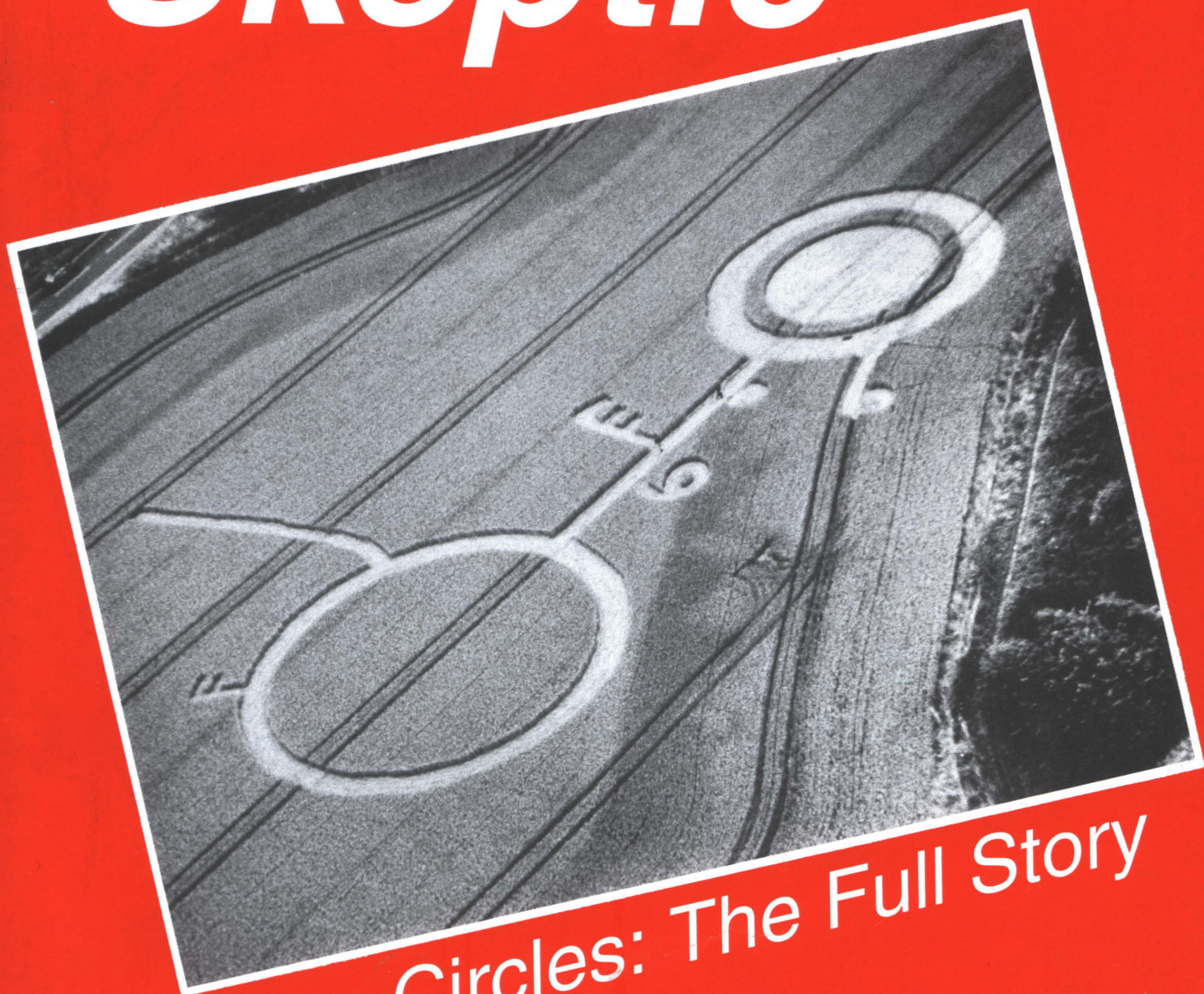


Volume 8 Number 1

The Skeptic



Crop Circles: The Full Story

Also in this issue:

*Parapsychological research in the U.K.
The dangers of New Age 'Crystal Healing'
Skeptical predictions for 1994*

£1.85

Hilary Evans' Paranormal Picture Gallery



Sœur Thérèse de l'Enfant-Jésus, durant la guerre, entraîne un séminariste-brancardier pour ramasser les blessés sous la mitraille. (Dessin de GUSTOUX).

Otherworldly allies

The Gods in Homer's *Iliad* were continually interfering in the conduct of the Trojan War, supporting the warriors they liked and sabotaging the ones they didn't. The tradition has been maintained into the Christian era, and World War One warriors were frequently encouraged by the Comrade in White, the Angels of Mons, and other otherworldly allies. The Saints were quite ready to abandon their neutrality and pitch in for the Allied Cause; the English were abetted by George of dragon-killing fame, and by Michael who had shown himself no mean fighter when the Heavenly Establishment had been threatened by Lucifer's uprising.

For the French, it was of course Jeanne d'Arc who came to her country's help—though it may have confused her to find that this time the English were fighting beside the French, not against them. A more unexpected participant was Therese of Lisieux, who had died in 1897 at the age of 24. She appeared in the French trenches in 1916, to guide ambulance men towards a wounded French soldier. However, there is more to this story than meets the eye. Therese had not, in 1916, been recognised as a saint, though a lot of people thought she should be. The publication of this story in the fervently Catholic magazine *Le Pelerin* in 1923 may well have been intended to further her cause. If so, it was successful, for 'the Little Flower' (as she is known to her millions of admirers) was duly canonised in 1925.

Was this story invented for the purpose? Only a skeptic with a heart of stone could suspect so...

Hilary Evans is co-proprietor of the Mary Evans Picture Library, 59 Tranquil Vale, London SE3 0BS

CONTENTS

Volume 8, Number 1

Editors

Dr Steve Donnelly, Toby Howard

Subscriptions and Finance

Dave Martin,
Dr Dave Love

Typesetting

Dorothy Biden

Typing and Secretarial

Mavis Howard,
Angela Linton

Cartoons

Donald Room,
Tim Pearce

Proof-reading

Jane Bousfield,
Daf & Mike Tregear
Angela Cernoculski

Special Consultant

Cyril Howard

Publicity

Chris Nash

Printing

Chapel Press, Stockport

Hits and Misses	4
Steve Donnelly	
Cereology is Dead—Long Live Cerealogy!	6
Robin Allen	
Parapsychology in the UK	13
Tony Lawrence	
Crystal Dangers	15
Ian Plimer	
Skeptical Predictions for 1994	17
Marjorie Mackintosh	
Hello, Earth Talking!	18
Robert McGrath	
Far Too Green By Half	19
Russell Dear	
Psychic Diary	20
Toby Howard	
Skeptic at Large	21
Wendy Grossman	
Reviews	22
Letters	27

The Skeptic is published bimonthly from PO Box 475, Manchester M60 2TH, UK. Opinions expressed are those of the authors and do not necessarily represent those of the editors.

ISSN 0959-5228

Copyright © The Skeptic 1994

A big thank-you to all our clipping contributors, who for this issue include:

C L Torrero, Michael Heap, R W Hamilton, Mark Butler, Arthur Chappell, Jack Cramb, Gerald Fleming, Earnest Jackson, Donald Room, Mike Rutter, Gerald Fleming, Gillian Sathanandan, H Sivyer, Steuart Campbell, Tom Ruffles, Marie Donnelly, Brian Slade, J G Watson, Ean Wood and Austin Moulden.

Sorry if we've missed anyone out! Please keep the clippings coming!

Hits and Misses

Steve Donnelly

Allo, allo, allo . . .

Clearly with no thoughts of the 'War of the Worlds' radio hoax perpetrated by Orson Welles in the 1930s, listeners to scanner radios in Yorkshire in December could barely believe their ears when they monitored local short-wave transmissions. Police broadcasts indicated that aliens were invading planet Earth, apparently landing their flying saucers at Kearsley Lane in Doncaster. According to the *Guardian* on 27 December, the eavesdroppers understandably went to investigate and promptly had a close encounter with big blue men rather than the little green ones they expected to meet. In a mission known as Operation Marconi, police had set out to apprehend wrongdoers who were acting on information obtained by listening to police radio transmissions. In Britain it is perfectly legal both to own a scanner and to use it to listen to police broadcasts but it is a criminal offence to act on anything heard. South Yorkshire police are convinced that criminals are cashing in on information obtained from the airwaves and are making a concerted effort to crack down on those listening to their transmissions. I suspect that regression hypnosis carried out on the people arrested will reveal memories of bare cell-like rooms, flashing blue lights and creatures wearing strange helmets . . .



Here we go again

Don't get upset about it, but the world is going to end (again) sometime this year and the reappearance of Christ is imminent—this time as a youth cult figure in the USA (Michael Jackson, Meatloaf?). The information, this time, comes in the form of a tract entitled 'A Little Scroll Unrolled' by Ali A Shah (available from Aaliah Publications, PO Box 2480, Harlow, Essex priced £5.50 including postage and packing). Anyone purchasing this

little book will also receive the name and address of the new Messiah—but be warned that the anti-Christ (Michael Jackson, Meatloaf?) will give his first world-wide press conference very soon and that worldwide catastrophes will herald the coming apocalypse. Amongst some of the events predicted in the run-up to the end, are a reversal of the Earth's rotation, the breaking-up of the moon, a new purple sun joining the solar system and the appearance in the sky of a giant winged horse with a human face.

What's in a name?

Staying on a religious theme for a moment; a father in Japan has recently taken a Japanese local council to court in an attempt to force it to register the name of his son under the name he has chosen—'Akuma' or 'Devil'. According to the *Guardian* on 14 January, the authorities of Akishima city near Tokyo claimed that the name would invite ridicule and discrimination against the boy and refused to register him in that name. But the father insists that he wants a name that will make his son 'strong' (Sue?) and has taken legal action. A law professor has pointed out that the two characters that make up the name in Japanese are on the authorised list and that therefore the city will have a devil of a job forcing the father to change his mind.

Two by two

Claims have once again been made that the remains of Noah's Ark have been found near Mount Ararat on the borders of Turkey, Iran and Armenia (formerly part of the Soviet Union). According to an article in the *Observer* on 16 January, the Turkish government is so impressed by the findings of a team of scientists who have been investigating the area for six years, that they have designated the site one of special archaeological interest. The team, consisting of Middle-Eastern and American scientists have discovered a buried, 'ship-like object, wider than the Queen Mary and half as long'—dimensions that seemingly conform almost precisely to the 300 x 50 cubits specified in God's original blueprint recorded in Chapter 6 of *Genesis*.

In the area surrounding the find, the team have identified large stones with holes carved at one end (the late Barbara Hepworth is not believed to be involved) and they believe that these are 'drogue-stones' that were dragged behind ancient ships to stabilise them. According to David Fasold, an American shipwreck specialist (working at a significantly greater height above sea-level than in his normal work): 'The radar imagery at about 75 feet down from the stern is so clear that you can count the floorboards between the walls'. He believes that these are the fossilised remains of the upper deck but no mention is made of the fossilised remains of a rather large number of animals that one might also have expected to have found.

Claims to have discovered Noah's Ark on or near Mount Ararat are made fairly regularly and many fundamentalist Christians and Muslims believe in the literal story of the great flood. The first edition of the *Encyclopaedia Britannica* in 1768 had no doubts as to the factual existence of Noah's floating menagerie. But, according to that wonderful book *A Dictionary of Common Fallacies* by Philip Ward, by the 11th edition of *Britannica* in 1911, the Noah story had come to be described as a myth, although this has in no way deterred the many expeditions that have visited Turkey in search of the ark since that time. A flurry of 'arkeological' activity began in 1982 when a ten-year ban on expeditions was lifted—the ban had been placed in 1971 following Russian complaints that expeditions included Western agents spying on Soviet installations. The last major 'discovery' of the ark was announced in August 1984 by an international expedition led by Marvin Steffins and was much hyped in the press at that time. Steffins also claimed that his discovery had almost the exact dimensions given in *Genesis* for the Ark and that he had samples of fossilised wood from the big boat itself. However, the Turkish authorities were less enthusiastic about the 1984 find. At a press conference a couple of weeks after the discovery (from information kindly supplied to *Hits & Misses* by regular clipping contributor J Cramb of Perthshire) the Turkish Minister of Culture and Tourism announced that the rocks and earth discovered by the expedition were just that, and had nothing to do with Noah's Ark.

Returning to the recent find, even if it really does turn out to be the remains of a wooden vessel and not just another rock formation, Gerald Larue, professor of biblical archaeology at the University of Southern California believes that it is likely to be a replica of the mythical Ark built by Christians some 3 000 years after the supposed event. In an interview published in the *Sunday Telegraph* on 23 January he adds that even if the 'gopher wood' of which the Ark is reputedly constructed was actually metal, 'I still wouldn't want a cruise with all those animal messes'.

Winter madness

Although having little direct relevance to the tenets of astrology, some recent research findings may, nonetheless, be of interest to anyone who believes that one's date of birth may influence character. As part of a research project aimed at finding the causes of schizophrenia, researchers at the Institute of Psychiatry in London used nuclear magnetic resonance imaging to examine the brains of schizophrenics, manic depressives and people with no diagnosed psychiatric disorder. According to the *Sunday Telegraph* on 9 January, Dr Raj Persaud and colleagues discovered that schizophrenics had brains that were significantly smaller than the other groups and that this effect was more pronounced for those born in winter. The difference in brain size between schizophrenics manifested itself as a reduced amount of the grey matter that makes up the outer layer of the brain. No explanation has yet been put forward for the seasonal variation although one theory is that babies born in winter are more likely to be exposed to viruses while in the womb. (This is a little hard to understand as most babies spend

three seasons *in-utero*.) Of course, at this stage, astrological influences cannot be ruled out.

Unlucky for some

One of the most common superstitions is the belief that Friday the 13th is an unlucky day and, as a consequence, many people refuse to travel or engage in other potentially risky activities on this date. Generally, the belief is derided by skeptics but recent research by a team from the Mid Downs Health Authority in West Sussex has indicated that perhaps we should be taking the superstition more seriously. According to the *Daily Mail* on 17 December, the team examined Department of Transport traffic records for the southern M25 for every Friday the 6th and 13th for five years. First of all they found that people were less likely to drive on Friday 13th by a factor of 1.4%—this is presumably a consequence of drivers staying home to avoid risk—but they also found that there were significantly more road accidents on the 13th than on the 6th. In fact the risk of a transport accident, in the study, was 52% greater on Friday the 13th than on Friday the 6th. Dr Tom Scanlon who reported the findings in the *British Medical Journal*, his skepticism apparently unaffected by the findings, suggested that increased anxiety or even a sense of destiny was affecting drivers' concentration and added: 'I'm not superstitious at all and it won't affect my driving pattern.'



Tim Pearce

Odds

The dealing of a bridge hand containing all 13 spades to a man in Sussex was found sufficiently interesting to merit a mention in the pages of the *Daily Telegraph* on 10 January in a short filler article that reported that the odds against this occurring were 158,753,389,899 to 1 against. What the article failed to mention, however, is the fact that these are also the odds against the occurrence of *any* particular 13-card hand.

Steve Donnelly is a physicist and a reader in electronics and electrical engineering at the University of Salford.

Cereology Is Dead—Long Live Cerealogy!

