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THEY CURE WEAK BACK

How to become a charlatan

Also in this issue:

The enduring myth of the unicorn

The mystery of the self

Earthly origins of alien stereotypes

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Hilary Evans' *Paranormal Picture Gallery*



Buck Nelson's Trip to Mars, the Moon and Venus

It was not until a fortnight after he turned sixty, in April 1955, that Ozark farmer Buck Nelson took his first journey into space, along with Teddy, his dog. Unlike today's nasty abductions, his experience was entirely pleasant: the space ship was large and comfortable, and since the space-people had brought along *their* dog, too, there was company for Teddy, which was nice. In the typewritten account he published a year later, Buck tells us that 'folks on Mars, the Moon and Venus look like us here on Earth, but are much better looking in general'.

But handsome is as handsome does, and it is greatly to Buck's credit that, offered a check for one thousand dollars if he would never tell his story, he refused it, believing he had a duty to pass on to mankind the messages given him by his friends from space.

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

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The Skeptic is published bimonthly from
PO Box 475, Manchester M60 2TH, UK.

Email: skeptic@cs.man.ac.uk. WWW:
<http://www.cs.man.ac.uk/aig/staff/toby/skeptic.html>.

Opinions expressed are those of the
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those of the editors.

ISSN 0959-5228

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

Andy Brice, Stuart Campbell, Jock Cramb, Bill Donnelly, Gerald Fleming, Dorothy L Forrester, Mavis Howard, Ernest Jackson, David Martin, Harriett Moore, Stephen Moreton, Austen Moulden, Alan Remfry, Donald Room, Neil Rosen-Webb, Mike Rutter, Gillian Sathanandan, Ian Saunders, H Sivyler, Brian Slade, J Thompson Jnr, Chris Torrero and Chris Willis.

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

Hits and Misses

Steve Donnelly

A ghost in the ohm

In *Hits and Misses* in *The Skeptic* 9.1, I discussed David Jones' (tongue-in-cheek) hypothesis that ghosts exist in a parallel world whose temperature is close to absolute zero. An article published in the *Independent* on 20 April not only provides strong corroborative evidence for this theory but at the same time perhaps indicates that ghosts use electricity to combat the cold. Bill and Liz Rich live with their three children in a two-story house in the middle of the Welsh countryside near Brecon; a house that is haunted by a spirit who wears hobnail boots—if the mysterious sounds that are heard are anything to go by. He also generates unpleasant smells and occasionally throws objects around, all of which could be forgiven if the energy-hungry spirit did not also run up electricity bills of between £500 and £800 per quarter. In a house where, even the electricity board admits, electricity consumption should be about 40p per day, the Rich family are managing to use nearer to £7 per day—a fact they can only explain by assuming that their phantom is responsible. Perhaps even the devil himself is feeling the pinch now that there is VAT on fuel bills, and is keeping his enormous heating costs down by siphoning electricity through other people's meters.

For the Rich family however, the most unfortunate aspect of their haunting is not the ghost himself, nor even his excessive electricity consumption, but the hordes of psychic researchers who have been drawn to their house—each one with his or her own explanation for the

mysterious occurrences. 'We don't want to know anyone from the psychic world anymore,' said Liz Rich. 'Frankly they're all wierdos. The final straw was when we had a visit from a man from the Christian Spiritualists . . . He was horrible, hands all cold and clammy. I'd rather have spooks in the house than him.'

