It was indeed a bravely out-on-a-limb speculation by Acorah (assuming he didn’t use narks in the audience), one rewarded with a success that few of his other more daring guesses were to be met with

that night. Even so, could I have been the only person who remembered that just a few minutes before the woman had clearly given her name as something else entirely?

A few people seemed to be cautiously taking him on. One woman claimed knowledge of a Mr Roberts, then later said she knew of him “from the phone book”. Derek asked her to think about the name. Another, on being told that Derek had made contact with her grandmother, asked “Which one?” Derek replied that he could only say what the spirits chose to tell him, then mysteriously lost the connection.

The general mood as we left, from what I could gather, was that Acorah had not, on the whole, been very impressive. Yet always I sensed that what resentment there was, was not directed at psychic mediums *per se*, but simply at a bad medium. Derek *is* a bad medium, but that does not mean that there are no such things as good mediums. Others were even more generous – Acorah was just having a bad night. The connections were weak, the audience unhelpful, but Derek is plainly sincere. The door is always open for precisely the reason that makes what Acorah does so very unpleasant – the fact that it meets an intense human need. With a need as powerful as that of grieving relatives desperate to know that human life has meaning, is it any wonder that people like Acorah can make a good living? Even after a display of sheer clodhopping failure on this scale the spirit world itself was left undented. As Acorah himself said: “The spirits don’t tell fibs!” No, just people.

It is a game of luck: sometimes Acorah must get enough good lucky hits in a night to make even himself start believing in it. Tonight he was unlucky, and he got mainly misses, including a few so unlikely one almost ended up believing in spiritual guidance after all, such as a large white building associated with fear and trepidation that turned out not to be a hospital, and a woman who didn’t know a Mr Smith.

But how unlucky was he, really? After all, the theatre was full at £7.50 a head, the souvenir stand was doing brisk business selling stress beads, bracelets, crystals and a ten-pound book, and with no set, supporting cast or effects to eat into the profits Acorah was probably already in his car and counting his money as we streamed gloomily into the south London night.

And indeed, a few months later, he was back at the same venue, so presumably there had been no complaints. I was going to go back, to see if he came out with exactly the same rubbish or instead had thought up lots of new rubbish. But in the end, I couldn’t be bothered. Playing on the vulnerable is, after all, not a noble way to earn a living, and to not even bother trying to lie successfully displays cynicism of a breath-taking sort. And the joke is on us, because we let him get away with it.

**Matthew Coniam** is a freelance writer specialising in film, philosophy and philosophy of science. His most recently published pieces include a brace of articles on existentialism for the magazine *Philosophy Now*, and a discussion of evolutionary biology and the paranormal for the journal *Abraxas*.



# Rhyme and Reason

Steve Donnelly



## The Last Post

HAVING LIVED IN Australia for a few years, many years ago, I tend to think of Australians as the least likely people to suffer from mass religious hallucinations and I certainly would not have imagined Australia as the place that the Virgin Mary would favour with her next set of visitations after Fatima, Lourdes and Medjugorje. But the Lord works in mysterious ways, as we sceptics know only too well, and He has recently been performing his wonders in the unlikely setting of Coogee Beach, NSW, Australia. I bring this revelation to you, first-hand (well, actually second-hand, I suppose) from my eldest daughter who has just come back to the UK after a gap year which included several months in Australia.

Towards the end of her stay, she was following the well-beaten track from a beach in Sydney's Eastern suburbs to the 'happy hour' at a nearby pub, only to find her path blocked by a jostling crowd. The chaotic scene appeared to her (still sober) eyes to be reminiscent of a Monty Python sketch. Scantily-clad backpackers, Japanese tourists with expensive cameras, schoolchildren and nuns, all pushing and shoving to get the optimum view of a white fencepost 300 metres away on the headland.

Given the spate of divine messages and images that have appeared over the last few years in potatoes and aubergines and, of course, the phenomena of weeping and milk-drinking statues, it is probably not too surprising that miraculous transformations should also affect a mundane object such as a fencepost. In fact, the good Virgin has been making appearances daily between 3 and 4 pm for the last two months and can be seen by devotees who look at the fencepost from a particular vantage point through squinting eyes. Much to the pleasure of Coogee shopkeepers, hundreds of visitors every day are flocking to see this miraculous apparition from the optimum viewing point on the headland. Others take the path up the cliff so that they can touch, kiss and pray to the post, which has now effectively been turned into a shrine and has flowers and pictures of the Virgin placed around it. However, not everyone is treating the visitation with this degree of respect; the Melbourne newspaper *The Age* on 2 February reported the following comments: "I saw an apparition but it wasn't "Mary" (referring to more scantily clad female apparitions elsewhere on the beach). "It's hot out here, so if she does show up, hopefully she will be wearing sunscreen." This from an American visitor. In fact, in

mid-February, disrespectful vandals tore down the section of fence containing the fencepost but the Randwick City Council rebuilt it rapidly, presumably in the hope that the stream of visitors would continue unabated. The repair has caused a minor schism amongst the faithful, with some claiming that the apparition is still there and some claiming that she is no longer visible.