Robin Allen

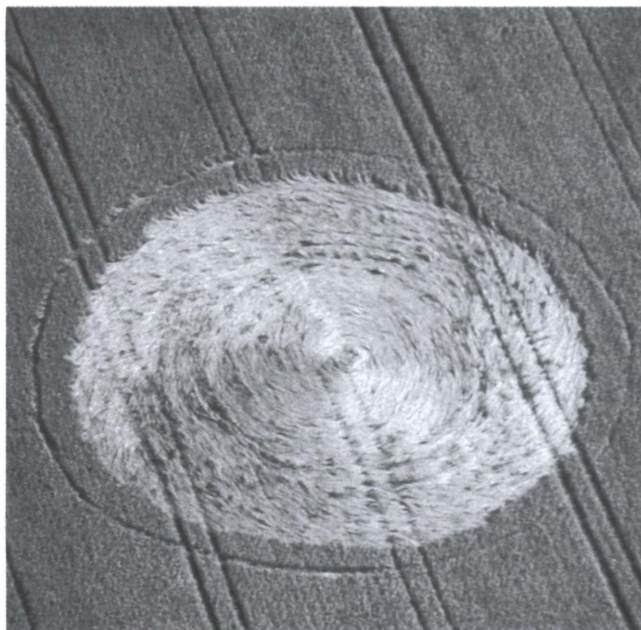
The first of a two-part history of the crop circle phenomenon

Cerealogy (formerly *cereology*), n. The scientific study of the crop circle phenomenon.

IT USED TO BE SUCH FUN to be a cerealogist. You were feted as an expert on what had been described as the 'greatest mystery of the twentieth century'. The press ceaselessly sought out your opinions on developments in the crop circle phenomenon, broadcasting them to a public hungry for details, fascinated by what you had to say. You could deliver talks in hushed auditoria, greeted by gasps from those in attendance as you communicated the profundity of your field of study, or in seminar rooms, enticing scientists with the possibilities opened up by your insights. You might find yourself surrounded by admirers, sometimes eager to hear your theories, sometimes aspiring to become your acolytes, willing to help garner evidence for your case and defend it in public. You could write articles in abundance for Scientific or New age publications, and even pen books, perhaps such best-sellers that you could retire on the proceeds; you could even find a niche in the video market.

In the Summer of 1991, things could not have looked rosier. Bigger, ever more spectacular formations were appearing. Public and press interest, and the concomitant demand for your opinion, were never greater. Evidence from the field and the lab was mounting, refuting the cynical suggestion that circles were all hoaxes, and offering much support for your revolutionary hypotheses concerning genuine circles. True, there was an unfortunate increase in the crime of hoaxing, but you had it under control, and could easily exclude the handiwork of errant humans from your database. The solution to the mystery, and the scientific paradigm-shift and change in world consciousness it would catalyse, were just around the corner. All in all, it was *good* to be a cerealogist.

All good things come to an end. The cerealogical dream that was the summer of 1991 collapsed into a nightmare of hoaxing and humiliation in the autumn, when it was revealed that two Southampton pensioners, Doug Bower and Dave Chorley, claimed to have started the phenomenon years previously, and to have been running rings around the experts ever since. The press, always eager to dethrone the kings it itself crowns, gloated over the cadaver of its former silly season standby and vociferously preached the new gospel: circles not only could be made by people, they all had been. The reaction of the cerealogists' main audience, the public, was swift and ruthless: circles were hoaxes, the



Mary Evans/G T Meaden

Ringed circle at Weston Overton, Wiltshire, August 1989

experts were pompous idiots, and that was that.

Of course, that was *not* that; and no close observer of the cerealogical scene expected the vicissitudes of the autumn of 1991 to signal the demise either of the circle phenomenon or its students. The fields of Britain were once again peppered with circles in 1992, and cerealogy, having skillfully rationalised the hoaxing revelations of the previous season, was ready and waiting to meet their challenge. It was to be a difficult year; but cerealogy would ride its various storms, emerging intact, if dented, to confront the phenomenon when it got underway yet again in 1993. And there is no doubt that the circles will be back in 1994, and 1995, and 1996, accompanied by their faithful students, each confident of the genuineness of the mystery and evangelising its significance to the world.

So what?

The fact that the world has stopped listening to cerealogy's good news probably accounts for the general indifference of skeptics towards the resurrection of the crop circus. Cerealogy was filed between cattle mutilations and channelling long ago, and its continuance has simply been ascribed to the persistence of hoaxers and the enduring gullibility of their victims: a depressing reminder of human fallibility, but not a stimulus for further scrutiny. Now, whilst I would agree that circles research no longer brings science into

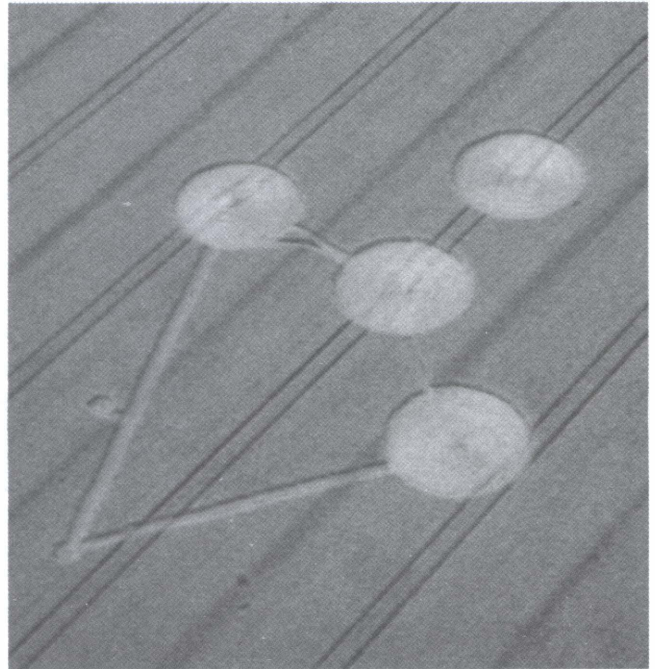
disrepute—and, yes, hoaxers, gullibility and all that—do not think this should herald the cessation of skeptical interest in the field: for in my view, it presents us with an unparalleled opportunity to gain insight into the structures and functions of pseudo- and quasi-science, and into lay conceptions of science and its method. It allows us to study how ordinary people, varying in worldview and education, group together and attempt to make sense of a single phenomenon; how they construct, and perhaps test, a variety of hypotheses, gather evidence, analyse data, argue their case, react to criticism, and rationalise failure. In particular, if we assume that the central tenet of cerealogy—there is such a thing as a ‘genuine’ circle—is wrong (and I will suggest later that the validity of this tenet is not as straightforwardly rejected as one might think), then examination of the discipline might help us identify what it is about the research strategies, and personal idiosyncrasies, of people that can lead to them getting things so terribly wrong; and then refusing to face the fact that they have. The primary purpose of this article, which is in two parts because of my prolixity, is to exploit these opportunities.

It will also serve to bring the reader’s knowledge of circles research up to date. A lot has happened since 1991, most of it bad for cerealogists. In October 1993, as part of a Faustian pact with the UK Skeptics (to wit, they pay for me to go, I write this article), I attended the traditional autumn ‘Conference’, a weekend of circles-related talks held this year in Dorchester. An impressive one hundred and thirty or so circles enthusiasts (‘croppies’) turned up, and from the talks, the question-and-answer sessions which followed, and a little socialising with the cerealogical hierarchy, I was able to assess the current state of the field; I was left in no doubt that it was alive and well, if a little despondent. So what has cerealogy been up to these past two years? Has it made any progress? Has its evidence for ‘genuine’ circles improved? Most importantly, have circles researchers won their battle against the hoaxers?

In a word, no.

A quick puzzle: take a look at the figure at the top of the next column. It depicts a geometrically complex area of flattened wheat known as a *crop pictogram*. This particular formation was one of two that appeared in the Summer of 1993 in the vicinity of Cheesefoot Head, east of Winchester in Hampshire; a region visited by many legendary crop circles over the last ten or fifteen years. The pattern—christened ‘Bohemia Two’ to reflect the radical departure from conventional cerealogical aesthetic norms its design embodies—measured some 200’ from top to tail, and appeared in the wee hours of Sunday the first of August, at Chilcomb. It formed in full view of a busy road, under a bright moon. No-one saw or heard a thing.

Like its illustrious predecessors in the area, Bohemia Two bore the hallmarks of the ‘genuine’ pictogram. In the circles themselves, each about 40’ across, the crop was swirled in a beautiful spiral pattern; significantly, the centres of these spirals did not coincide with the geometrical centres of the circles (which were, in any case, imperfect). In the avenues, the crop was laid down linearly. In places, the stems were laid with some complexity, with a braiding



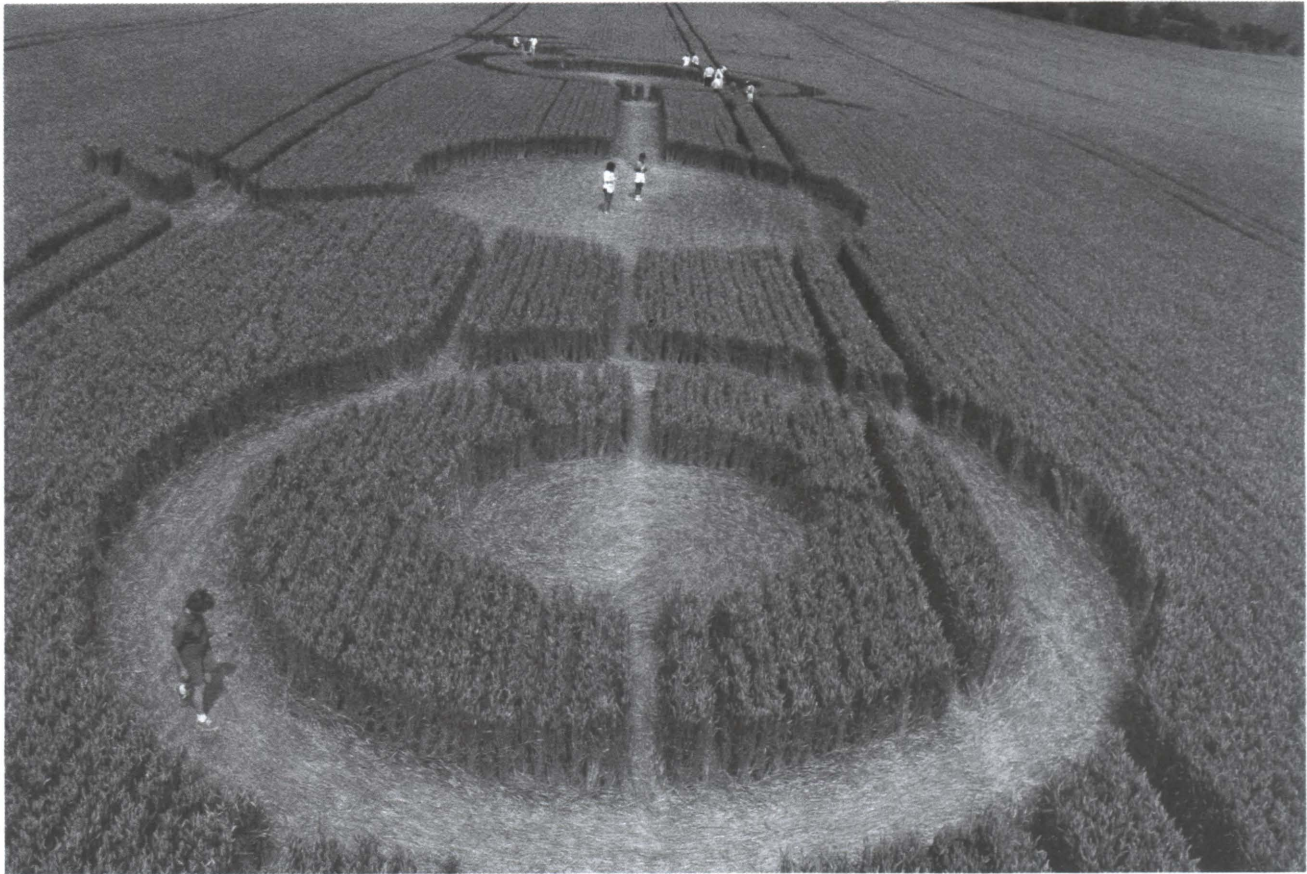
Bohemia Two

and plaiting in evidence; despite this, the laid crop exhibited little damage. There was a sharp cutoff at the edges of the formation, flattened stems lying roughly perpendicular to standing ones, although there was a periodic ‘feathering’ effect: that is, occasional bunches of stems leaning up against the perimeter. There were some tufts of standing crop in the body of the formation, and a certain amount of ‘gap-seeking’—the perimeter crop splaying into the tramlines—could be discerned. There were no footprints.

Although some had their doubts, Bohemia Two was generally well-received by crop circle investigators: Richard Andrews, a Hampshire expert of long-standing, widely recognised as most proficient at the art of detecting genuine circles through dowsing, authenticated it. Subtle energies were sensed in the formation by meditators and the psychically sensitive. RF anomalies were reported by one researcher, who was also able to link the design of the formation to that of the majestic Barbury Castle pictogram of 1991 (to many the greatest crop circle of them all); it graced the cover of his booklet of site surveys. One luminary of the Centre for Crop Circle Studies even felt moved to declare it the best formation he had seen thus far in 1993.

Now for the puzzle. Simply: How did Bohemia Two get there?

I appreciate that some readers, particularly those new to the circle phenomenon, might like their decision to be informed by the accumulated wisdom and experience of a decade of cerealogical research. As an aid to them, and as a reminder to others of the phantasmagoria of theories spawned by circles, I present below an inventory of the more popular causal conjectures that have gained favour amongst the croppies, and other students of the phenomenon, over the past decade. The list is not exhaustive, and it is admittedly somewhat flippant, but it has a magical saving grace: one of the options given is the correct one. Good luck.



'Pictogram' at Alton Barnes, Wiltshire, July 1990

(a) A novel atmospheric phenomenon known as a 'plasma vortex', comprising a mass of spinning, ionised air, perhaps akin to ball lightning, was undoubtedly the cause of the Chilcomb circle complex. In a matter of seconds, a parent throw-off vortex, formed in the lee of a nearby hill, perhaps Telegraph Hill, broke up into four daughters, each connected by an ion-track, which descended into the field. Two of these subsidiary vortices emitted grand-daughter vortices, charged parcels of air which travelled linearly until briefly coalescing at the apex. Magnetohydrodynamical instability, or perhaps a local anomaly in the Earth's electromagnetic field, accounts for the perturbed circle off the avenue.

(b) Err... it could have been an alien craft landing in the crop, but I admit it would have to be a funny shape. Or in trouble. Maybe it was a psychic extraterrestrial projection...err..Whatever, the link between UFOs and circles is undeniable.

(c) I don't know precisely, but it was probably an energy beyond the scope of materialist science; perhaps something to do with ley lines, or poltergeists. It certainly was not made by people! (This, of course, is what I mean when I say the circle is 'genuine'.) Circles, and this one is no exception, have been shown to contain un-hoaxable complexity, and to catalyse all manner of weird phenomena. Experts have shown that it takes hours to make even the simplest of circles. One expert has said that, if people are responsible for the crop circle phenomenon, then they must be part of a secret society of chess grandmasters, Fellows of the Royal Society, as fit and efficient as the SAS, as close-knit as royalty, as ingenious as Colditz escapers... preposterous! So

I'm keeping an open-mind. But it's not people.

(d) A rare form of fungal infection, combined with a good, strong breeze. No, I've never been anywhere near a circle. So what?

(e) Helicopters.

(f) Hordes of rampant hedgehogs rotating in unison.