Tears of blood

In a move that has set the judiciary against local Catholics, magistrates in the southern Italian town of Civitavecchia recently ordered that a weeping Madonna statue be securely locked away in a cupboard. Meanwhile, the owner of the statue, electrician Fabio Gregori, is believed to be under investigation for possible fraud. These events received a great deal of press coverage in the UK at Easter in (amongst others) the *Sunday Telegraph* and *Scotland on Sunday*. The saga—which has triggered off a wave of weeping statues all over Italy—began when the Gregori family was given an 18-inch-high, mass-produced statue of the Madonna by a priest who had bought it at the shrine of Medjugorje in Herzegovina. A few days after the family received the statue in early February, five year old Jessica Gregori noticed that the Madonna, now installed in the garden, had red liquid running down her cheeks. This 'weeping' was repeated several times, in the garden and later in the home of the local bishop, Girolamo Grillo, where the statue was taken for safe-keeping against the ensuing onslaught of sightseers and journalists. The statue was then subjected to a battery of tests which revealed that there were no blood-squeezing gadgets inside and that the red liquid was indeed blood, although male blood. 'She probably cut herself shaving,' was the fairly unhelpful comment of Rome's communist newspaper, *Il Manifesto*. At this point, the statue was ordered to be locked away pending DNA tests aimed at determining whether the blood comes from a member of the Gregori family.

Meanwhile, back home in the UK, rumours that John Major has a weeping statue of Margaret Thatcher locked away in a cupboard are entirely unfounded.

Repressed memory

The use of hypnosis to uncover repressed memories is well known in a number of fields. The majority of people with memories of being abducted and interfered with by aliens have 'uncovered' their memories by means of so-called 'regression hypnosis'. Similarly, experiences of supposed past-lives—taken by some people as proof of reincarnation—also usually surface under hypnosis. In the US, some psychotherapists even treat conditions such as depression and persistent headaches by uncovering the repressed alien abduction or past-life memory. The patient is then made to



come to terms with the traumatic memory that has given rise to a particular symptom and by doing so may eliminate the symptom. Although this approach seems not to have caught on to any great extent in Britain, in an article in the *Sunday Telegraph* on 2 April, Myles Harris, author of *Magic in the Surgery: Counselling in the NHS*, expresses great concern about the validity of the repressed memory hypothesis in any context and in particular its current popularity in uncovering evidence of purported child abuse. Harris's view is that there is not a shred of evidence to back up the idea that the mind can 'harbour repressed memories like an intact incubus'.

It may be the case that this lack of evidence in favour of suppressed memories is finally filtering through to courts on both sides of the Atlantic. The *Daily Telegraph* on 6 April reported that George Franklin, a retired fireman who was jailed for life after his adult daughter recovered memories of him killing a child 20 years earlier, was released after a federal judge in San Francisco said that Franklin had been the victim of 'serious constitutional errors'. Meanwhile in the UK, a shop worker from North Yorkshire was freed by a court at the end of March, 17 months after being arrested on a charge of sexually assaulting his daughter 18 years ago. According to *The Times* on 29 March, the man was freed after the court found that his daughter's repressed memories, which formed the basis of the case, were in fact fictitious. Perhaps the publicity surrounding the whole 'false-memory' syndrome will force some alien abductees and reincarnated Henry VIIIs to re-examine their belief systems.

Mail order hex kit

Is your boss driving you mad? Your spouse causing you grief? Don't worry—a solution is available. A Tokyo company, Juonsha, is offering a mail-order curse kit for sale enabling purchasers to put spells on neighbours, bosses, in-laws and spouses. The kit features a straw doll to represent the hexee and numerous accessories including some nails, a curse manual and a curse-blocking doll to ward off curses coming in the other direction. According to an article in the *Japan Times-Jiji Press* on 11 August last year, it is vital to specify the type of misfortune you are wishing upon the victim: 'it is important to imagine the unhappy scenes'.

The devil's money

Lottery fever is not only endemic to Britain but to many other countries as well. According to an article in the *St. Joseph News-Press* on 8 March, reported in *News of the Weird* on the Internet, a man arrested in the US for the theft of six 350-pound transformers from a local power company said that he needed them to build the time machine that he was going to use to transport him a few days into the future to discover that week's winning lottery ticket numbers.

A few thousand miles to the south, however, in Fortaleza, Brazil, unemployed maid Maria Benoiza Nascimento burned a winning \$60 000 lottery ticket because she was afraid of

going to hell. According to the *Tuscaloosa News* on 3 December last year (and also reported in *News of the Weird*), despite the fact that Nascimento's husband is unemployed and four of her seven children are seriously ill, she followed her Assembly of God minister's advice to refuse to accept 'the devil's money'.