Vigorous theological debate has, thus far, failed to yield an explanation as to why Australia, in general, and Coogee Beach, in particular, should be graced with the Blessed Virgin Mary (or BVM as she is familiarly known) at this time. The three front runners, though, are:

(i) to guide us to world peace in a time of conflict (one would imagine that Bagdad or the front lawn of the White House might be better locations to disseminate this particular message);

(ii) to comfort the families of the victims of the Bali bombing (several of the victims played for the local rugby team);

and (my favourite)

(iii) to register her disapproval of the topless bathers down on the beach (although one would imagine that the BVM would have made the relatively short trek from Lourdes to San Tropez many years ago if this was a major concern of hers).

In any case, my daughter squinted at the fencepost, as instructed and saw . . . a fencepost. But then, when she defocused her eyes, she could indeed make out the shape of a shrouded figure in white. When she focused her eyes again, this turned back into the fence. Fortunately, this left her scepticism undamaged as she was able to figure out that when one's visual system is dealing with input that is less than ideal such as in dim light, when faced with fractal-type scenes such as clouds or mountains or when viewing through squinting and defocused eyes, the pattern-making abilities of the human brain exert their maximum creativity. Dressing gowns on backs of doors turn into monsters; clouds and mountains turn into the face of Christ; and fence posts become veiled women.

My daughter, who only went to church once in her entire childhood, however, did not see an image of the BVM but was reminded more of Princess Leia from Star Wars. She will perhaps be reassured that, on coming back to the UK, she is now in good company since 390,000 people declared that their religion was Jedi in the most recent UK National census.

Steve Donnelly is a physics professor at the University of Salford.



## Philosopher's Corner

Julian Baggini

IT'S REMARKABLE HOW much emotion can be conveyed in an e-mail. A few years ago I conducted a short e-mail interview with the prominent American philosopher Martha Nussbaum. The subject was her talk at the World Congress of Philosophy in which she argued that self-examination is of crucial importance to becoming fully human, responsible citizens, and that people should learn not to accept beliefs from habit and tradition, but should take responsibility for their own reasoning.

In my question to her, I wrote: "You suggest, perhaps tongue-in-cheek, that a compulsory two-semester philosophy course is the best way of achieving this."

Nussbaum's stern reply began, "My suggestion is not at all tongue-in-cheek; it is entirely serious." Was it not possible to detect in her simple text, transmitted digitally across the Atlantic, some mild irritation mixed with indignation? I thought so.

Quite justified, you may think. After all, what made me think her suggestion could possibly be tongue-in-cheek? The reason is simple. I have heard many fine words about philosophy's power to elevate the mind and cultivate better human beings. But I've seen precious little evidence that studying the subject has any of these effects. Indeed, I am constantly depressed by the extent to which people supposedly dedicated to philosophy prove themselves to be as petty, pathetic and pitiful as everyone else.

There is a pat explanation of this, which is that the study of academic philosophy has become divorced from the pursuit of wisdom and right living which has lain and should lie at the heart of philosophy. It is therefore not surprising that those who are deemed 'experts' in philosophy do not demonstrate the virtues traditionally associated with it.

The explanation is neat but it fails to account for the fact that I have found, if anything, the enthusiastic non-academics have been worse behaved than their academic peers.

The latest example of this is of someone who, purely for the love of wisdom, helps run a philosophical society, which maintains a web page containing links to other useful sites. Now any impartial judge will tell you that our website ([www.philosophers.co.uk](http://www.philosophers.co.uk)) is one of the most interesting and valuable resources for philosophy enthusiasts on the net, and indeed a link to our site was included by this society. That was so, until the person in question took offence at something a colleague of mine said, at which point the link was removed. It was

definitely no coincidence: the person in question has confirmed to me that when he read what he thought were the offensive comments by my colleague he thought "you can go and f\*\*k yourself" and that is why he removed the link.

Now I think that personal vendettas – especially ones based on such trivialities as this – are a poor basis for determining which sources of information should be made available to people, which is why the listing of his society in *The Philosophers' Magazine* remains. And I also think that if a long-standing interest in philosophy is compatible with behaviour like this, then people like Nussbaum need to question their conviction that studying philosophy is going to make people better citizens.

This example is not isolated, alas. I've also been what can only be described as blackmailed by a distinguished professor of philosophy into puffing his book by the threat of legal action for some, in my view, minor and immaterial inaccuracies in a generally positive review of one of his works. We've had people from 'rival' publications – under some delusion that the world of philosophy periodicals is some kind of dog-eat-dog, cut-throat business – attempt to prevent a bookshop from promoting our title in its window and a service provider from keeping us as a client. And I also know of at least one philosopher who has examined the master's degree of a student he had conducted an affair with.

It's not that I think this kind of behaviour is especially unusual or bad. Far from it. We human beings on the whole should be seen as something of a disappointment to ourselves. My point is simply that philosophy does not seem to make people any better.