(g) Twenty people, possibly the military, all night, employing some highly complex technique.

(h) Three skeptics with a garden roller, taking about eighty-five minutes.

(i) A bunch of drunken yobbos with planks and string, about an hour.

(j) Dunno.

Had one conducted a vox pop on the creation of Bohemia Two in the summer of 1991, one would have found takers for each of the above; with the exception of the tabloid favourite (f) and, perhaps, the deeply unpopular (j). The opinions that mattered, however, were those of the experts, and they restricted themselves almost entirely to options (a), (b) and (c): the other hypotheses, particularly (g) through (i), could only be subscribed to by complete ignoramuses. By the time Bohemia Two appeared, things had changed. The vicissitudes of the autumn of 1991 had ensured that noone would take the beautifully scientific (sounding) account (a) seriously; but the remaining theories still had adherents. Certain of them had even risen to ascendancy amongst the lay public—such as (g), favoured by those who thought humans were involved but had swallowed some of the expert's propaganda, (h), favoured by those in the know, and (i), the darling of cynical farmers everywhere. The greater body of experts and croppies,

however, whilst no longer as dismissive of hoaxing notions as before, had not really broadened its horizon: (b) or (c) was it.

Which is unfortunate. Bohemia Two was, of course, man-made. But those of you who opted for (h), skeptics with rollers, Channel 4's *Equinox* documentary and all that, put down the champagne. The correct answer is (i). Bohemia Two resulted from the nocturnal activities of that rare genus *yobboswivabittastring*.

To be precise, Bohemia Two was made by five yobbos on their way home from a sumptuous five-hour feast in Wiltshire. The site was selected at the last moment, and the design evolved as the hoax progressed. The construction of each circle required first defining its perimeter; one yobbo, attached by a piece of string to a stationary yobbo, walked in a circle, trampling crop underfoot as he went. This done, the yobbos armed themselves with the tools of their trade, and proceeded to flatten the crop within. The method used was that pioneered by Doug and Dave: the stick-and-reins, or stalk-stomper, comprising a loop of rope attached to a plank of wood. The yobbo pushes down on the plank with his or her feet, laying the crop beneath it, then uses the rope to haul it back up for the next push. It is not particularly strenuous work; neither is it interesting, and like Doug and Dave, the Bohemia hoaxers chose to relieve the monotony of their task with an occasional drink and snack.

And that's it. Munch, slurp, vroom, stomp, stomp, stomp, munch, slurp, stomp, vroom, snore. Genuine. Spiritually powerful. Linked to Barbary Castle. Best I've seen this year, so far.

That such crude methods can still fool some cerealogists so long after their public disclosure—stomping was demonstrated by Doug and Dave in 1991 and by various entrants to the hoaxing competition in 1992, and has been described in several publications over the past two years—is extraordinary; doubly so given that the technique requires such minimal effort to master. The Bohemia Two team could hardly be considered experienced; most of them had cut their teeth on stompers only the night before, making Bohemia One, just up the road (see figure below). Although the design of this formation repelled some croppies—one described it as 'dreadful... completely over the top'—it was dutifully authenticated by Richard Andrews, and even the Great Colin Andrews was rumoured to declare that, if it turned out to be man-made, it would undermine many of his notions about circles. The disgusted



Bohemia One

art critic, meanwhile, had to concede, grudgingly, that it might have looked like shit but it was extremely well-laid.

You're being a little selective

I am. As the qualified phrase 'some cerealogists' in the opening line of the preceding paragraph suggests, enthusiasm over the Bohemias was not universal. Some circles researchers liked Bohemia Two, but not Bohemia One. Others thought that the latter was basically genuine, but suspected hoaxers of adding to it. One croppie confided to me his concerns about the apex circle on Bohemia Two. And although I can muster no hard evidence, I would wager a considerable sum that some cerealogists were impressed by neither.

The Bohemias are a microcosm of the confusion of modern cerealogy over the work of hoaxers. Despite two years in which to exhaustively assess hoaxing methods, and a competition held for precisely that reason, there is still tremendous variation in the ability of researchers to identify man-made formations, and no consensus exists over which circles are genuine, which fake. While some cerealogists persist in claiming near-papal infallibility in hoax-detection (though to my knowledge, no senior researcher can lay claim to never having been fooled by hoaxes), many croppies, and even some seasoned experts, threw in the towel a long time ago, adopting the honest, if precarious, stance that whilst there is a genuine phenomenon out there, they could not claim to be able to recognise it when they saw it: it is not unusual for croppies to enthuse over a formation whilst candidly admitting that it could be a fake (for example, the researcher who linked Bohemia Two to Barbary Castle stated, in his booklet of site surveys, that he 'personally "liked" the formation, but nonetheless appended a disclaimer as to the authenticity of all the formations he surveyed.) And those cerealogists who rejected the Bohemias, wherever they might be, would not necessarily have done so because of any superior talent for spotting crude, first-time stomper jobs; it is far more likely that they have succumbed to the hypersensitivity engendered by a suspicion, gaining ground in certain cerealogical quarters, that the weak signal of the genuine phenomenon has been swamped by the noise of fakes, and any given formation is much more likely to be counterfeit than real. It is a cynicism that finds its apotheosis in the belief that the genuine phenomenon ceased completely after 1991, its 'Golden Age' having run its course. As one exponent of this position told me at the Conference, he thought he had seen nothing but 'crap' since.

In spite of this chaos, so reminiscent of 1991, most cerealogists remain confident that hoaxing is merely an irritating contaminant, resulting from the irresponsible actions of irritating contaminants. Or, as one otherwise friendly female croppie put it to me at the Conference, people who 'get their jollies f****ing up other people's corn'. This conviction was never more clearly expressed than by George Wingfield, editor of *The Cerealogist*, who ended his address at the 1993 Conference by putting up a slide which he said revealed the true significance of the hoaxer to circles research. It was a picture of an insect, and was met with thunderous applause.

A Brief History of Cerealogy

The tenacious belief of cerealogists in the existence of genuine circles simply reflects the fact that it has always been based on more than a repudiation of hoaxing; circles researchers have claimed for years to be in possession of convincing positive evidence for a non-human component to the phenomenon. This aspect of the field has received little attention in the critical literature, which has consistently kept the feasibility of hoaxing centre-stage, to the annoyance of cerealogy. So, I turn to it now, deferring further discussion of hoaxing to the second part of this article. My purpose will be best served, and the reader hopefully less bored, if I place

these claims within their historical context; this will also enable the next section to serve double-duty as a refresher course on the history of circles. My only regret in this is that I have found it impossible not to be flippant; and I offer my apologies to any of the cropies I met at the Conference who take offence. Anyway: come with me, reader, as I spirit you back to the fateful summer of 1991....

In the heady days that were the beginning of the nineties, the crop circle phenomenon was at its height. 1990 had seen the coming of the pictograms, sprawling, complex, marvellous patterns representing a quantum leap in the evolution of the phenomenon. 1991 thankfully saw their reappearance, and the fledgling science of cerealogy vigorously undertook their study. By then, the discipline had evolved into two clearly defined camps, which we

might label meteorological and mystical; their respective experts agreed that not all circles were hoaxes, but beyond that found little common ground. Dr Terence Meaden, independent meteorologist and head of Circles Effect Research (CERES), attributed circles to the activities of a 'plasma vortex', a spinning mass of ionised air akin to ball lightning, envisaged as floating luminously through the summer air and punching its mark into the corn. Science did not recognise such an object, and some of its supposed properties—the ability to carve out circles with such repeated, flawless perfection whatever the weather or crop, for example—quite naturally engendered skepticism in its existence. Meaden would have none of this. 'The evidence is now overwhelming in favour of an atmospheric origin for the circles effect, and all open-minded unbiased people who have properly studied the evidence accept that this so,' he declared in his self-published *Journal of Meteorology*, wherein most of his circles-related work appeared. His picture of a humming, glowing airborne object attracted the

attention of a number of UFOlogists, who repudiated the fantasies of their ET-fixated colleagues, took up Meaden's standard, and declared the 'death of the UFO'. Meaden concurred. He also credited his vortex with resolving the problem of the megaliths: Stonehenge, said Meaden (who described himself as a 'true antiquarian'), was built by ancient, superstitious peoples on the site of an ancient crop circle. There was simply no other way to explain it.

Most cerealogists, however, rejected Meadenism, as they did all attempts to address the phenomenon within the narrow confines of rationalist discourse. 'It is as if orthodox physics and science have been on trial for the last ten years

and failed to come up with an answer', opined Pat Delgado, inventor of the Teasmade™ and a leading light of Circles Phenomenon Research Group (CPRG). CPRG had examined a bewildering variety of explanations for circles, and would challenge critics to prove that the circles were not related to the face on Mars one day, UFOs the next. Other researchers, such as most members of the nascent Centre for Crop Circle Studies (CCCS), agreed that the cause of circles was definitely not hoaxing, and was paranormal, but beyond that they remained open-minded: the cutting edge of mystical theory dealt with concepts ranging from playful fairies to psychically-manipulated earth energies.

The meat and drink of the cerealogist's investigative life was fieldwork. This comprised the actual business of visiting and analysing the structure of circles, often hundreds each summer. Initial concerns would focus on whether each circle was genuine; this was only to be done by an expert, as the inexperienced had a habit of being misled by hoaxes. It could be done either by visual inspection (checking that the corn was unbroken and neatly swirled, etc.), by deploying little black boxes with flashing lights on them, or by more exotic methods: some researchers dowsed the mysterious energies drenching circles, a wobbling rod or pendulum indicating genuineness (some researchers were so practised at this that they could dowse circles from aircraft hundreds of feet up). Others professed mediumistic or psychic abilities, and opened themselves to the 'vibrations' found in the real thing. Scientist Meaden, on the other hand, asserted in a paper that CERES had an 'instrumental test' that detected genuine circles; unfortunately for his readers, he did not say what it was.

Should the circle have passed the test, it was mensurated and its structure subjected to detailed analysis. Significant, un-hoaxable layering patterns—including braiding and plait-



Complex formation, Stanton St Bernard, July 1990

ing of stems—were often found. On occasion, isolated stems would be noted standing amidst a sea of flattened crop. Brittle rape stalks would be found twisted and bent, but not broken, as if steamed into shape. Particular excitement was caused by results that were emerging from scientific researchers, who had undertaken analysis of corn stems and soil from various formations. CPRG submitted several corn-stems to a fringe medicine diagnostic laboratory. The results indicated molecular change in the stems, compelling CPRG to agitate for the removal of circle-corn from the food chain. The CCCS-affiliated 'Project Argus' team orchestrated a series of scientific tests which eventually revealed anomalous levels of radioactivity in stems from genuine circles, leading the CCCS to proclaim that it might have found 'a litmus-test way' of deciding which circles were genuine (some cerealists advised concerned members of the public to keep out of circles for a little while after their appearance). How could hoaxing explain this, as well as the other structural changes found in plants—such as polyembryony and nodal swelling?

But there was more. Cerealists encouraged those living near to, or far from, where circles had appeared, or who had visited any, or not, to report if they saw, heard or experienced anything strange on the night of formation, or at the time of their visit, or at any previous time in their tenure in the area, or lives, in case they knew something which could be tied into that formation or, perhaps, others (the CCCS supplied forms). The results were spectacular. Many sane, normal people came forward attesting to seeing circles formed by the wind, or to having seen circles many decades ago, clinchingly indicative of a natural phenomenon said CERES. (There was no limit on who could have such an experience. A recent *Journal of Meteorology* contained a paper describing the sighting of a 'vortex' penned by a physical medium, renowned as a one-time producer of spirit materialisations of the dear departed). The mystics, however, contended that there was a mass of testimony to weird events quite confounding materialist efforts to account for the phenomenon. Headaches cleared up and dogs acted strangely. Cameras malfunctioned and strange noises were heard, such as a bizarre crackling and hissing, or a bang. Circle-rich regions were haunted by UFOs, which had even been caught on film. Such phenomena often afflicted investigators, without whose expertise one might not have realised something anomalous had even happened. In their first best-selling book, the heads of CPRG reproduced a photograph of a circle, at the centre of which lay what clearly resembled a rectangular piece of paper. But no. Neither expert remembered anything being there at the time. The mysterious white object in the picture had been 'analysed professionally', and was 'disc-like'. 'No logical explanation has been found', they insisted. What human hoaxer, or vortex, could precipitate such marvellous phenomena? It was only natural that lay members of the CCCS should have delivered public lectures with titles such as 'Crop Circles: Hints of a New Physics?'

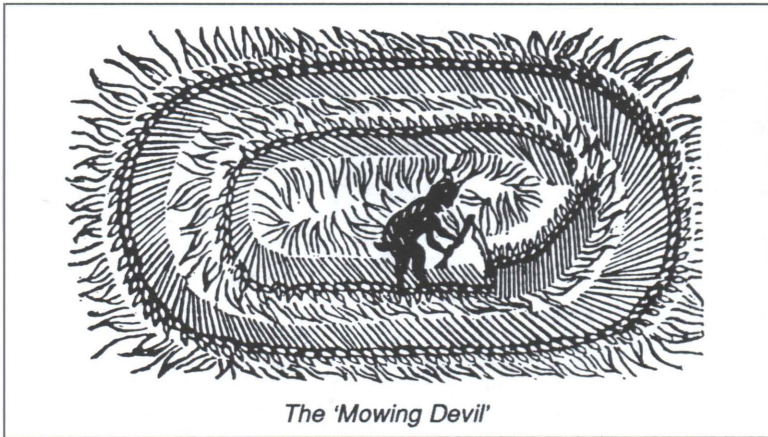
When not in the field, cerealists continued their attack on the phenomenon by energetically analysing their data. This was drudge like, but invariably proved profitable.



Dr G T Meaden investigates the '3-fingered claw' at Stanton St Bernard, Wiltshire, July 1990

CERES used structural information from site surveys to work backwards and see what kind of vortex motion could account for each pattern. In this way, it was able to explain any formation that appeared. Statistical analyses were presented which showed that circles clustered about hill-slopes, vindicating Meaden's prediction that vortices are created over such hills and travel only a short way. (Critics were quick to point out that the control study required to eliminate the possibility that circles were randomly distributed over a terrain that just happened to be hilly had not been carried out; in its absence, CERES' claim was meaningless. The latter retorted that, if critics wished to question its vortical interpretation, then they would have to carry out the—long, complex, difficult—control study themselves. Tellingly, they never did.) Enterprising mystical cerealists were able to discern sacred ratios, or the echo of musical scales, in the geometry of formations. A number of researchers even translated the circles, asserting that they were messages in, variously, Sumerian, Atlantean or the Tifinag tongue—a hybrid of Old Norse and Berber, presented to us by Jon Erik Beckjord, curator of the Museum of Cryptozoology in the US. I do not know if anyone other than Beckjord has ever spoken it.

Mixed in with all this analysis was bookwork, constituting researchers scouring the literature—scientific, the press, *Ripley's Believe It or Not*—for material supporting their position. This was particularly beneficial to CERES: papers in and elsewhere described simulations of vortex motion in fluids, which contained parallels to circle patterns; Japanese scientists had created little plasma balls under laboratory conditions, and they made little circles; the UFO literature was replete with references to strange marks on the ground associated with UFO sightings, going back decades, only some of which could be hoaxes, and many of which could easily fit into a vortical framework (some of the marks almost resembled crop circles). Most spectacularly of all, a



The 'Mowing Devil'

woodcut existed from 1678 describing a 'Mowing Devil', wielding a scythe, cutting out what looked very much like a circle—a circle discovered in a field of oats which was visited by a luminous phenomenon on the night of formation. The non-Meadenites were no less successful in the literary stakes. Detailed study of folklore and ancient cultures (including the Atlantean) provided ample evidence of the enduring, magical significance of agriculture and the geometry of the circle; and seventeenth century writings described various unfortunate souls momentarily caught up by strange, stifling luminous energies, subsequently finding themselves in the midst of fairy rings. How on earth could hoaxing explain all this?