The ram

Drivers born under the sign of Aries, the ram, are living up to the symbolism of their astrological sign according to an article published in *The Scotsman* on 23 March. The results of a recent study by the insurance company, Zurich Municipal has shown that those of us born under Aries make the most insurance claims for motoring accidents. The fewest claims are made by Sagittarians. As yet, there are no plans to have a sliding scale of insurance premiums based on astrological sign.



Tim Pearce

Blame Microsoft

Eagle-eyed skeptic, Stuart Campbell wrote to express his dissatisfaction with *The Skeptic's* proofreaders who seemingly failed to spot a rather significant typographical error at the end of this column in the last issue. Whilst I'd like to apologise unreservedly for the error, I should also like to defend our hard-working proofreaders. After the text of magazine has been proof-read, the file is transferred between two different computer systems (Mac and PC) before the master pages are printed out on a high-resolution printer. Slight incompatibilities between versions of the page makeup software running on the two computers resulted in a strange reformatting of the text and the loss of a line at the bottom of the column. The last sentence should have read "Perhaps Orville was Wright, after all, when he said in 1903 that 'the airplane stays up because it doesn't have time to fall'."

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

How to Become a Charlatan

Edzard Ernst

A step-by-step guide to becoming a successful fraud

YES, IT IS FRUSTRATING, even positively nauseating. There you are struggling day in day out, doing your best and striving for the real breakthrough in science. Yet the real breakthrough never comes. Lack of talent, originality, or just not the right friends? Who knows? And who cares?

My advice is to call it a day—reconsider what you were hoping to achieve. You wanted a breakthrough in the field of your expertise, but think! How many are trying exactly that? It is hopeless. You ought to try something else. My advice is to try the fast and easy way: become a charlatan.

The advantages are obvious: if you do it right you have little competition, you'll be famous in no time at all and you definitely don't need to be a genius. Here is your comprehensive 'charlatan survival kit'.

First stop and think where (preferably but not necessarily in the area of your expertise) there might be a niche for you. The niche needs to be unoccupied and it ought to have a weird yet appealing touch. Being a medical man myself I am prone to think of medical examples: Don't try to diagnose diseases by looking at people's eyes, tongues, ears or hands. Too many fellow charlatans are already earning a good living on these 'options'. How about a new therapy? What about a cure based on consuming your dried, powdered toe nails in increasing and decreasing doses finely tuned with the moon cycle? Or what about creating a mysteriously dosed vacuum in the ear to clean out the 'bad spirits' in your body's airways and soul—anything really, but make sure that *only you* can perform the act of your particular innovation. At the most you might condescend to educate a few followers (for good cash, self-evidently), but do not endanger your monopoly too much.

The next important step on the road to success is to give your method an identity. A suitable name can be easily found; you can use your own name if it has a mystical undertone to it, or use one that rings subconscious bells: 'Livingstone's Life Line', 'Hannibal's Handling', 'Mac Master's Management'. Better still you create a pot-pourri of fashionable words, melting them together to give an utterly meaningless but highly impressive pseudoscientific term: 'Entropic Enterospectrophly', 'Bold Fusion', 'Psychoanalytic Jogging', 'Transcendental Recreation', 'Crystal Radioaesthesiology'—use your imagination, it's unbeatable fun.

Your technique now requires a glamorous, mysterious background. Best to link it up to some obscure ancient culture, Incas or Egyptians for instance. This implies that



Mary Evans

'thousands of years of experience support you and your method' and 'the wisdom of the forefathers must be respected'. Historical roots are an essential asset particularly for the slightly insecure charlatan.

Whatever your method/technique/invention/theory etc. does produce or achieve, it should be drastically out of line with the accepted thinking of the scientific establishment. Bowl them over by explaining that their so-called scientific approach is but naive reductionism and your ideas are based on a revolutionary change of paradigms. The mere attempt to scientifically test your concepts within the framework of the old (former) and now obsolete paradigm, would destroy the innovation. If this fails, you must insist that your idea only works if one *believes* in it.