This wouldn't have surprised Aristotle, by the way. He thought that moral character is formed by habit and so what we need to do to make better citizens is instil these habits in our children when they are young. Only when they are older should they be permitted to study the basis and principles of moral reasoning.

Aristotle's view is a little too extreme for my liking. I do think that studying philosophy at a relatively young age can have its benefits. But I agree that when it comes to being good or bad, how much philosophy we have read is of little, or no, importance at all. It can help us make particular moral choices better and is almost certainly important for formulating public policy. But on a personal level, it doesn't have the power turn a little shit into a basically decent person.

*Comments welcome to [julian@julianbaggini.com](mailto:julian@julianbaggini.com)*

Julian Baggini is editor of *The Philosophers' Magazine* ([www.philosophers.co.uk](http://www.philosophers.co.uk)) and author of *Making Sense: Philosophy Behind the Headlines* (Oxford University Press). See [www.julianbaggini.com](http://www.julianbaggini.com).

## ASKE News

From the chairman of the Association for Skeptical Enquiry, Michael Heap



### The ASKE Psychic Challenge

ONE OF THE projects that ASKE is undertaking is an emulation of James Randi in his offer to award a prize to anyone able to demonstrate psychic or telepathic ability under controlled testing conditions. As readers may know, Randi offers \$1 million; ASKE offers the sum of £11,000. ASKE is also willing to conduct a preliminary test of anyone over here wishing to take up the Randi challenge.

For some time now we have issued a challenge to anyone who claims to be able to communicate with the dead (or otherwise to possess telepathic powers). Several ASKE members have each filed a question concerning a deceased family member and the challenge is to provide at least some of the answers. Tony Youens is to be credited with doing most of the planning and organising behind all this.

To date, the project has, on the face of it, yielded disappointing results. This is not because we have yet to experience the thrill and astonishment of witnessing, at long last, a genuine supernatural or paranormal event (albeit at the expense of those ASKE members who have guaranteed the prize money). It is simply that so few people have come forward to take up the challenge, and when they have, their claims have usually been either too vague or too absurd. For example, although our challenge has been announced in a Nottingham newspaper, there have been no serious takers.

One of the first individuals to take up our challenge simply e-mailed Tony and politely claimed the reward. When it was explained to him that rather more was required of him than this, he became rather indignant. As Tony is not one to suffer fools gladly, you can imagine how the subsequent correspondence proceeded.

Another person who responded to the challenge revealed that he knew a guru in Delhi who could give a person details about his or her past, present and future just by having that person sit in front of him. (The correspondent explained, "It is against the law of the spirit world to give answers by photo or name only.") However there were no volunteers to travel to India.

The most complicated claim involved matching statements with the name (or alias) of the person who made the statement. Initially 5 statements were returned to the

claimant with a list of 10 names. The claimant achieved 2 correct matches on the first trial and none on the second, after which nothing more was heard from him. (If this sounds vague, it is because I am unable to understand the claimant's instructions that Tony sent me.)

We have yet to pass anyone on to Randi, but for this purpose Tony was asked to examine a video recording made by a man who claimed that it showed that alien beings were congregating in his back garden. Inspection of the video revealed the creatures in question were insects filmed at close quarters. Indeed a Professor of Optics familiar with infrared camera work confirmed this, as did the Amazing Randi himself.

As is so often the case, what we learn from all of this is that the world can be divided into two sorts of people. In this instance it is those who consider that the above stories are hardly worth the effort of putting pen to paper and those (myself among them) who believe that much of interest and importance in human life is revealed in its absurdities.

### 11th European Skeptics Congress

At the time of writing plans are going well for the Congress on September 5-7, 2003. This will be at Franklin Wilkins Building, Kings College London, 150 Stamford Street, London SE1 9NN. Speakers (some yet to confirm) include Willem Betz, Edzard Ernst, Chris French, Ray Hyman, Paul Kurtz, Robert Morris, Massimo Polidoro, Dorothy Rowe, Leslie Walker, and Richard Wiseman.

### The 'Skeptical Intelligencer'

This is the annual periodical of ASKE. The issue for 2002 is now out and features articles on 'Medicine and Health' including critiques of alternative medicine. The cost of this is £4.50 (incl. p&tp). The issue for the year 2001 features articles on Delusional and Anomalous Beliefs and its relationship to beliefs in anomalous phenomena. This issue contains a rare account of the hypnotic interview in the 1980s, by the late H B Gibson, of a policeman from a certain northern town, claiming abduction by aliens. The cost of this is £3.50 (incl. p&tp). For both issues the cost is £7.50. To obtain your copy, send a cheque payable to 'Association for Skeptical Enquiry' to Mike Heap, 10 Woodholm Road, Sheffield, S11 9HT.