How indeed? Given all of this positive evidence for a non-human component to the circle phenomenon, it is unsurprising that the superficially devastating claims of Doug Bower and Dave Chorley that graced the front page of *Today* newspaper were greeted with a mixture of scepticism and scorn. Not only could two old men with planks of wood hardly account for radioactivity, polyembrioli and eyewitness accounts, but the alleged hoaxers could not even make a good circle: when called upon to demonstrate their skills in front of experts in a barley field, the result of their exertions was an utter mess. And, although they claimed authorship of a Sevenoaks pictogram that duped Pat Delgado, they did so without proof (photographs of the two making the formation existed in the *Today* archives, but one circle looks much like another at night, so they did not prove anything). Delgado, meanwhile, claimed that *Today* had not left him with enough daylight to study the circle properly. And let's face it, *two old men with planks of wood* simply could not have made so many, so big, without being caught, and wouldn't have bothered if they could. Besides, when pressed on the structural minutiae of certain of the hundreds of formations the two pensioners claimed to have quickly created, after a few beers, over the past fifteen years, suspicious lapses of memory and contradictions in their stories were eventually found. Some cerealogists began to uncover evidence that Doug and Dave were pawns in the establishment disinformation conspiracy first mooted in response to the sinister Operation Blackbird hoax of 1990...

Nevertheless, Terence Meaden was impressed by the Southampton artists' story, which solidified the doubts he had developed about the authenticity of the pictograms. It

had not been a good year for him and CERES. The saga of Doug and Dave came as salt in the wound resulting from a cruel hoax perpetrated by a group of orthodox scientists known as the Wessex Sceptics, who had conspired with Channel Four and a deceitful farmer to ensnare him into declaring '100% genuine', and 'a textbook example', and 'genuine in every way', a crude multi-circle set that appeared at Clench Common, near Marlborough. His discomfiting humiliation on national television momentarily united a normally riven cerealogical world in grief. Pat Delgado described the hoax as 'vicious and unfunny'. His colleague in CPRG, Colin Andrews, minced no

words in fulminating his sympathy in the pages of *The Cerealogist*. 'The cruel and unnecessary methods used by some of the sceptics groups leaves me almost speechless,' he wrote. 'Remember, many of these negative fools are scientists whose training we have paid for in the hope that they would produce usefully for society. There is always a place for scepticism... but it is the destructive type, that engenders such tremendously potent negativity and often hatred verging upon evil, that I have no time for.' Although Meaden was subsequently to declare that he had had doubts about the formation which he neglected to share with the TV production crew, to most his authentication remained authentic, and some now had doubts about the ability of experts to recognise hoaxes. However, other cerealogists would have none of this. They scorned the Sceptics' handiwork. Upon exposure of the hoax, they admitted that they had flown over it shortly after it had appeared, decided it was obviously man-made, and had not even bothered to dignify it with a visit.

Taken together, Doug and Dave and Channel Four were too much for CERES, and by the end of 1991 it had rejected all complex formations as hoaxes; although it retained a belief that vortices were responsible for some simple circles (Doug and Dave could not account for the eyewitnesses!). Meaden subsequently retired from public cerealogy, and began to concentrate on his archaeological theories. The loss of its elder statesman, the only one to bring any scientific authority to the field, was a bitter blow to cerealogy, but most researchers kept the faith, reaffirming the genuineness of the pictograms and defiantly repudiating the cynicism and laughter of the world at large. This staunch faith was expressed most clearly in a measured press statement, issued by the CCCS, in which it declared total hoaxing, as an explanation for the circle phenomenon, to be *less likely than any other hypothesis*. Cerealogy had survived, and things could only get better. But in 1992, and more so in 1993, things were to get much, much worse. In the concluding part of this article, I will describe the two years in which cerealogy's chickens really came home to roost, and see what lessons can be drawn from them.

Robin Allen is a physicist, and a member of the Wessex Sceptics.

The second, and concluding, part of this article will appear in the next edition of The Skeptic.

Parapsychology in the UK

Tony Lawrence



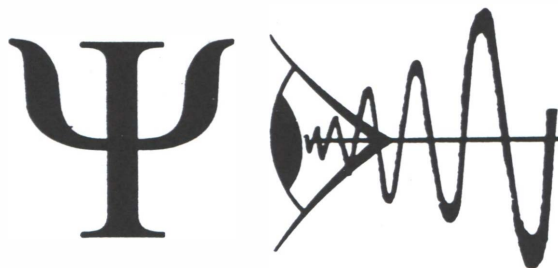
A look at the healthy state of British parapsychological research

IF YOU COULD PLOT the international status of British parapsychology over the last hundred years it would surely follow something of a U-shaped curve. In the late 19th century, when Britain still had an empire, British psychical researchers ruled the roost. The eminence of British parapsychologists (on a lighthearted point of definition, 'parapsychologists' are basically 'psychical researchers' with calculators) continued unabated until the late thirties, when J B Rhine, the acknowledged founder of modern parapsychology (both in name and nature) published the results of his experiments on ESP. Thereafter, British parapsychology took a back seat, for the most part, to the bolder, more analytic American sort. With the exception of S G Soal, whose experiments later proved to have involved definite fraud, and Carl Sargent, who left the field in 1987 under suspicion of having been fraudulent (although, to be fair, the case against him was never fully proven, as it had been with Soal) only John Beloff could lay claim to having made any consistent, lasting contribution to parapsychology; and then, not so much as an experimental parapsychologist but as a philosopher of parapsychology.

Now however, British experimental parapsychology is back in the ascendancy, thanks in large part to the generous bequest of Arthur and Cynthia Koestler of funds to set up a Chair of Parapsychology in Britain. John Beloff headed a committee to find a place for the Chair, and finally, in 1985, it went to the university where he spent most of his career, Edinburgh University. Since then, the Koestler Chair has built up a reputation for its solid, scientific approach to the paranormal. Indeed, at the 1993 Parapsychological Association Convention in Toronto, the UK fielded the largest number of presentations (11 out of 36), with the majority of those coming from researchers working at the Koestler Chair (9). What follows is a broad but brief overview of parapsychological research in Britain. I shall begin with research at the Koestler Chair.

The Koestler Chair of Parapsychology

There are presently eleven people working in parapsychology at Edinburgh. Eight of the present eleven researchers at Edinburgh are post-graduate students seeking their Ph.D's in parapsychology. However, lest it be thought that these students spend all their research time doing parapsychology, it is noteworthy that *every* post-grad has to develop a proposal for research that shows clear application to mainstream psychology. This means that often the post-grad develops links with non-parapsychological supervisors. More importantly, all these post-grads will have developed marketable skills and knowledge in psychology that will



give them a much greater chance of employment in mainstream academic posts. Thus, researchers from the Koestler chair can genuinely claim to be *parapsychologists*—a semblance to psychology that previous parapsychologists often held only in name. Furthermore, in a very real sense the research at the Koestler Chair is *programmatic*. Various research programmes can be distinguished, all overlapping to some degree, but nevertheless pursuing themes of enquiry. In what follows I introduce the various researchers at the Chair in terms of the programme of research they pursue.

Professor Robert Morris—'The Boss'—is the present holder of the Chair, an 'affable American', and a supervisor to all present postgraduate students at the Chair. He has just finished work on a psi training study out of the laboratory (in people's homes) with Deborah Delanoy and Caroline Watt. Results are encouraging. Bob also has interests in the psychology of deception: what's not psychic but looks like it.

Psi Training Studies: Dr Deborah Delanoy is a research fellow at the Koestler Chair, and has been at the Department of Psychology as a postgraduate and postdoctoral researcher since 1979. She has interests in the Ganzfeld ESP technique, and specialises in research into what makes a good target for ESP experiments. She has also worked with Bob Morris on the psi training study outside the laboratory. This programme of research aims to provide secure conditions for the testing and training of ESP in people's own time, in their own homes. Early results gave evidence of an extra-chance effect, but true to the cautious approach to testing advocated by the Chair, discussion of the import of these results awaits further confirmatory studies. A new series of studies is planned.

The Psychology of Psi: Dr Caroline Watt recently graduated from this Chair and is now submitting a proposal for funding for postdoc research into a device that provides an objective measure of perceptual defensiveness (a very important determinant of psi ability according to Caroline's PhD research and that of others). As one might suspect, this work has application in psychology (where measures of

psychological defensiveness originated). This research might also have (normal) applications for military personnel selection. Surprisingly, Dr Watt is the only Scottish parapsychologist at the Chair.

Cathy Dalton is the new girl on the block. She is straight from the Foundation for Research into the Nature of Man (FRNM) in Durham, Carolina, USA. She is going to do her PhD on psychological factors in the Ganzfeld, following the late Chuck Honorton's research, using Edinburgh's sophisticated Automated Ganzfeld System.

Social Studies of Paranormal Belief and Experience: Shari Cohn is an American postgraduate, for the last eight years doing in-depth interview research on 'familial traditions of second sight in the highlands'—fascinating stuff that gets right to the heart of ostensible psychic experiences in traditional Scottish communities.

The Psychology of Paranormal Belief and Experience: Research into psychological factors underlying belief in the paranormal represents the most respectable end of paranormal-related research. Naturally, research into the psychology of belief is given strong emphasis at the Chair, and this is manifest in the number of researchers at the Chair whose work falls in to this domain. Christopher Roe is in his fourth year of his postgraduate research, and is looking at the ways in which pseudo-psychic cold readers can give the impression that they are psychic, when in fact they are not. Most recently Chris is looking at whether clients of pseudo-psychics might nevertheless be able to elicit some kind of psychic response from their readers. This is important work looking at conventional explanations for psychic ability.

Carl Williams is in the second year of postgraduate research after having graduated from the University of Liverpool in psychology. Carl is looking at ambiguity tolerance, schizotypy and belief in the paranormal. Basically, Carl's research is about whether people differ in their ability to attribute images to internal or external causes, hence being more or less prone to hallucinations that might be construed falsely as psychic.

Tony Lawrence has just completed his first year at Edinburgh after graduating from University College London in psychology. He is trying to develop a 'Covariance Structure Model' of belief in the paranormal. It's basically to do with what makes people believe and disbelieve and what are the consequences of those beliefs (both ostensibly paranormal and normal). His work fits nicely with that of Carl Williams and Chris Roe.

Newly-arrived Paul Stevens is a physicist from University College London, and is going to be looking at ostensible psychokinesis in groups, belief in the paranormal and the illusion of control. (What is it about University College London that makes it produce so many parapsychologists? Dr John Beloff was an undergraduate there in the fifties, Dr Serena Roney-Dougal did her undergraduate degree there in the sixties, and Dr Richard Wiseman did his psychology degree there in the late eighties, followed by Tony Lawrence and Paul Stevens. I'm sure *someone* will fund research into this mystery if anyone's interested!)

Carlos Alvarado, also from FRNM, arrived in January to begin his PhD here with us. Carlos (a Puerto Rican parapsy-

chologist of some standing in the field) has come here to conduct research into the psychology of the Out of the Body Experience (OBE). He will be taking a keen interest in the various variables that might moderate the content of OBEs.

These are the specific research interests of the folk at the Koestler Chair. On a more general note, the Koestler Chair is adding the final touches to its Automated Ganzfeld testing system (akin to the system the late Chuck Honorton had at the Psychophysical Research Laboratories). The research into ESP done on this system will follow on from Honorton's Ganzfeld studies. The Koestler Chair Auto-Ganzfeld system has had various refinements added, designed to deal with the various criticisms of Chuck's work that have emerged since the recent publication of his paper with psychologist Daryl Bem (in the prestigious *Psychological Bulletin*, January 1994) and the previous round of debate with critic Ray Hyman, reported in the *Journal of Parapsychology*. At present it is, indeed, a lively time at the Koestler Chair.

Parapsychology in the rest of British academia

At present there are really two other places in the UK that do parapsychology.

The first is the University of the West of England, Bristol, where Dr Susan Blackmore currently supervises PhDs in the area of parapsychology, with at least three students currently looking into psychic healing, cold reading and hypnosis.

The other is the University of Hertfordshire, Hatfield, where Dr Richard Wiseman, a postdoc from Edinburgh, now a lecturer in cognitive psychology, teaches a parapsychology/deception course, drawing on his PhD, and his considerable skills as a 'close-up' magician. He has most recently supervised some work on luckiness and ESP. Most importantly, he spent some time in India testing the psychic claims of the Swami Premananda. He would have liked to test Sathya Sai Baba but unfortunately for Richard and Baba somebody tried to have a crack at the Indian guru, leaving six people dead. So Richard decided not to bother with all the security, somewhat wisely!

These then are the two main centres of research activity outside Edinburgh. Apart from these active researchers, Dr Nick Humphrey, at Darwin College, Cambridge, is on a four-year contract as a Senior Research Fellow in Parapsychology, writing about the paranormal.

Well, that's British parapsychology just about summed up. The number of academically-trained parapsychologists in Britain now is most probably larger than ever before and, more to the point, is likely to get larger still. Going back to our curve for International Status in Parapsychology I confidently predict that, at long last, British parapsychology is on the up. With a growing band of new researchers, skilled equally in the normal and the (ostensibly) paranormal side of human behaviour and psychology, we should be in a position to make some genuinely informative contributions to this difficult, but interesting, area.

Tony Lawrence is a parapsychologist at the University of Edinburgh.

Crystal Dangers

Ian Plimer

Is New Age crystal healing a danger to logic and health?

CRYSTALS AND GEMS have been used since antiquity not only for personal adornment but were considered a safeguard against evil spirits, sickness and injury. Like many ancient myths, the alleged healing powers of crystals is enjoying a revival.

The ancient Greeks believed that quartz crystals (Kristallos) were a type of ice and believed that amethyst (a coloured form of quartz) prevented drunkenness. The Roman author Pliny wrote that not only did amethyst protect one from the intoxicating effects of wine but protected the wearer against lunacy. Therefore, by wearing amethyst, the pleasures of life such as drunkenness and lunacy were prevented.

Numerous books have recently appeared on the healing properties of crystals, snake oil merchants are now expert in crystals, and many famous mineral collecting localities (which represent part of our national heritage) have been destroyed by rapacious crystal collectors. Minerals are naturally occurring substances with a chemical composition defined by certain boundaries and a specific arrangement of atoms. This arrangement of atoms is the basis of the crystal structure. The properties of crystals can be explained in terms of the chemical composition (eg. colour, magnetism, radioactivity, specific gravity, etc.) and the arrangement of the atoms in the crystal (eg. lustre, specific gravity, hardness etc). Before a substance can be called a mineral, all the properties must be documented and checked by the international Mineralogical Association. Not one naturally-occurring crystal has displayed properties unknown to man and all unusual properties can be explained in terms of physics and chemistry.

Minerals are naturally occurring chemicals and every year some 200 new mineral species are defined, and there are now a total of some 6000 known mineral species. Despite the reams of textbooks on crystallography and mineralogy, the myth of the mystical powers of crystals is promoted by purveyors of fraud and blindly accepted by those searching the cosmos for delusion.