Next comes the only really difficult challenge in becoming a first rate charlatan: you must be convincing,



May Evans

'Quicksilver', from a circa 1600 lithograph by van der Kellen

more than convincing, you must be a monomaniac and charismatic. This usually needs some rehearsing. Go to rhetoric lessons, join a theatrical group, spy in a lunatic asylum, but do anything to become fanatically convincing and religiously missionary.

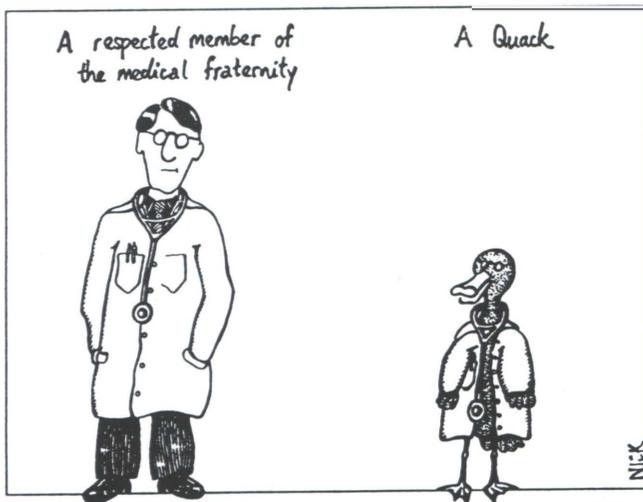
Now you are almost there. You only need a few tricks to complement your act but you will pick these up swiftly as you go along. With a base in science, you will find it easy to distort the scientific truth. Your former colleagues will, of course, challenge you in discussions, radio interviews, talk shows, etc. By all means attend those events, they are free PR for you. When the opposition comes with its boring facts, you counter with your imaginative distortions—the

public won't be able to tell the difference and you will 'win' because your concept offers more. It appeals to the need for irrationality, mysticism and unreason that is so deeply rooted in the human species.

When the going gets tough (and it occasionally will), you can always claim that you are being constantly and viciously attacked for reasons 'well-known'; don't be too precise, hint at something 'ethnic' or 'extra-terrestrial' or 'political' or waffle about strong lobbies that conspire against you—a consortium of pharmaceutical companies or the nuclear industry would be ideal. Elaborate on your altruistic dedication in spite of threats to your and your family's lives—you always wanted to be a hero anyway.

The rest should be clear sailing. 'Successes' of your concept will now come fast and effortlessly. People will queue up to give evidence in favour of its unique usefulness. It would be good though, if you had a few VIPs speaking out for you; take film stars, sports champions, pop singers. Beware of politicians! Not that they would manage to see through you, but they are not reliable enough and usually have their own, possibly competing monomania to follow.

My final word of advice will please your bank manager: be expensive, unscrupulously, even ridiculously expensive. People strongly believe that the more they pay the more it's worth. And surely you are worth a lot.



Nick Kim/New Zealand Skeptic

Nick

HEALTH PROFESSIONAL IDENTIFICATION GUIDE

Professor Edzard Ernst is Director of the Centre for Complementary Health Studies at the University of Exeter.

Meet the Italian Skeptics

Sergio Della Sala

The successful growth of skepticism in Italy



THE ITALIAN SKEPTICS GROUP 'CICAP' (Comitato Italiano per il Controllo delle Affermazioni sul Paranormale) was born in January 1989, thanks to the efforts of Piero Angela, a science writer and journalist. At its formation its present secretary, Lorenzo Montali, spent two months in Buffalo at the headquarters of the Committee for the Scientific Investigation of Claims of the Paranormal (CSICOP) to study its organisation. At the same time, Massimo Polidoro, currently the deputy editor of CICAP's journal, spent a year in Florida with James Randi to master the art of 'psychic investigation'. Today, the committee includes a number of respected Italian scientists, including three Nobel Prize winners.