**Michael Heap** is the Chairman of ASKE and a clinical and forensic psychologist in Sheffield. ASKE email address = [general@aske.org.uk](mailto:general@aske.org.uk)  
ASKE website = <http://www.aske.org>

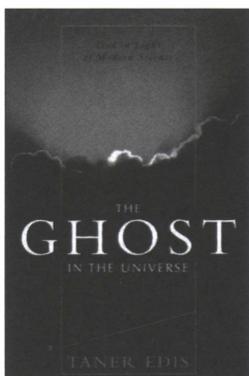
# Reviews



## THE GOD QUESTION

**The Ghost in the Universe: God in Light of Modern Science** by Taner Edis  
Prometheus, \$29, ISBN 1573929778

Man has always been searching for proof or signs of the existence of a god (or gods). The tools vary from metaphysical philosophy, revelations in holy texts, creationism, intelligent design, the origins of the universe, quantum mysticism, twisting the laws of thermodynamics, faith healing, Gödel's Theorem, and mystical revelations. Edis tackles them all in this collection of essays and treats all those different 'proofs' with respect, pointing out their strong points, and then gently takes them apart. Only the metaphysical philosophers do not get this patient treatment. Throughout the chapters he describes how the concept of a god has evolved. Miracles were demonstrations of a Higher Power and became breaches of the Natural Law. Bible analysis has caused a change in the concept of a personal God reigning from his throne, to a more vague entity. The 18th Century Enlightenment shift from theism to deism was inspired by scientific discoveries.



The more physicists discover, the more the image of a traditional god evaporates and the more the organized religions have problems justifying their claims. If there is no one who observes, cares and meddles, no master plan, then there is not much need for religion any more, nor for a higher power to explain things that a random generator can explain as well. The recurring theme is that our world can best be explained by 'random accidents' and that we can very well live with that idea. The answer from the religious, claiming that there is no morality without religion, gets special attention in a chapter on the social animal, sociobiology, evolutionary ethics and evolutionary psychology. Advocates of intelligent design and cosmic design use the same arguments with the same flaws.

The chapter on Holy Writ treats of not only the Bible and the life of Jesus but also quite extensively looks at the Quran and the life of Mohammed. Edis describes how Jahweh evolves from a local thunder and lightning god, who had to compete with the other gods, to a chief of all gods and then to the only god. A Moabite text, in the same style as the Biblical, tells how they "slew the Israelites

guided by their own gods" and then committed the same atrocities. The Bible is "not written as an account of the past but an instrument to get unconditional loyalty to Jahweh".

Traditional miracles are waning and replaced by 'statistical miracles'. Edis deals with them in a chapter on parapsychology. The 'new miracles' are UFO abductions, OBE and NDE. That brings him to neuroscience, the function of the brain, the definition of consciousness, malfunctions of the brain, hallucinations, the mystics and other ways of 'knowing', and postmodern philosophy. The battle is to win society and that battle is not waged with scientific arguments. In his conclusions, Edis does not reject religion, instead arguing that we should see it as an art form of myths and magical thinking that can give much pleasure.

A brilliant book, warmly recommended for its broad view, bringing together so many different aspects that are rarely to be found in one great synthesis.

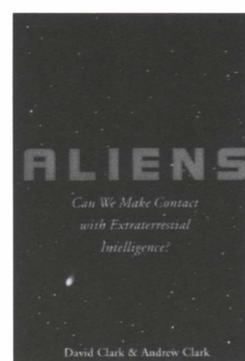
Willem Betz

## LOOKING HARD

**Aliens: Can We Make Contact with Extraterrestrial Intelligence?**

by Andrew J H Clark and David H Clark  
Fromm International, \$25.00, ISBN 0880642335

This book is by a father (David) and son team who, between them, possess expertise in astronomy, physics and philosophy. It starts well, with a prologue full of marvellous withering scorn for the alien-abductions and other nonsense surrounding the subject. There is, the authors say, no certain evidence that extraterrestrials have ever visited Earth, and the rest of the book, making clear the vast distances there must be between intelligent species, if indeed there are any others, demonstrates why this is almost certainly so. And that is a big 'if': there is a nice illustration of the fallacy of the "in the vastness of the universe there must be other intelligent beings" argument with an analogy with a shoe shop offering 12,000 pairs.



The authors admit that no definitive evidence of extraterrestrial intelligence (ETI) has been found, but emphasise how small the effort to find it has so far

been. They illustrate the vastness of the task with another nice analogy, on how long it would take to ask everyone on Earth their cola preference – at 10 seconds per person, all day every day – 1,000 years! But that would be only 1.5% of the challenge of surveying every star in the Galaxy. The McCrea Question (“If life in some elementary form that we know about is available on every planet in the cosmos, what is the chance that creatures like humans will evolve elsewhere?”), and the Fermi Question (more usually called the Fermi Paradox – if there are intelligent beings elsewhere why do we see no evidence of them, given that some might be expected to be much more advanced than us and therefore to have developed interstellar travel, or as the Clarks put it more economically: “If they are there, why aren’t they here?”) are naturally discussed. The book ends with an epilogue, glossary, bibliography, and advice on how to become a SETI scientist.

Ray Ward

## SCATTERED FRAGMENTS OF FLESH

### The Mind Made Flesh: Frontiers of Psychology and Evolution

by Nicholas Humphrey

Oxford University Press, £11.99, ISBN 0-19-280227-5

Perhaps the first thing to be said is that, despite the rather grand subtitle, this is not a textbook on psychology, nor is it a treatise on the scope and limits of the evolutionary approach to psychological theory. It is a collection of the author’s ‘occasional’ pieces – newspaper articles, lectures, radio and television talks, etc. – on a wide range of topics.