Recommended treatments

There are daunting lists of natural crystals (ie minerals) provided by the New Age authors which they claim can be used for the treatment of illnesses. For example, the most abundant mineral in nature (quartz) can be used to cure kennel cough in dogs. As quartz is ubiquitous one wonders why kennel cough exists at all. Furthermore, no advice is given on how to administer quartz to dogs suffering from this particular ailment. In the case of kennel cough it is obvious—quartz crystals are normally trigonal crystals and so, as soon as the dog coughs, the crystal should be rammed down

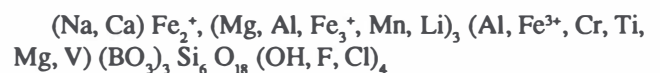


the dog's throat. This will stop the dog ever coughing again.

Diopase the unusual copper silicate from Tsumeb in Namibia is recommended for the treatment of animal's illnesses, heart burn, weak heart, mental burdens and sleeping sickness. I have had specimens for over a decade, during which time I have been to the sleeping sickness areas of Africa a number of times. I have not suffered from sleeping sickness, so clearly, according to the simplistic logic of the New Age, diopase has done a good job. Conversely, the extremely rare calcium chromium silicate (uvarovite garnet) is recommended for the treatment of flatulence. This mineral is a relatively recent discovery, hence flatulence must have been an epidemic before this mineral was first described from the Urals. I have four crystals of uvarovite in my collection, and can categorically state that there must be some mistake.

The crystals in the minette-pryomorphite mineral group can be used for treatment of marital problems. In this case, the treatment is lovingly administered by dissolution of some of the hexagonal barrel-shaped crystals in the partner's drink or food. As these minerals are lead arsenic compounds, successful treatment can be guaranteed.

Crystals of tourmaline can be coloured pink (due to lithium), green (due to magnesium), blue or black (due to iron) or red (due to manganese). The tourmaline family is a very complicated mineral group with a chemical formula of:



CRYSTAL A \$7.00+\$1.00 postage. This crystal is about 2" long. It is perfect for most of the projects in Crystal Power and for similar d- Its size is right also dramatically breath- large bracelet- necklaces.

CRYSTAL B \$17.00+\$1.50 postage. This crystal is about 3" long. That may not seem long, but when you get it you will see that it is huge! This crystal is excellent for larger projects and is big enough to do crystal gazing. Or, you can simply use it as a magickal paper weight that actually absorbs negativity out of the environment! It is a piece to have a

GEM DROP Very many small (gentle broad prismatic medium distance)

BELL Many very large narrow prismatic (distance)

DEW DROP Quite a few small intense broad prismatic rainbows (short distance)

SPE Many small bows (l

With such a complex chemistry, it is little wonder that this mineral is claimed to cure unhealthy hair, indigestion, ear trouble, bladder problems, brain problems, epilepsy, laryngitis, melancholy, ulcers, obesity, tonsillitis, weak muscles, loss of smell, weak vocal chords, multiple sclerosis and forgetfulness. I doubt if anyone can remember the general formula for tourmaline, hence its ability to cure forgetfulness must be questioned.

The gem ruby (hexagonal aluminium oxide with a trace of chromium) is recommended by New Age authors for the treatment of anaemia, low blood pressure, poor blood circulation, constipation, envy, bleeding, wounds, weak physical and mental willpower and plague. It is also recommended for increasing strength, for encouraging faithfulness and for cauterising in surgery. While the references to blood related conditions are obviously linked to ruby's colour, one New Age author also recommends ruby for enhancing ESP, thus fulfilling the New Age criterion of using one myth to substantiate another—believe one and you must believe the other, regardless of any lack of proof for either.

However, a number of the fundamental properties have been ignored by the New Age, clearly demonstrating their ignorance of school child science. For example, the most abundant element on Earth is oxygen, followed by silicon. These elements bond as silicate tetrahedra to form the basic building blocks of common minerals. These silicate tetrahedra are pyramids and join in chains which provides a wonderful opportunity for heliolinguistic rantings about pyramids, the power of sharing, inner union, etc.

Many of these minerals with alleged wonderful curative properties are rare, hence treatment cannot be administered by touching, stroking, ingesting or humming to the crystal. Never fear, the New Age authors write that possession of the crystal is not necessary—one has only to deeply concentrate on this mineral and build a mental picture for treatment. This is possibly why flatulence is still rife—how many readers have either a specimen or can conjure up a good mental picture of uvarovite from Outokumpu?

One wonders, therefore, why you would need to ever own a crystal in the first place, thus doing irreparable damage to the profitability of the crystal mongers, but as the above would indicate, logic has never been a strong point of New Age proponents.

Dangerous practices

As one who has had a great scientific interest in minerals and crystals for 25 years, it is pleasing that a large segment of the community is becoming aware that crystals of minerals are beautiful, should be treasured and can be used for adornment.

Unfortunately, our New Age promoters have published that venomous bites can be treated with sulphur or emerald, malaria can be treated with turquoise, venereal disease with zircon, cancer with amethyst and multiple sclerosis with tourmaline.

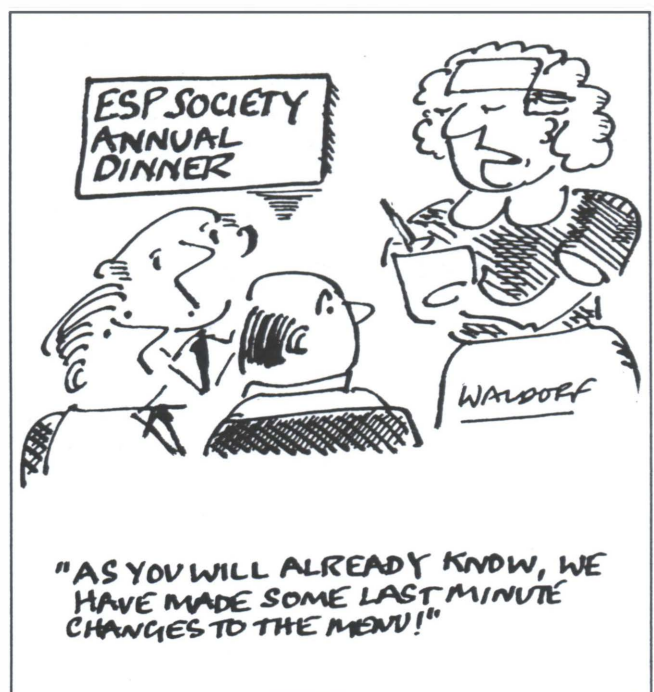
It is criminally irresponsible to publish that crystals of sulphur or emerald can be used for the treatment of venomous bites because the deluded might attempt to administer crystals in a life-threatening situation when time and a hospital visit are imperative. The contraction and treatment of malaria is extremely well documented, yet to publish that turquoise might in any way help malaria can only be dangerous.

A recent case in which crystals were used to assist in a home birth which went wrong is indicative of something which is more than just a trivial aberration.

Not only do crystal proponents lack much basic scientific knowledge of crystals, but their conclusions lack any sense of rationality and logic. Their preference for ignorant faith (wishful thinking) instead of reasoned argument is not only destructive to our national heritage, it is also potentially dangerous to the health of crystal healing adherents.

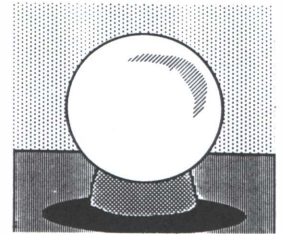
Ian Plimer is Professor of Geology at the University of Newcastle, NSW, Australasia. He first started studying crystals at Broken Hill in 1968. He says that since then he has 'been degenerating—proof that crystals have no powers'. Such degeneration is unrelated to the 32 hotels and 16 licenced clubs in Broken Hill.

This article first appeared in the Australian Skeptic, and is reprinted with kind permission.



Skeptical Predictions for 1994

by resident seer
Marjorie Mackintosh



January: With the publication of the latest volume of her autobiography, Lady Thatcher reveals the source of her political philosophy: for the past twenty years she has been channelling Attila the Hun.

February: John Major takes up channelling in the hope it will make him powerful like Margaret Thatcher. However, no past great leader wants to speak through him. The best he can manage is Aethelred the Unready.

March: The Prince of Wales claims that he was once captured by aliens. He doesn't remember what they looked like, but he was most impressed by their architecture.

April: Kenneth Clark produces a budget which stuns the country with its good sense and financial balance. Clark gives the credit to his new financial adviser—Clever Hans the counting horse.

May: Homeopathic chemists announce the development of homeopathic spirits. These have all the kick of traditional alcoholic drinks but don't show up on breathalyser tests.

June: Government ministers, anxious about the profitability of BR, urge rail managers to send drivers on transcendental meditation courses. When the autumn arrives meditation-trained drivers can levitate fallen leaves off the line as they go, thus avoiding delays and saving the cost of maintenance crews.

July: There is a continuing fall in the number of crop circles reported. Cerealogists believe that space visitors have been put off by the wet British summers. As evidence they point to the sudden appearance of complex and otherworldly sand castles on the Costa del Sol.

August: The Bible is confirmed when an archaeological expedition in the Middle East finds a millennia-old apple preserved at a site thought to be Eden. It is easily identified as the original apple by the fact that there are only two bites missing.

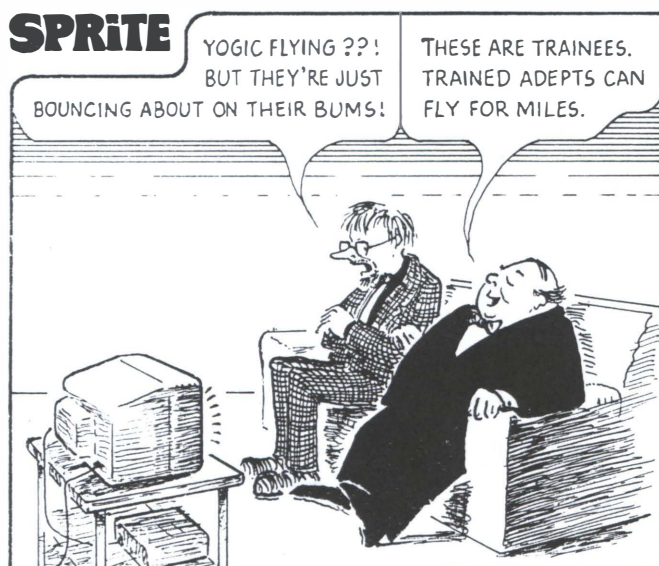
September: *The Sun* newspaper breaks the story that Fergie is studying reflexology. 'I've always had an interest in feet', she says.

October: Your humble seer sits down to draw inspiration from the aether for next year's predictions. She will achieve the same level of accuracy as Jeanne Dixon, Edgar Cayce and Nostrademus.

November: The government goes to the country in a snap election and loses. John Major vows never again to use Nancy Reagan's astrologer.

December: A crisis develops when Father Christmas disappears. His sleigh is last seen flying in the direction of the Bermuda Triangle.

Marjorie Mackintosh works for the Open University.



Hello, Earth Talking!

Robert E McGrath

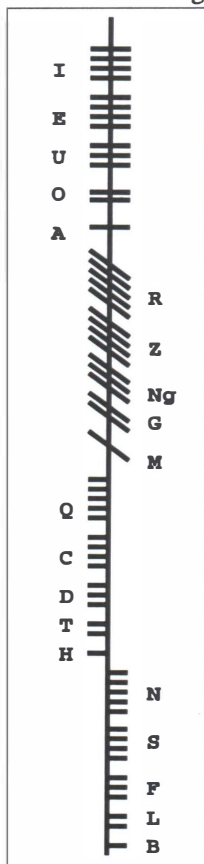
A rather far-fetched concerto for Earth and orchestra

IN THE COURSE of somewhat random browsing, I ran across another bizarre, but apparently true, Earth art project, in which readers of my recent article 'The Face on Mars' (*The Skeptic*, 7.4) might be interested. The article is by Gary Dwyer, and is entitled 'Mea Culpa—My Fault: A Report on an Earthwork in Progress', (*Leonardo*, Vol. 19, No. 4, pp. 285-287, 1986. The project is also discussed in another article by Gary Dwyer, 'The power under our feet—Mea Culpa: a work in progress', (*Landscape Architecture*, Volume 76, May/June 1986, pp. 64-9.)

The abstract of the *Leonardo* article reads:

The author describes the landscape sculpture through which he hopes to initiate a dialogue with the earth. The project is located in the Carrizo Plain along the San Andreas Fault in California. Symbols are inscribed along the axial line of the fault and a sound system that plays a symphonic composition and simultaneously records the earth's sounds will serve as the media for communication between artist and the earth during the next, inevitable earthquake.

The article explains that the 'symbols' are to be letters from the Celtic Ogham alphabet. The symbols of the Ogham can be written in the form short horizontal lines across a vertical axis, in this case, the fault is the axis (see illustration).



Instead of Celtic, the message is to be expressed in Chumash, the language of a local aboriginal people. Apparently the Chumash will be transcribed into some sort of phonetic representation in the Latin alphabet, and then into Ogham characters. Well, why not?

The idea is to spell out a 'question' in Chumash using using gigantic (2 x 150 metre) swaths of erosion control matting set perpendicular to the fault to form the the Ogham letters. The question is to be 'What do we do now?'. The earth will answer the question by displacing the fault, which will reconfigure the cross-hatches, forming new letters! (Will the answer be in Chumash?) Both the question and answer would be visible only from high in the air.

A sound system is to be set up to detect an earthquake, at which event it will activate to and play a symphony to (with?) the earthquake. This unique con-

certo for earth and orchestra will be automatically recorded.

The 'artist' is Paul Dwyer, a professor at California Polytechnic State University, San Luis Obispo. I have no idea if this has been executed. There have been two very serious earthquakes since the proposal was made, so this project might not seem terribly amusing right now in California.

Robert E McGrath is a computer programmer in Urbana, Illinois, USA. He is a member of the Planetary Society.

SKEPTICAL CONTACTS

U.K. Skeptics

Committee: Susan Blackmore, Steve Donnelly, Wendy Grossman, Ian Rowland, Chris Nash, Mike Howgate, Richard Mather, Michael Hutchinson, 10 Crescent View, Loughton, Essex, IG10 4PZ.

London Student Skeptics

Convenor: Dr John Lord, University of London Library, Senate House, Malet Street, London, WC1E 7HU.

Wessex Skeptics

Secretary: Martin Hempstead, Optoelectronics Research Centre, Southampton University, Highfield, Southampton, SO9 5NH.

Electronic Mail

For information on skeptical information by E-mail or for subscription, back issues, or other magazine enquiries please contact:

Toby Howard: toby@cs.man.ac.uk

The Skeptic now also has World Wide Web pages, at: <http://cs.man.ac.uk/aig/staff/toby/skeptic.html>

Far Too Green By Half

Russell Dear

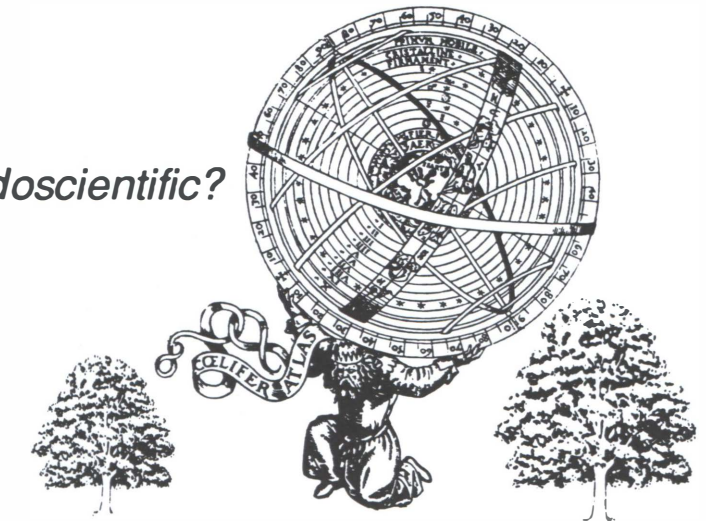
Do Green issues have to be pseudoscientific?

NOT TOO LONG AGO a friend gave me a subscription to *Green Scotland* magazine. It's one of those journals that champions animal rights and ecological issues. Along with excellent articles on subjects like soil erosion, afforestation, the role of the community constable and how to make good use of cycle paths, you are liable to find ones entitled 'Marx or Muesli', or 'The Efficacy of Flower Essences'. Don't get me wrong—the magazine has writers of stature, a good proportion of them university people with impeccable pedigrees. It's just that the editorial committee doesn't seem to be able to distinguish the credible from the incredible.

Take, for example, an article on the healing properties of flower essence remedies. The item ran a predictable course and described the similarity between the preparation of these remedies and those of homeopathy. Having just read a well-crafted article on the effects of loss of diversity within species, it was extremely irritating to be presented with this sort of garbage. Sentiments like, 'homeopathy and essence remedies work by awakening the natural healing abilities of the body' rather took the edge off a reasoned argument in the previous article on how lack of diversification within species can affect the ecology of an area. Finally a paragraph on the wild flower yarrow exhausted my patience. The writer was describing the two colour forms, pink and white, and continued with the statement that, 'yarrow becomes coloured pink when it comes in contact with irradiation and in consequence it becomes an excellent flower essence remedy for radiation sickness'. I was so appalled that I took the unusual step of putting pen to paper and rushing off a letter to the editor.

I lambasted the article explaining that, 'The idea was ridiculous. Yarrow comes in two colours, white and pink. The pinkness has nothing whatever to do with irradiation, indeed two adjacent yarrow plants can exhibit the two colour forms'. While in the mood I had a good go at homeopathy, and said that it was unfortunate that a magazine such as theirs could become a clearing house for cranks. I didn't really expect *Green Scotland* to print the letter but, all credit to them, they did. Perhaps they anticipated the response—they certainly got one.

The original author responded to my 'attack' by saying that she normally recommended yarrow as a 'protection from negative influences in the environment'. Unfortunately, no specific negative influences were given. 'If one looks at yarrow in its natural habitat', she continued, 'it is sur-



rounded by a strong white light'. What effect this had on radiation sickness was left unsaid. The lady, who positively oozed warm fuzzies, went on to say that her relationship with this Earth was intuitive. 'Birds and animals know instinctively what they need when they are sick and I'm learning, or remembering, how to do that too... Look where rational thinking has got us. I'm sick and tired of waiting for scientific evidence. Let's be intuitive, totally irrational, constantly changing and alive'.

Most of the letters tried to put me right about homeopathy. If it's good enough for the Royal Family it must be good for the rest of us being a common thought. Some even bemoaned the fact that homeopathic remedies were not available to Scots on the National Health Service, 'except in Glasgow'. One writer stated that there had been no systematic investigation into homeopathy and therefore I had no right to criticise it. He continued by saying that large doses could be counterproductive due to negative feedback (whatever that is). Another writer said that 'scientists do not have sufficient knowledge of the healing capacities of homeopathic remedies or of the individual's patterns of disease and health either to prove or disprove the means by which each system operates'. She later wrote that the body, 'which has an amazing capacity for self-healing, occasionally gets blocked. This block we call disease. We get ill. Homeopathy and essence remedies are two medicinal means of assisting the individual to unlock and re-establish health', suggesting that if scientists do not have sufficient knowledge, the writer certainly does.

I think my favourite letter was one which stated that, (she) 'didn't buy *Green Scotland* to read letters from cranks like R A Dear. If you're going to print outright attacks on Green issues I might as well buy the *Daily Telegraph*'. Lovely stuff.

A friend once told me that, 'Greenies like nuts'. I think he may have meant 'Greenies are nuts'.

Russell Dear lives in Invercargill, New Zealand.

Psychic Diary

Toby Howard

The secret of the black magic box



YOU MAY HAVE NOTICED that *The Skeptic* doesn't appear to have a real address. Instead, your editors lurk behind a mysteriously vague Post Office Box number. Until we began using the Box four years ago, I had always regarded the idea of the 'Post Office Box number' somewhat suspiciously—as a cloak of anonymity for people up to no good, from fly-by-night dodgy companies to international spies dropping off secrets for each other. The PO Box may well be used for nefarious purposes, but the majority of people use it for convenience. It must be said, however, that many of our fellow customers at the Manchester Box do seem rather anxious to receive their brown paper parcels, and shuffle away before you can say hello.

For *The Skeptic*, the Box provides us with a first line of defence against, well, shall we say people you would not wish to be stuck on a desert island with. Let me give you an idea of some of the material we receive. Obviously, we get letters—lots of them. Some are articles and reviews for publication, or requests for information. And there is that special category of letter: the rant. You know you have a rant when the letter extends to at least five pages, with excessive use of CAPITALS and strange; punctuation. They are unpublishable.

We get rants from people who feel we are evil debunkers of beautiful New Age truths—how can the Age of Aquarius ever dawn properly if we skeptics continue to project our inhibiting rays of negative rational energy? Other people have complaints which are harder to fathom, such as a religious gentleman who accuses us of increasing the level of psychic activity in the country by, erm... actually talking about it. Far better to treat it as taboo, he says, therefore gradually driving it out of our culture. Hmm.

We have been sent psychically-inspired pictures of the shapes and colours of atoms and elementary particles, similar to the 'thought forms' of Annie Besant and CW Ledbetter. Not long ago we received a spate of broken watches. This rather threw me. Was it assumed that we could repair these, a la Uri Geller, by our paranormal powers? Alas, there was a more mundane explanation. The Post Office re-uses Box numbers, and many years ago our Box was used by a company selling watches. The mystery remains as to why they all appeared to fail at the same time.

Self-published pamphlets and books fall with amazing regularity through *The Skeptic's* rented letterbox. Recently we have had an extraordinary contribution: *Gog, the Forces of Magog, the Land of America*, by a New Zealand writer,

Michael Callagher. Mr Callagher's thesis is that the biblical visions of Daniel foretold the Gulf War, the accession of President Clinton, and also predict the death of Clinton by the end of 1993 (oops!), to be replaced by Al Gore, who will lead the United Nations military forces to defeat Iran. The author is confident in his claims, which is reasonable, because he is himself referred to by name in *Daniel* 12:1, 'At that time shall arise Michael, the great prince who has charge of your people'. Of course, The Bible holds many truths cryptically concealed from us. One need only refer to *Nehemiah* 6:14 to read: 'Remember Tobiah and Sanbalat, O my God, according to these things that they did'—an unequivocal reference, it is clear, to Toby and Steve, and their editorship of *The Skeptic*.

Another favourite topic for self-publishers is the Shakespearean mystery, and the relentless search for clues to his real identity, that galvanises a certain cabal of individuals who pursue the theory that William Shakespeare was, in reality, Francis Bacon. *How to Crack the Secret of Westminster Abbey* is one publication which claims to find confirmation of the Baconian theory in words engraved on a scroll on a statue at Westminster Abbey. I will omit the details of the tortuous cryptographic method required to produce such a result, save to say that it probably has about as much cosmic significance as the fact that 'can ruin a selected victim' is an anagram of 'circumstantial evidence'.

The PO Box is an administrative help, and a safety mechanism. I really do not want a 700-page single-spaced typewritten self-published manuscript on the Cumbrian activities of the Knights Templar delivered to my house at 7.30 on a Monday morning (I'm not joking). And I like to see those other people with their anonymous brown paper packages, and wonder—what mysteries do *their* Post Offices Boxes conceal?

Toby Howard is a lecturer in computer graphics at the University of Manchester.

Calling contributors old and new!

The Skeptic welcomes articles, cartoons and illustrations for possible publication. Please send your contribution, together with an SAE if you require it returned, to The Skeptic, PO Box 475, Manchester M60 2TH. We would prefer written contributions to be submitted on PC or Mac disks, but this is not essential.

Skeptic at Large

Wendy M Grossman

Distinguishing fantasy from reality

A FRIEND OF MINE who is the religious affairs correspondent of one of the national newspapers recently reported the arrival on his desk of a leaflet intended to help the Christian parents of children who had been educationally disadvantaged enough to have seen *Jurassic Park*. The movie, after all, promulgated all sorts of irresponsible claptrap about evolution. This leaflet promised help in the form of explanations that yes, Virginia, dinosaurs and humans did inhabit the planet at the same time, as well as speculation about whether Noah took dinosaurs with him on the Ark. (Another friend in a later discussion suggested Noah took DNA, frozen in amber.)

There is, of course, a fair bit of scientific unlikelihood in the movie. As we know from all those stories about the human cloning experiment, our cloning abilities aren't up to whole dinosaurs, let alone cloning from hundred-million-year-old blood in a preserved insect's stomach (apparently someone has tried extracting DNA from the blood inside a mosquito and gotten nowhere with it). Then there was the bit where the chaos specialist was able to leap instantly to the conclusion that the frog spawn used as a carrier for the dinosaur DNA had suddenly switched sexes so the dinosaurs could breed. 'Life,' said Jeff Goldblum reverently, 'found a way'.

Right. Well, it seems to me that if the leafleters want to do their jobs properly, they ought to point out some of the real howlers in the movie. In a park full of dangerous, extremely large animals, for example, the only vehicles are open jeeps. Then, to make sure the animals wouldn't breed uncontrolled, the scientists decided to make the population all female. All female?? Females breed. Not without males, true, but in case of accidents, wouldn't it be safer to have a male population? One slip-up in a male population would produce a lot fewer baby dinosaurs than one slip-up in a female population.

But *Jurassic Park* wasn't about science any more than it was about good acting or depth of character; it was about monsters threatening humans. Any science, good or bad, was incidental; even the bad guys were the entrepreneurs, rather than the scientists. At the same time, on a completely different subject, *Time* magazine's cover story recently speculated on whether or not Freud was dead (no mediums were asked to contribute). In the article, a number of scientists and psychologists said what some skeptics, notably Terry Hines in his *Pseudoscience and the Paranormal*, have been saying for years: that there is a persuasive case for regarding psychoanalysis as a pseudoscience.

Curiously enough, what has brought the debate about psychoanalysis as a pseudoscience to the forefront has nothing to do with the skeptics but with recovered memories. This is the business that we saw with the abduction crowd where a patient, under hypnosis and with guidance from a therapist, comes away from the therapy session believing that he or she has recalled being abducted by aliens and, often, abused. More recently, these same techniques have been used to 'recall' memories of child and satanic abuse.

The scenario is quite frightening: someone, usually a woman, suffering from depression or an eating disorder, under a therapist's guidance remembers being abused as a child. The important point, though, is that the person has no prior recollection of such abuse: the story comes out only under the therapist's guidance. In a number of well-publicized cases, the patient, as part of the therapy, demands that her parents confess their wrongdoing. A few have even gone to court, and at least one parent has gone to jail.

The question really hinges on whether the memories so recalled are genuine: we hear every day about post-trauma disorders suffered by emergency workers and the survivors of violence that involve being unable to forget rather than being unable to remember. A number of such patients have no concluded that the retrieved 'memories' were not real; several are suing their therapists for negligence.

Again, it's gratifying to note that some skeptics were questioning the idea of recalled memories even before the abduction craze came along. Melvin Harris, for example, in his *Sorry, You've Been Duped!* investigated the Bloxham tapes. What came out under hypnotic regression, he revealed, was no more than half-digested, badly remembered bits of old French novels read many years earlier. Similarly, Philip Klass in his book on abductions reported the results of a study in which college students, hypnotized and questioned, produced a nice set of science-fictional tales. *Time* traces one aspect of this whole business—the frequent diagnosis of multiple-personality disorder, a diagnosis some of these therapists apparently use to explain how such traumatic memories could be repressed—to the 1973 book and later TV mini-series *Sybil*. It's an interesting point: if being unable to distinguish fantasy from reality is the hallmark of mental illness, large parts of our society are clearly in danger of needing to be institutionalized for its own safety.

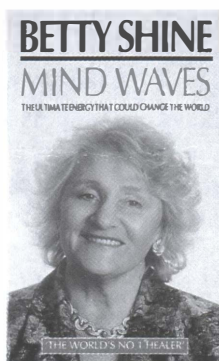
Wendy Grossman is the founder of *The Skeptic*, a member of the UK Skeptics, and a writer and folksinger. Her CompuServe ID is 70007,5537.

Reviews



All in the mind

Betty Shine, *Mind Waves* (Corgi, 1994, 282 pp., pbk, £4.99)



The author of this book, a healer with a wide practice, gives compassionate and inspirational advice on topics from the need for positive thinking and unselfishness in everyday life to the problems of stress and environmental pollution in the contemporary world. She includes simple relaxation and visualisation exercises from Yoga and hyp-

notherapy that may help people deal with personal problems and develop their mental powers.

Surely nobody could find fault with such ideas. Yet, I have to confess a slight wariness—for the author claims to work via mediumistic powers and spirit helpers. Her outlook is a blend of Eastern spirituality and Western alternative philosophy, including the chakras of the subtle body and mental energy which is said to operate in ESP, telepathy, and so on.

Now, if such theories could be rationally demonstrated, e.g. by properly conducted clinical trials, the potential benefits to suffering humanity would be immense; however, the author shows no sign of seeking such objective validation, but relies rather on unsubstantiated anecdote.

This work is obviously not intended as a scientific text, and totally lacks any skeptical references—instead, we are told, as usual, that scientists are blinkered and afraid to face evidence that might upset their view of reality (whereas in my experience the same might be better said of many alternative thinkers). The author displays no knowledge of the therapeutic powers of suggestion and placebo, or the psychological (rather than psychic) effects of imagery.

On the contrary, we are told that Rosemary Brown is a talented medium, that psychic photography is a genuine phenomenon, and even that forks can be bent by the power of the mind alone! Automatic writing, clairvoyance, colour healing, dowsing, past-life regressions, poltergeists, psychometry, and psychokinesis, are all described as well-established truths, which only a misguided skeptic would wish to deny.

I was also horrified to see the Philippine psychic surgeons (or some of them) extolled as having genuine healing powers. This is in spite of the many detailed exposes of

their activities and of the harm (emotional, financial, and medical) they so often wreak on their victims. The author herself practices a different method, in which she or a discarnate assistant operates on the patient's energy body to heal the physical.

The most disturbing feature of the book is the heartrending account (in Chapter One) of a comatose child who is said to pass messages (telepathically) via Mrs. Shine to his totally credulous family. If the author is genuinely communicating with the boy, this is a miraculous fact of tremendous importance, that needs to be investigated in a scientific manner. If she is mistaken in her belief, then this also is a fact which must be exposed before untold damage is done to the child and his family in the name of healing.

As the author herself asks (on page 279): What other explanation (than psychic powers) can cover the whole of the paranormal? Readers are invited to consider their reply!

—Mike Rutter

Weird science

Gary Taubes, *Bad Science: The Short Life and Weird Times of Cold Fusion* (Random House, 1993. 502 pages. \$25).