These include: the nature of the Self, Multiple Personality Disorder, altruism, St Valentine, mediaeval ‘trials’ of animals, Shakespeare’s sonnet LXXXVII, the Mind-Body problem, cave painting, the placebo effect, war, belief in the supernatural ... well, you get the idea. Given their different intended audiences, the pieces vary considerably in tone, but all are entertaining and thoughtful.

Although not intended as an academic text, most items are provided with footnotes, which give some guidance towards evidence and possible supplementary reading. The time period covered is rather wide (1979-2000) and this means that some of the pieces refer to events which have lost their immediacy (e.g. his 1987 Guardian article on the US bombing of Libya). Even in these cases, however, Humphrey usually has a telling and controversial point to make.

From the sceptic’s viewpoint, the most rewarding



chapters are the 1995 New York lecture on ‘Human Nature and Supernatural Belief’ and his 2000 lecture in Stockholm on ‘The Evolution of Faith Healing’. For those interested in getting a brief taste of the theoretical approach of evolutionary psychology, this collection contains some useful material (especially the 1987 radio talk, ‘The Deformed Transformed’). Ultimately, however, this is a book for the beach or the bedside. Nothing wrong with that, of course, but anyone who wants a systematic treatment of evolutionary psychology would have to look elsewhere.

John Gillies

## (UN)IDENTIFIED OBJECTS

### UFOs and How to See Them

by Jenny Randles

Caxton, £6.95, ISBN 186019205X

### The Mammoth Book of UFOs

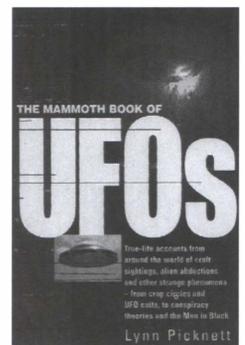
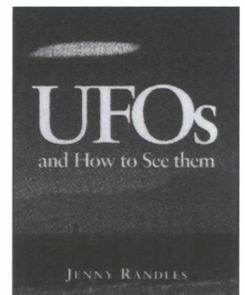
by Lynn Picknett

Carroll & Graf Publishers, £7.50, ISBN 078670800X

Separating the hundreds of rubbishy UFO books from the true reference books is a feat in itself. Further narrowing down to those that fundamentally add something to the field leaves a mere handful. Only one encyclopaedic reference, detailing dates, locations and witnesses, is needed to grasp the vastness of the phenomena. Clark’s three volume set springs to mind; other authors include Vallée, Hynek, and Evans. Whether these current titles ultimately add something to the field, like UFOs, remains to be seen.

Firstly, Randles’ handbook delivers its promise of 100 photographs (I counted them).

Picknett’s stands out as having no photos or other illustrations, thereby hindering any assessment of cases where photographic evidence is the focus. Aside from the catalogue format of cases, both authors attempt to provide natural explanations for the wealth of reports. Randles provides us with a fascinating chapter on IFOs (Identified Flying Objects) and an interesting flow diagram. The diagram begins with the shape of the apparent UFO (i.e. lights, disc, or tube) then takes the witness through a series of questions to determine whether it’s actually a balloon, aircraft, satellite, bird, meteor or planet. This diagram is annoyingly rehashed in text



form elsewhere in the book in a pointless chapter entitled 'UFO recognition'.

*The Mammoth Book*, however, delivers 60 pages of explanations ranging from the Extraterrestrial Hypothesis (ETH), through various IFOs and psychological theories, to the wonderful Charles Bonnet Syndrome (CBS), a little-known mental condition giving rise to 'otherworldly' visions. The cases in 'The Mammoth Book' are presented in a writing style that is frustratingly chatty, and constantly questioning, preventing accurate comparison between key cases or a ready acceptance of all the facts. Despite this, the research on the subject matter has obviously been comprehensively conducted, supported by various named advisors including Kevin McClure, John Spencer, Dr Jacques Vallée and Hilary Evans. Likewise, Jenny Randles has had a prolific impact on ufology since the 1980s and has revealed a knowledge and field-active expertise unmatched today. Do these books add anything to the field? If you are fascinated by ufology, have the photographs from one book and text from the other on your shelf, then maybe they offer convenience. But if you're not interested in ufology, look away...

Ciaran James O'Keefe

## STIMULATINGLY SKEPTICAL

### Rivals: Conflict as the Fuel of Science

by Michael White

Vintage, £7.99, ISBN 0436204630

Michael White's latest book takes as its theme the role of personal, political and ideological conflicts as the motivating force behind some of the key scientific developments from the Renaissance to the present day.

The topics are selected to reflect different historical periods, fields of research and levels of conflict (from the personal to the international), and the result is an engrossing and always entertaining piece of popular science writing in the tradition of White's previous best-sellers on Leonardo, Newton and Stephen Hawking. Fans of these earlier biographical works may find the present book's inevitably more superficial treatment of individuals and ideas a little frustrating – but the aims of the present book are obviously different.