About five years ago, in laboratories in Utah, the promise of unlimited power seemed to be unleashed. The news was heralded in major scientific publications, like the *Desert News* and the *Wall Street Journal*, and discussed in scholarly press conferences. A simple bottle and sink combination, like the lamp of legend, held the genie of the very energy that causes the sun to shine. All of this now seems long ago, back when *Star Wars* promised Peace on Earth and cold fusion would at last allow us to enjoy it to the fullest.

This is the period detailed in a marvelous book by Gary Taubes, *Bad Science: The Short Life and Weird Times of Cold Fusion*. The book is a wonderful piece of science journalism, but it is much more. Like no other study so far produced of the episode, *Bad Science* details the process by which the public became aware of the claims of two relatively obscure research groups, claims that would eventually capture the attention of the world. Claims that eventually became the best available example of how not to do science. The central focus of Taubes' book is not so much the science of cold fusion, although he does an excellent job of explaining the physics of normal fusion and of the associated physical processes of electrochemistry. Rather, it is in

his placing the whole episode in context that Taubes makes his most valuable contribution.

One of the more interesting, often neglected, points that Taubes exposes is the role played by the science press in promoting and exploiting the cold fusion affair. For instance, there is a real fusion-related phenomenon produced by substituting a muon for an electron in atoms. The effect, the statistically measurable penetration of the electrostatic repulsive barrier of the nucleus by the heavier orbiting negative charge, catapulted physicist Steve Jones to public notice with an article in *Scientific American*. All of the attention has focused on Pons and Fleischmann, mainly because they started it all with the first press conference and news releases, but also because theirs were the most extravagant claims. Taubes illuminates both Jones's role in the developing hoopla and also points out the importance of this popularizing article in making the phenomenon widely known to the public. I recall reading the article at the time, but there were few details of the physics, of course, and some exaggerated claims at the end that I remember ignoring. Taubes points out that the imprimatur provided by this magazine lofted Jones and his collaborators into a sort of celebrity status, especially with granting agencies.

There were many forces at work to promote weird science in the middle years of the last two American administrations. Taubes details the funding processes at the National Science Foundation and the Department of Energy (DOE) for far-out ideas and places the cold fusion and muon-catalyzed fusion research, funded out of the DOE, in its proper context. He is superb at describing the hype and the science and where the two diverge. And he is also the first I know of to detail how the same bureaucrats who were responsible for funding the muon work were also the ones who enthusiastically promoted cold fusion. Muon-catalyzed fusion is a legitimate field, one that even has its own journal, holds its own conferences, and has numerous review articles describing it. There are actually real results here—meager and technologically unexploitable but real—while there are none in cold fusion!

Taubes uses the muon-catalyzed fusion work, rather than polywater, as his doorway into the cold fusion episode. This is actually very effective, because many of the same claims and proponents were involved in the two. Not that he neglects polywater, because as I've mentioned elsewhere (*Skeptical Inquirer*, 1992, vol. 16, no. 3, p. 301–2) B V Derjaguin plays a role in both, but he is more concerned with how this whole affair fits within a research program. The book also outlines the role played by some of the 'special interest' funding agencies, especially the Electric Power Research Institute. Both the Brigham Young and University of Utah groups were being funded by EPRI for other projects, as were many of the other labs (like Texas A&M). In fact, these groups were actively encouraged by EPRI to start work on the subject.

There is a very fine discussion of the theoretical arguments that started over possible explanations of the reported phenomena. The most strident claims were made by Peter Hagelestein of MIT, the Star Warrior described so well

by William Broad in his book on the work at Lawrence National Labs. Like polywater, the fact that there was any theoretical explanation for the phenomenon at all was very important in spurring the work, but unlike polywater, there were only claims and no hard calculations.

I won't detail all of the history yet again. After all this time, they are too well known and Taubes does a far more complete job than I can in this short review of enumerating labs and reports. But I must say that, when read side by side with Eugene Mallove's book *Fire From Ice*, this book provides refutation of every positive claim listed and describes every experiment in detail. Unfortunately, Taubes does not mention Mallove's book but all of the original literature is cited here so this one omission is inconsequential.

The importance of this book derives from its style. It is a moment-by-moment report of what was happening in many different arenas. For journalistic purposes, Taubes has divided the world up into a comparatively few locations. But he follows the simultaneous developments in them all in order to lay out the evolving climate of the affair. Yes, some of his colors are too bright and his contrasts too stark when he paints the scene, but there is no created dialogue here and he provides very complete documentation. I was very impressed at the completeness of his references and also at the extensive interviewing he conducted of all of the principals. Moreover, he is very careful to give extensive quotations, something that will make the job easier for any future investigators of the affair.

This book, along with John R Huizinga's recent book (*Cold Fusion: The Scientific Fiasco of the Century*, University of Rochester Press, 1992) are the last words on the affair. This is a book to study very carefully, especially if you want to understand the evolution of press reports of scientific and paranormal claims. There is no better single reference, except perhaps *When Prophecy Fails*, that presents so completely the development of a flap and follows its aftermath. This book is a must read.

—Steve Shore

This review is reprinted with kind permission from Skeptical Eye, the newsletter of the National Capital Area Skeptics, Maryland, USA

Mesmerism defended

Alan Gauld, *A History of Hypnotism* (Cambridge University Press, 1992, 738pp., £75)

This book falls into two parts: the first is a detailed although selective history of mesmerism with all its occult and paranormal trappings; the second part deals with hypnotism. These two terms are not synonymous, although many people talk and write as though they were. As readers of *The Skeptic* will be interested in the first part rather than the second, I will omit a review of the latter. The book must inevitably suffer by comparison with that great and scholarly work *Abnormal Hypnotic Phenomena* by E J Dingwall and his collaborators (in 4 volumes, J and A Churchill,

1967–68), which is occasionally cited. Dingwall, a very learned and fair-minded man, characterized the history of mesmerism in France as showing:

...the same almost inextricable mixture of fraud, careless reporting, gross credulity, mal-observation, and negligence in removing sources of error, which have bedevilled the study of the paranormal since ancient times (Vol 1, p294)

Unlike Dingwall, Gauld talks on the surprising role of defender of the mesmerists, even at their most ridiculous. He writes in a strangely ambiguous manner which sometimes implies that he believes that some of the more absurd phenomena that the mesmerists claimed, really did take place. I do not suppose that Gauld really believes all the nonsense that the mesmerists claimed, but because of his ambiguous manner of writing, I am pretty sure that some New Age freaks will quote him as an authority confirming the reality of the most preposterous alleged mesmeric phenomena, such as the ability to read without the use of the eyes.

Again, Gauld writes as though he believes that the power of 'the will' telepathically beamed by the operator is sufficient to make a mesmerized person carry out unspoken commands, provided the operator is 'strong willed' enough. He writes:

After a demonstration of ordinary phenomena, Madeleine, with eyes still shut, would be put through contact *en rapport* with individual volunteers. Each volunteer would designate some object with hand or eyes, and will Madeleine to fetch or touch it. She was successful in a reasonable proportion of trials—provided that the operator's will-power was strong enough (p48)

Thus, according to Gauld, if the mesmerized girl carried out the unspoken command, this was proof of telepathic communication, but if she failed it was simply because the operator had not willed hard enough! This is the sort of special pleading that runs right through the book.

When he mentions contemporary critics of the mesmerists (and there were many of these in the nineteenth century) Gauld is rather severe in his condemnation of them. Thus J A Dapau is condemned, but Eric Dingwall regards Dupau as one of the best of the nineteenth century critics. The same clash of opinions occurs over Burdin and Dubois' critical *Histoire Academique du Magnetism Animal...* which Dingwall praises but Gauld regards as marred by 'the astonishing amount of petty spite...'

When Gauld is not writing about the parapsychological aspects of mesmerism, his book is quite valuable in its scholarship concerning the use to which mesmerism was put in securing painless operations in the time before the application of chemical anaesthetics. What he does not point out, however, is that it was the very absurdity of most of the claims of the mesmerists that made people chary of believing in the genuineness of mesmeric analgesia at a time when its greater use would have been of immense benefit in surgical practice. Also, he does not mention the possibility that the so-called 'mesmeric sleep' was a condition not unlike the tonic immobility that can be readily induced in many animal species, and with our modern knowledge of endorphin mechanisms is better understood today and requires no occult explanation.

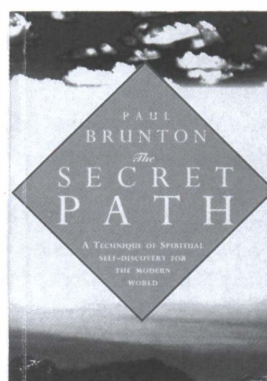
This is not a good history of mesmerism because its author skates over historical details which show what a lot of tricksters many of the mesmerists were. Thus, while Dingwall tells the full story of J Pigeaire's attempt to win by trickery a prize of 3 000 francs offered to anyone who could demonstrate reading without the use of eyes, Gauld omits such embarrassing details. In contrast to the great detail in which alleged paranormal phenomena such as clairvoyance is discussed, I was disappointed to find some surprising omissions when the therapeutic work of Mesmer and his followers is described. There is no mention at all of the work of E M Thorton *Hypnotism, Hysteria and Epilepsy: an Historical Synthesis*, London: Heinemann, 1976) who has suggested that many of the patients in Mesmer's salon were, in fact, epileptics, and hence the crises and subsequent conditions of prostration that followed were physiological phenomena that are well known today.

Who will buy this highly priced book? I imagine it will go in parapsychological libraries and on the shelves of well-heeled eccentrics who like to feel that the mesmeric movement with all its occult trappings has been misjudged and traduced by hard-nosed scientists ever since its beginnings in the eighteenth century. I can only regret that such scholarly research has been expended on so biased a project.

—H B Gibson

The 'mysterious overself'

Paul Brunton, *The Secret Path: A Technique of Spiritual Discovery for the Modern World* (Rider, 1994, 176pp. pbk. £9.99)



The late Paul Brunton was a self-confessed explorer and seeker of eastern spiritual mysticism. He sought out 'seers, sages, fakirs, yogis and lamas' during his journeys in Asia and Africa in the 1930's, and was intent on finding what he believed to be 'the divine secrets that life and fate had conspired to confide in their care'. This book, which is the

second of the eleven volumes written by Brunton, represents the core of his spiritual discoveries.

The Secret Path was first printed in 1934, and it is important to bear this in mind when reading the book, for two reasons. First, the writing style is very flowery and poetic, sometimes unbearably so. This has the effect of coating the content with such a strongly devotional flavour that it biases the reader against seeing it as having any objective validity. Secondly, real knowledge and experience of eastern religious traditions and teachings were only just beginning to reach the West at the time the book was written, so Brunton should be looked upon as a pioneer. Christmas Humphreys, for example, who was the founder of the

first Buddhist Society in Britain, was only to visit the East in 1946.

The book is divided into two sections. In the first few chapters, Brunton describes his meeting with an eastern sage that led to his decision to write. He examines philosophic and scientific conclusions about the nature of human existence and then presents his doctrine of a 'mysterious Overself' within man's being. In the second part of the book, Brunton describes several meditation techniques aimed at awakening one to this Overself and experiencing inner peace and spiritual transcendence.

The most startling revelation in the book comes in the second chapter. On the verge of leaving Britain to tour the East a second time, Brunton has a mysterious vision that changes the course of his life. The sage he had met, whose presence had such a profound effect on him, appears and admonishes him to reconsider his intention to travel. Rather than add to his own store of knowledge, the Sage tells the author that he should consider helping others out of compassion. Taking this to heart, Brunton decides to write.

This vision which Brunton describes sets the tone for the rest of the book. It, and other revelations in the work, establish the author as someone who claims to have had direct spiritual insight, 'not based on human intellectual opinions, but on eternal truths'. If Brunton had confined his approach to this alone, the book would perhaps have been more consistent and effective. As it is, his attempt to rationalise this experience and to justify it in western philosophical and scientific terms is very weak. Yet, he also confesses that the book is 'a collection of scattered thoughts loosely tied together ... with very little argument ... but very much that will provoke it'.

The truths about the 'mysterious Overself' which Brunton elaborates on in the second part of the book 'did not come after argument, but after long experience ... because I spent the years stretching my philosophic soul upon the rack until I found the truth'. The confidence and unshakeability that he professes in relation to his experience do ring true. For this reason the useful and more credible part of the work is contained in the chapters on meditation techniques. Brunton describes the Overself as 'the secret, silent witness of the body and the intellect'. It communicates through intuition and comes into action when the conscious mind is quietened. His techniques of meditation aim to be a progressive system of arriving at this state through practising mental quiet, self analysis and breathing exercises.

The experience of the Overself gained through regular practice of the meditation techniques is said to cause a state of peace and bliss. On this, Brunton writes: 'Our grave and learned sceptics will tell us that these spiritual ecstasies are mere derangements of the nervous system ... Men may sit in solemn conclave to investigate these assertions, as some will. They would be wiser, however, if they investigated their own selves. For the experience of the eternal being within is its own best proof'. Not something one can really argue with!

The publishers have classed the work under 'Buddhism', an assertion which is not borne out by an investigation of

its content. There are Buddhist elements and ideas in the book—for example the reference to the impermanent nature of all things and the doctrine of mind preceding everything. These are, however, mixed in a haphazard way with Christian beliefs and references. Most particularly, the notion of a fixed soul within man is not a Buddhist truth, but a Hindu and Christian belief.

To conclude, Brunton does seem to have embarked upon a process of self-discovery through the experience of meditation. His secret path is probably likely to remain a secret unless one goes to the trouble of practising the meditation techniques! There is no convincing objective or rational analysis of this experience, or of the existence of the 'mysterious Overself' which stands, or perhaps could, stand scrutiny.

A book to be read with an open mind: avoid it if you dislike fervent poetical language, enjoy it and allow it to inspire you if your experience of meditation resonates with his own.

—Sophie Brown

The human face of science

Dennis Overbye, *Lonely Hearts of the Cosmos* (Picador, £7.99, 442pp, pbk, 1993); Steven Rose, *The Making of Memory* (Bantam, £6.99, 355pp, pbk, 1993)

For the most part, scientists are perceived by the public as mysterious, white-coated figures, who converse in a secret language and twiddle with equipment whose purpose is unfathomable by 'ordinary people'. They are seen as existing in some way tangential to society, as if they are alien to it. This is a sad state of affairs. While millions believe with ease in planetary bodies at unthinkable distances from the Earth exercising constant influences on our everyday lives, the workings of the internal combustion engine, for example, are regarded as mysterious and all but unknowable except to a few gifted initiates.

These two books go some way to putting a recognisable face on the 'mysterious scientist'. The first, Dennis Overbye's *Lonely Hearts of the Cosmos*, is an intriguing story of the men and women who have developed modern cosmology, from the early work of Edwin Hubble, to today's Hubble space telescope. Overbye has written a solid book on the history of a particular scientific discipline, but made it an accessible and exciting story, which should be as attractive to the layperson as to the professional. We read about the scientists' work, their exciting results, and the often barbarous in-fighting that is perhaps less well-publicised. We also see them smiling for the camera, playing the guitar, eating barbecues, and drinking—just like us. This is a well-written book that presents a fascinating picture of modern cosmology and its curious characters.

The Making of Memory is another book which takes a very personal look at scientific research, in this case the search for an understanding of the workings of memory. Professor Steven Rose writes about his medical research in an autobiographical style which places his often technically

challenging work in a historical and personal context. He tells us what motivates him to do his work: not, as many people might assume, to publish the maximum number of papers in *Nature* in the minimum time, but rather a genuine need to understand how our own memories work.

Some people will undoubtedly be uncomfortable to learn that Rose conducts his experiments on baby chicks, procedures which he describes in detail. However, he does not dodge the ethical issues this raises, and explains his ambivalent and unsettled feelings about the use of animals in research.

To say that scientists are indeed people, with the same desires, worries, loves, hates and personalities as everyone else sounds rather silly, and yet it is simply not common belief. Perhaps if it were, there would be more appreciation of science, and less of pseudoscience.

—Les Francis

Unexplained mysteries?

The Unexplained: Mysteries of Mind Space and Time (Blitz Editions, 1993, 400pp, hbk, £16.95)

Many readers will already be familiar with Orbis Publishing's *The Unexplained* series, which has been around since the early 1980's, often published as a part-work of the 'Issue 2 free with Issue 1' variety. This book collects all the parts of the series together, and is a visual feast for anyone with an interest in the paranormal.

The general approach of *The Unexplained* is one of unrestrained credulity, and corresponding wide-eyed amazement, no doubt based on sound commercial principles. We can't get away from the fact that on the whole people are more interested to be told about amazingly mysterious goings on, than to be confronted with voices of skeptical dissent.

But I don't want to be too hard on *The Unexplained*, because once you've picked the book up it's hard to put it down again. It seems to cover everything a pro-paranormalist or skeptic would find interesting: poltergeists, UFOs, Men In Black, telepathy, spontaneous Human Combustion, premonition, levitation, Raudive voices, hypnosis, rains of blood and fishes, Kirlian photography, crop circles, clairvoyance, out of body experiences, Sai Baba, cryptozoology, reincarnation, the Cottingley fairies, Nazca, disappearances, stigmata, divination, visions of the Virgin Mary... 'STOP!', you cry! But it's all here.

Perhaps the strongest feature of the book is the excellent variety of illustrations, including many of the classic images which have become attached to paranormal and supernatural lore over the years. But although the illustrations are excellently researched, the text is far less so. The diversity of writing styles points to a book stitched together Frankenstein-like, and indeed the identities of the authors is one more mystery to ponder, since the book contains no credits or acknowledgements other than for the pictures.

Should you buy it? Well, yes, if you can find it in a remainder shop. Or wait for the next reprint of *The Unexplained* as a part-work, and claim your free binder with Part One.

—John Yates

Medium tedium

Stephen O'Brien, *In Touch with Eternity*, (Bantam Books, £3.99, 302pp, pbk, 1992) and *Angels by my Side* (Bantam Books, £4.99, 366pp, pbk, 1994)

On the bottom of the front cover of *Angels by my Side* I read the somewhat confusing phrase 'The heir to Doris Stokes' woman' and after some reflection on exactly who Doris Stokes' woman might have been I realised that the phrase actually reads 'The heir to Doris Stokes' *Woman*. If, by this, *Woman* means that O'Brien has all the intrinsic psychic ability that the late Mrs Stokes used to possess, then I can't find it in my heart to disagree. Stephen O'Brien is a good-looking, quietly spoken, 38 year-old Welshman who is undoubtedly now one of Britain's best known (and possibly best-loved) mediums.

In these, the third and fourth volumes of his autobiography, O'Brien provides, according to the cover blurb, 'impressive evidence of the survival of the soul beyond death'—and a very comfy, homely kind of survival it is too, as exemplified by a passage from his meeting with Marlene Dietrich in the astral world: 'Miss Dietrich and I met in the astral world ... in a large and airy, peach-and beige-coloured apartment with huge picture windows overlooking deep green fields and extensive parkland. There were bright flowers everywhere in the grounds outside, and inside, too, in large pots, tubs and vases. It was a stylish, lovely home.' These books are not an exciting read nor are they likely to provide any seeker-after-truth with unequivocal (or even equivocal) proof of survival—and to be perfectly honest I'm not sure I'd want to spend the rest of eternity in the chintz and antimacassar environment that is O'Brien's particular vision of the afterlife.

I have met, and gently crossed swords with Stephen O'Brien on a number of occasions and I have to admit that I find him an apparently sincere, intelligent and caring person. My difficulty is in squaring this character description with some of the information—purportedly from the other side—that he passes on to members of his audience. Surely any sincere, intelligent and caring person must regard as slightly suspicious the fact that almost identical information—Paul, Robert, road accident, a woman who has lost an earring—is sent on more than one occasion for different recipients. I also found it particularly interesting that the first chapter of *Angels* describes in detail a performance that O'Brien gave on Central Television and which in my view (I was in the studio audience for the show) was exceedingly unimpressive as recorded but much more impressive when broadcast 30 minutes later as edited highlights. If its prominence in the book implies that this was a *good* performance then the bad performances must be really dire (as anyone who saw his appearance on *Wogan* will agree). I'd like to be able to say that reading these books will give the reader some insight into the nature of the cosmos, or even into the psychology of spiritualists but I fear that the only insight to be gained is into Stephen O'Brien's rather uninventive fantasy world. One wonders, with an average of one volume per 9.5 years of life, what on (or off) earth the contents of the next four volumes is going to be.

—Steve Donnelly



Anything goes

I read with interest the article 'The Big Bang Controversy' by Taner Edis (*The Skeptic*, 7.5) because I have myself reservations in accepting some of the basic concepts that are currently enjoying a consensus among cosmologists.

Inflation—a Miracle: '*Miracle*, an event or action that apparently contradicts known scientific laws and is hence thought to be due to supernatural causes, esp. to an act of God.' (*Webster's New World Dictionary*) I would like to expand the wording by addition: a *one-time* event. The inflationary expansion hypothesis following the Big Bang meets this definition. It defies the basic accepted physical law that material bodies can only move at speeds less than the velocity of light. It is also a non-repeatable event and therefore non-verifiable and non-falsifiable. Yet, cosmologists believe to be able to describe the events back from the inflation to some ridiculously near instant (10–25 seconds or something) from the beginning by applying today's quantum theories to the period B.M. (Before Miracle).

Background Microwave Radiation: as this radiation is practically as old (15–20 billion years) as the universe, and as it has been travelling (in a straight line) to us all this time, the inflation must have expanded the universe in a single *zap* at least to a size of 15 billion light years. How can one know *anything* about what has been there B.M.? Even time loses all meaning. According to the General Theory of Relativity time slows down with gravity and actually stands still in the state of a black hole. The density at the beginning, and hence gravitation, has been extreme with time having no meaning. (Is there a zero-gravity point at the center of a black hole like at the center of the earth?)

Open/Closed Universe: is there enough mass in the universe to stop the observed expansion and even run-

ner signs? What stopped short the inflationary expansion, anyway? Gravitation?

Anything goes: to an uninitiated the modern cosmology and physics is a bit like modern art: anything goes. New theories (superstrings, invisible mass) and new elementary particles (the graviton—anybody seen this UFO shuttling between the moon and the earth?) are introduced a go-go, but when pinned down, the physicists finally concede that all these are just metaphors to help imagination.

Lassi Hyvarinen
Le Vesinet, France

Sounds odd

I was interested to read Toby Howard's account of 'extraordinary noises' (*The Skeptic*, 7.5). When such noises occur in everyday life we see something akin to the scientific method in operation. For instance, we hear a sudden noise in the middle of the night. Our explanation (or hypothesis) may be 'I didn't shut the kitchen window properly. We test this by getting up and checking if the window is indeed open. If it is, then it supports our explanation of the noise but does not prove it; if the window is firmly closed then our explanation is disproved. This is not dissimilar to Popper's conception of the scientific method (K R Popper), *Conjectures and Refutations: The Growth of Scientific Knowledge*, London: Routledge & Kegan Paul, 1963), but we need to apply Occam's razor to confine our explanations to those that have a reasonable probability, rather than unlikely ones such as 'There is a ghost in the wardrobe' which are obviously unadaptive and may cause us undue distress.

I wonder if any readers can help me explain a mysterious noise which occurred some years ago as I was driving up the A1 through Lincoln. All of a sudden I heard a loud 'pop' which seemed to come from the roof of my car as though something had hit it.

This happened several times (I'm not sure if this was at regular intervals of not) and the noises grew louder. I became quite alarmed and, fearing something dangerous was about to happen, I pulled into a lay-by, noticing that the car behind had done likewise. No further noises occurred and I resumed my journey. By this time I had the notion that the noises were something to do with the proximity of an RAF base. (I did not see or hear any aircraft but it is not impossible some were flying nearby).

Any similar experiences or offers of explanation?

Michael Heap
Sheffield

Seeking experiences

I would be most grateful to hear from any readers who have had detrimental experience of Alternative and New Age Medicine, particularly in a life-threatening situation.

Events such as those described by Dr John Maddox ('Events', *The Skeptic*, 7.5, page 26, where Lewis Jones refers to Dr Maddox's recollection of his personal experience of the dangers of homoeopathy) would be suitable.

It is my long-term aim to publish a skeptical viewpoint, particularly within an EC context. Needless to say confidentiality would be respected.

Harriett Moore
17 Ballynaris Hill Dromore
Co Down BT25 1J
Tel: 0846 693914

The Skeptic welcomes letters from readers. Please keep your contributions as short as possible but, in any case, we reserve the right to edit letters for publication.

Please send letters to:
The Skeptic (Letters), PO Box 475,
Manchester M60 2TH.

Subscribe to *The Skeptic*

The Skeptic is published bimonthly; a year's subscription covers 6 issues. Postpaid rates are shown below—please make cheques/P.O.'s (£Sterling only, please) payable to **The Skeptic**.

Postal area	Sub. (1 year)	Back issue
UK	£12	£2.10
Europe (airmail)/		
Rest of world (surface)	£15.50	£2.70
Rest of world (airmail)	£28	£4.50

From: **The Skeptic (Dept. B), P.O. Box 475,
Manchester, M60 2TH, U.K.**

Back issues

Volume 1 (1987)

1,2,3,4,6 Out of print.

5 **Abductions in perspective**; Magicians, mediums and psychics-1; Carl Sagan's universe; Science vs. pseudoscience-1.

Volume 2 (1988)

1,2,3,4,5 Out of print.

6 **Bristol psychic fair**; The incredible Mr Newman; Predictions for 1989; Joe Nickell on the Shroud of Turin.

Volume 3 (1989)

1,2,3,5 Out of print.

4 **Remembering Richard Feynman**; Two unpublished Feynman stories; The world of weird HiFi; The lessons of 'cold fusion'; A new test of religion?; Eye-to-eye with iridology.

Volume 4 (1990)

1,3,4,5 Out of print.

2 **UFOs over Russia**; The Moses barrier; On coincidences; Gullibility and the appliance of science; Crop circles: circular arguments and straw men; Enquiring minds.

6 **The man who invented UFOs**; The new demonology; Reflections on past life regressions; What is scientology?; Polywater.

Volume 5 (1991)

1 **Paul Daniels interview**; Canals on Mars Nostradamus and the Middle-East crisis; Potty training; The case for super-skepticism; Skeptical predictions.

2 **The New Age and the crisis of belief**; The Mary Celeste mystery—solved? N-rays; Wet and dry skepticism; 1991—the final crash of the UFOs.

3 **Why not to test a psychic-1**; Speaking in tongues; Passing the torch; Another look at Scientology; Sharp blades or sharp practice? .

4 **James Randi interview**; Why not to test a psychic-2; The inside-out cosmos; The Freethinker: 1881–1991; More light on Medjogorje; Dualism, ESP and belief.

5 **The documentation of a miracle?** (Dr Peter May); Psychics and semantics (Mike Rutter); Smith and Blackburn: homswagglers extraordinaire (Martin Gardner); Spirits at large (Lucy Fisher); Thicker than water (Bernard Howard).

6 **The summer of '91** (Martin Hempstead); Seeing is believing? (Susan Blackmore); Ask Professor Mesmo; Assessing evidence (John Lord); Alternative medicine in Europe (Wim Betz); Review of 3rd EuroSkeptics conference.



Volume 6 (1992)

1 **Paranormal trends in the USSR** (Tim Axon); Faking an alien (Ole Henningsen); Where do we file flying saucers? (Hilary Evans); Psychic questing (Lucy Fisher); Future imperfect (Robert Sheaffer); Bands of hope (Lewis Jones).

2 **Brainwashing a skeptic** (Arthur Chappell); Arguments to design (Anthony Flew); Dianetics: From out of the blue? (Jeff Jacobsen); Taking it all too far (Michael Heap); Who invented the Loch Ness monster (Steuart Campbell); The medium, not the message (Terry Sanderson).

3 **Premanand: Scourge of the Godmen** (Lewis Jones); Women and the New Age (Lucy Fisher); Do-it-yourself UFOs (Dave Mitchell); Chapman Cohen: freethinker (Ean Wood); Ice in the sky (Loren Petrich).

4 **Physics and the New Age—Part 1** (Tim Axon); A short course on homeopathy (Jan Willem Nienhuys); Ball lightning and one other (Frank Chambers); The science of miracles (Eric Stockton); Pyramid power (Jerome L Cosyn); Hoaxers on trial (Robin Allen).

5 **The Man Who Died Twice** (Frank Koval); Vampires in Cumberland (C M Drapkin); In no hurry to go (Charles Ward); Is light getting slower? (Donald Room); Euro-cerealogy (Ernest Jackson); Physics and the New Age—Part 2 (Tim Axon).

6 **Great balls of fire** (Steuart Campbell); Quackupuncture (H B Gibson); Cold comfort for Cold Fusion (Malcolm Glasse); The fasting woman of Tutbury (Tom Ruffles); Skeptics and scoffers (Tad Clements).

Volume 7 (1993)

1 **The theft of the tarot pack** (Daf Tregear); Across the great divide (Rebecca Bradley & Tso Wung-Wai); 1993 Skeptical predictions (Marjorie Mackintosh); Obituary: Charles Honorton (Susan Blackmore); A healthy dose of sasparrilla (Jerome Cosyn); A test for reincarnation (Val Dobson); Tunnel vision (Brian W Haines).

2 **The myths of meditation** (Arthur Chappell); Vicious circles (Robin Allen); The Cyril Burt affair (Ray Ward); What hath Carlos wrought? (Robert McGrath); All that glisters is not gold (Paul Munro & Dave Mitchell); Skepticism—1895 style (Tom Ruffles); Equine pseudoscience (Russell Dear).

3 **Cold-fusion heats up** (Chris Tinsley); Rajneesh: the failed guru (Brian Morris); Beyond the near-death experience (Rory MacCallum talks to Susan Blackmore); Meditation: skepticism or cynicism? (Adrian West); Spirit guides and after-images (Colin Sutherland).

4 **The face on Earth** (Robert McGrath); Neural networks and NDEs (David Bradbury); Francis Galton: A skeptical traveller (Russell Dear); Cyril Burt reconsidered (John McLachlan); It's all in the mind (Arthur Chappell); The computer conspiracy (Andrew Bulhak).

5 **The mysteries of creativity** (Margaret Boden); At the frontiers of science (William Corliss); A Supernatural IQ? (Andrew M Colman); The Big Bang controversy (Taner Edis); Write your own pseudoscience (Bob Bassalla).

6 **Science and nonsense** (Gilbert Shapiro); The Mary Celeste 'mystery' (Brian Haines); Who's that on the line (Robert E McGrath); Close encounters of the cult kind (Arthur Chappell)



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

Paypal: afu@ufo.se

IBAN: SE59 9500 0099 6042 0490 7143

BIC: NDEASESS – Nordea/Plusgirot, Stockholm

Swish (Sweden only): 123 585 43 69