So far as sceptics are concerned, White is most definitely on the side of the angels, as his introductory section, 'The Long Road to Reason', makes clear, and



throughout the book, he offers telling illustrations of the ways in which entrenched ideologies – particularly, though not exclusively, religious ones – have hampered scientific progress. The eight chapters (ranging from Newton *versus* Leibniz to Bill Gates *versus* Larry Ellison) are followed by a rather brief recapitulatory section, containing some general speculations about the nature of scientific discovery, the personality characteristics of scientists and the sociology of knowledge. These are topics on which whole volumes have been written and readers who seek an in-depth theoretical analysis of them will not find it here. What they will find is an enjoyable and balanced account of a broad range of specific rivalries which have both stimulated and delayed advances in scientific knowledge.

John Gillies

## IGNORANCE IS NOT BLISS

### Darwin's Mistake: Antediluvian Discoveries Prove Dinosaurs and Humans co-existed

By Dr. Hans J Zillmer

Frontier Publishing (Netherlands), £14.99, ISBN 193188207X

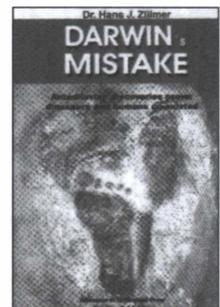
"The system of evolution seems convincing", writes Dr Zillmer, but only because contrary evidence is ignored. "Our world view is so brittle that it will not survive the smallest shake."

It starts with an account of a Texas museum exhibit, a steel hammer which had been completely embedded in solid sandstone, except for the broken end of its wooden handle. A graph reproduced from "sophisticated electron microscopes" (actually from a mass spectrometer) shows that it contains no carbon (and is therefore not steel – see under 'steel' in any dictionary), and is 96.6% iron. "Incredibly, this material is almost entirely solid iron!" (steel is between 98% and 99.8% iron).

"Why do we not find a coelacanth that is slightly more evolved? If this species has existed for the past 64 million years, then it should come in a variety of evolutionary stages." Not having looked up "coelacanth", in an encyclopedia, Dr Zillmer thinks the many fossil species and the one extant species are all one.

Some anti-evolution books are intellectually respectable – I reviewed one previously in *The Skeptic* (4.6). But this lavish volume is a work of self-satisfied ignorance.

Donald Room





# LETTERS

## Youens takes up Keen's challenge

The case highlighted by Montague Keen in the last paragraph of his letter (see *The Skeptic*, 16.1), is a very interesting one, and superficially a paranormal explanation may seem the only credible choice. However, I believe an alternative account is possible. I'll begin with a summary of the case.

The body of Jacqueline Poole, aged 25, was discovered on Sunday 13 February 1983 at her flat in Ruislip. She had been murdered two days earlier on Friday 11th. According to newspaper reports at the time, she had been beaten, sexually assaulted and strangled in the lounge of her flat. There was no sign of forced entry and police thought it possible she may have known her murderer. More than 20 items of jewellery were missing, which the police were hoping would turn up and provide valuable clues. A later report said police believed the murder was premeditated.

One of the investigating officers, Tony Batters, has written in *The Police Magazine* (available on the web at: [http://www.polfed.org/magazine/12\\_2001/12\\_2001\\_ghost.htm](http://www.polfed.org/magazine/12_2001/12_2001_ghost.htm)) about an interview he had with 22-year old medium Christine Holohan. According to Batters, the medium provided a great deal of startlingly accurate information. She had been contacted by a dead spirit calling herself "Jackie Hunt" (Mrs Poole's unpublished maiden name). She gave accurate details about the murder scene including

"the victim's position, clothing and injuries". Batters admits Holohan was not 100% accurate, but out of 130 points more than 120 "now seem to have proved absolutely correct". She gave information detailing the age and month of birth of the murderer, along with skin and hair colouring, number of tattoos and details of his previous convictions. However, even more remarkably the medium, *via* automatic writing, wrote down the name "pokie". Eighteen years later on Friday 24 August 2001, DNA technology finally helped convict the murderer, Anthony "Pokie" Ruark.

But there are other facts that could point to another, non-paranormal explanation. The medium, Christine Holohan, lived within 10 minutes of the murder scene and she was of a similar age to the victim. Holohan has never repeated this success either before or after Mrs Poole's murder.

The information she gave to the police provided no new information. Ruark was in fact already suspected by the police. The one piece of information that could have been of enormous help to the police was the location of the jewellery and in this respect the medium was of no help. She was also incorrect when giving the time of the murder. At this point I can only guess at a possible explanation but I believe there is one that has more credibility than spirit communication from beyond the grave.

Suppose someone strongly suspected or perhaps even knew that Ruark was the murderer and

wanted to get this information to the police without being traced back (possibly worried about retribution)? They could have passed this information on to a local medium who could then obligingly tell the police. But why not just send an anonymous letter? Well, perhaps Ruark was aware that someone else knew the truth and would immediately put two and two together, but this way the police would not be likely to make public their source.

Was their someone who suspected Ruark and wanted to push the police in the right direction? Yes there was. According to *The Times*, 25 August 2001: "Detective Chief Inspector Norman McKinlay was already investigating the murder, in which *suspicion over Ruark was renewed by a call from a member of the public in 1999.*" (My emphasis.)

This of course may not be the true explanation and we may well never know – unless someone obligingly comes forward. Other explanations are also possible. The medium and victim were of similar ages, and may have had mutual friends, or Holohan may simply have overheard someone talking about what had happened. However, I believe my first hypothesis is most likely.

Finally, we should not forget that ultimately it was a combination of a diligent investigation by the police together with recent advances in forensic science that ultimately got a conviction and not a ghost!

**Tony Youens, Derbyshire**

Please send your letters to: **The Anomalistic Psychology Research Unit, Department of Psychology, Goldsmiths College, University of London, New Cross, London, SE14 6NW** or e-mail [edit@skeptic.org.uk](mailto:edit@skeptic.org.uk). Email communication is preferred. We reserve the right to edit letters for publication.

**The Skeptic** is published quarterly. A year's subscription covers 4 issues. Please make cheques, postal orders (£ Sterling only), credit cards (MasterCard/Visa) payable to The Skeptic.

Postal zone	Sub. (1 year)	Back issue*
- United Kingdom:	£15	£4
- Europe (airmail) or Rest of the world (surface):	£18 (US\$30)	£5 (US\$8)
Rest of the world (airmail):	£30 (US\$48)	£5 (US\$10)

(\*see below for our discount rates for multiple back issues)

From: **The Skeptic**  
 10 Crescent View  
 Loughton, Essex IG10 4PZ, United Kingdom



**VOLUME 16 (2003)**

- 1 What are we to make of Exceptional Experience? Part 1: Remote Viewing;** Michael Benine: Behind the Door; Psychoanalysis: Science or Pseudoscience?; Coming Soon to an Office near You ...

**VOLUME 15 (2002)**

- 1 An Interview with James Randi.** The Missing Airmen; Mrs Gaskell's Elephant; Wild About Harry.
- 2 An Instructive Tale of Ear Candling.** Science/Non science; A Case of Spirits; Do Astrologers have to Believe in Astrology?
- 3 The Psychological Reality of Haunts and Poltergeists: Part 1;** In Search of Monsters? Secrets of Area 51
- 4 The Psychological Reality of Haunts and Poltergeists: Part 2;** Reconsecration: Towards a Secular Church; Myths to Die For

**VOLUME 14 (2001)**

- 1 Weird Science at Goldsmiths;** Psychic or Fantasy-Prone?; The Psychology of Psychic Readings; The Enigma of Florence Cook.
- 2 Would We Be Better Off Stupid?** Simon Hoggart's life as a skeptic; The safety of mobile phones; UFO sightings.
- 3 Why Are People Still Threatened by Darwinism?** The paranormal in women's magazines; Reinventing the past.
- 4 Watch Out Alien Big Cats About!** The Sexual Orientation Controversy; Post-Modernism and Parapsychology; Nostradamus Said What?

**VOLUME 13 (2000)**

- 1 Satanic Cat Abuse?** The last witchcraft trial; Asking awkward questions; Multiple personality disorder; Careers in pseudoscience.
- 2 Medjugorje Spectacular;** Brethrenarians; World Peace; Electromagnetism.
- 3/4 (double issue) God on the Brain;** Behind the Red Planet; In search of Nessie; Radio Ga-Ga; The skeptic's dictionary; Fantastic skepticism; What really happened?

**VOLUME 12 (1999)**

- 1 Hilary Evans on alien "abductions" (part 1);** Are women more gullible than men?; The Brahan Seer; Feng Shui revisited.
- 2 Rupert Sheldrake on Morphic Fields;** Revisionist historians; Hilary Evans on alien "abductions" (part 2); Biorhythms.
- 3/4 (double issue) Mars: The Mystery Planet;** Radio psychics and cold reading; Searching for the Loch Ness monster; Near-death experiences; the strange astronomy of the Hare Krishnas; Scientists who go off the rails.

**VOLUME 11 (1997/98)**

- 1 Psychoanalysis: fact or fiction?** Carl Sagan; The Mars Effect; Sleep paralysis or alien abductions?; Runes and the New Age.
- 2 Organ snatchers: myth or reality?** Genseng; Humanism - the atheist's religion? Regression hypnotism.
- 3 Zeppelin hysteria;** Analysing an 'alien' implant; The Piri Re'is map; Feng Shui foey; In defence of Humanism.
- 4 Does astrology work?** Blue-green algae and truth; An experiment to test a psychic; Spontaneous Human Combustion.

**VOLUME 10 (1996)**

- 1 The mystery of self;** Investigating a haunted pub; Why your 'IQ' may be misleading; The Cottingley Fairies; Fraud in Science.
- 2 UFOs today and yesterday;** Testing a guru; How not to get rich quick; Lucid dreaming; Do we only use 10% of our brains?
- 3 Why do people believe in the paranormal?** Investigating Yogananda, the 'incorruptible guru'; Little grey aliens; the media and the pylon scare; Meet a psychic faker.
- 4 Multiple personality disorder: fact or fiction?** The supernatural in detective fiction; The psychology of alien abductions; A critical look at children's books about the paranormal.

- 5/6 (double issue) Music from beyond the grave?** Millennium madness; Smart bombs or stupid people? The Delphic oracle; Meet the Extropians; Penny dreadfuls and video nasties; Psychic con-men; Skeptics choose their favourite books.

**VOLUME 9 (1995)**

- 1 Ritual satanic abuse;** How not to win the national lottery; Tesla: eccentric or neglected genius? Psychic surgery in Britain.
- 2 How to become a charlatan • SOLD OUT.**
- 3 Fighting Creation 'Science' • SOLD OUT.**
- 4 The social psychology of healing and therapy;** Quackery; Lies and statistics; Arthur Conan Doyle: unlikely Spiritualist.
- 5 Health-care for your Hi-Fi;** The triumph of alternative therapy; The Age of Aquarius; Spiritualism ancient and modern.
- 6 Is there anyone out there?** Desperately seeking immortality; The myth of the flying saucer; The placebo effect; Patent medicines.

**VOLUME 8 (1994)**

- 1 Crop circles: the full story, part 1 • SOLD OUT.**
- 2 The Creation: What really happened? • SOLD OUT.**
- 3 Animal Rights: Science or Pseudoscience?** Vivisection: The case against; Healing Waters: The Flying Saucer Myth.
- 4 Mysterious energies and martial arts • SOLD OUT.**
- 5 Can the hands heal?** Fantastic archaeology; Don't point that comet at me; The Mary Celeste revisited.
- 6 Alternative Medicine Special • SOLD OUT.**

**VOLUME 7 (1993)**

- 1 The truth about tarot;** Obituary: Charles Honorton; A healthy dose of sarsaparilla; A test for reincarnations.
- 2 The myths of meditation;** Vicious circles; the Cyril Burt affair; Castaneda; Skepticism, 1895 style; Equine pseudoscience.
- 3 Cold fusion heats up;** Rajnesh; the failed guru; Interview with Susan Blackmore; Meditation; Spirit guides and after images.
- 4 The face on earth;** Neural networks and NDEs; Francis Galton; Cyril Burt reconsidered; The computer conspiracy.
- 5 The mysteries of creativity;** A supernatural IQ?; The Big Bang controversy; Write your own pseudoscience.
- 6 Science and nonsense;** The Mary Celeste 'mystery'; Who's that on the line?; Close encounters of the cult kind.

**VOLUME 6 (1992)**

- 1 Paranormal trends in the USSR;** Faking an alien; Where do we file flying saucers?; Psychic questing; Sea-bands.
- 2 Brainwashing a skeptic;** Dianetics; Who invented the Loch Ness monster?; The medium, not the message.
- 3 Premanand: scourge of god men;** Women and the New Age; Do-it-yourself UFOs; Chapman Cohen: freethinker.
- 4 Physics and the New Age - Part 1;** Crop circle hoaxing; Homeopathy; Miracles; Pyramid power.
- 5 Vampires in Cumberland;** Is light getting slower?; Eurocereology; Physics and the New Age - Part 2.
- 6 Great balls of fire;** Quackupuncture; Cold comfort for cold fusion; The fasting woman of Tutbury; Skeptics and scoffers.

**VOLUME 5 (1991)**

- 1 Paul Daniels interview;** Canals of Mars; Nostradamus and the Middle East crisis; Potty training; The case for super-skepticism.
- 2 The New Age and the crisis of belief;** The Mary Celeste mystery; N-rays; Wet and dry skepticism.
- 3 Why not test a psychic - 1;** Speaking in tongues; Another look at scientology; Sharp blades or sharp practice?
- 4 James Randi interview;** Why not to test a psychic - 2; The Freethinker: 1881-1991; Medjugorje; Dualism, ESP and belief.
- 5 The documentation of a miracle?;** Psychics and semantics; Smith and Blackburn; hornswagglers extraordinaire.

**BACK ISSUE DISCOUNTS**

Order more than one back issue and deduct the following discounts from your order total: Ordering 2-6 issues, deduct 10%; Ordering 7-12 issues, deduct 20%; Ordering 13 or more issues, deduct 30%.



This document has been digitized in order to share it with the public through AFU's project, running since 2010, to share files donated/deposited with the AFU foundation. Please consider making single or regular monetary donations to our work, or donations of your files for future preservation at our archival centre.

Archives for the Unexplained (AFU) · P O Box 11027 · 600 11 Norrköping, Sweden · [www.afu.se](http://www.afu.se)

Paypal: [afu@ufo.se](mailto:afu@ufo.se)

IBAN: SE59 9500 0099 6042 0490 7143

BIC: NDEASESS – Nordea/Plusgirot, Stockholm

Swish (Sweden only): 123 585 43 69