Since its formation, the committee has conducted several investigations about paranormal claims, including poltergeists, crop circles, healers, psychic detectives, ESP and psychokinesis, dowsing, astrology, and so on, often in conjunction with the national media. Three members of the committee, Sergio Della Sala (a neurologist at Aberdeen University), Luigi Garlaschelli (a chemist at the University of Pavia) and Franco Ramaccini (an independent researcher) received world-wide attention, when their replication of the 'melting blood' known as the miracle of St Januarius was published by the respected science journal *Nature*.

Since 1991, CICAP has held an annual National Conference which attracts hundreds of participants, and generates considerable publicity in the media for the skeptical point of view. In July 1992 CICAP hosted the Fourth Euroskeptics Convention in St Vincent, the focus of which was the question 'What experimental evidence exists for paranormal claims?', and the participation of members of CSICOP as well as of Italian and European researchers made the event a great success. The following year's theme for the National Convention was 'Contacts with the other side?', where Luigi Garlaschelli presented his replica of the tricks used by a famous Italian medium, Roberto Setti, while Massimo Polidoro, acting as a 'medium', presented a seance for the journalists, and a demonstration of levitation! Needless to say, the reactions from Italian parapsychologists have been rather harsh.

On 1 April 1994, CICAP announced a prize for paranormal claims, called the 'Bufala' (literally the female buffalo, Italian slang for 'blunder' or 'conscious blunder'). The prize was successful in causing quite a stir in the media, especially thanks to the reactions of the winners.

British skeptics might have heard about the award, from a BBC interview with CICAP's president, Steno Ferluga, an astrophysicist at the University of Trieste.

CICAP publishes a quarterly magazine called *Scienza & Paranormale*, which now has more than a thousand subscribers all over Italy. The January 1994 issue, for example, was a special edition which gathered foremost parapsychologists and skeptics for a discussion on the future of parapsychology. James Alcock, Susan Blackmore, Richard Broughton, Charles Honorton, Ray Hyman, Stanley Krippner, Robert Morris and James Randi all contributed original papers. CICAP also runs a computer bulletin board for skeptical discussion.

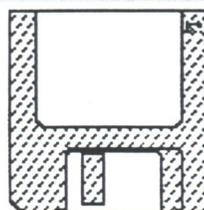
One specific factor which impacts on CICAP's work, is that it operates in a country where most of the paranormal claims have a religious flavour. This, of course, renders its acceptance by the general public a bit problematic, given that quite often a scientific approach is seen as unfair, in a religious context.

CICAP is still a rather small group based on voluntary work. Its main purposes are to provide skeptics with counter-arguments and the general public with the opportunity of being exposed to a viewpoint alternative to that presented by the media. Its aim is to facilitate a rationalist approach in considering unexplained phenomena, and—of course—to have fun!

Sergio Della Sala is Professor of Psychology at the University of Aberdeen, and a CICAP member. CICAP can be contacted at PO Box 60-27058 Voghera (PV) Italy; or Massimo.Polidoro@f318.n331.z2.fidonet.org.

Calling contributors old and new!

We welcome 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.

On the Horn of a Dilemma

Tony Wheeler

Investigating the persistent myth of the unicorn

DO UNICORNS EXIST? Have unicorns ever existed? These may seem like simple questions, questions to which the answers are well known. Nevertheless, they are not. We cannot select our answers from just 'yes' or 'no'. The answers have been sought for hundreds of years, and even now the answers are not simple.

'Science' strictly means 'knowledge'. Major methods of 'knowing' are intuition, authority, rationalism, personal experience and science. 'Science' as we usually use the term is the study of accumulated knowledge, and how it was produced using the principles of replication, and trial by experiment. It is science's scepticism about existing knowledge that drives our need for replication, and for trial by experiment.

How does science contribute to our knowledge of unicorns? How have these other methods of knowing contributed, and when there was conflict—which type of knowledge dominated?

As for the answers, the mythical, magical unicorns never have existed. Although natural one-horned animals, without magical powers, have existed (the rhinoceros) top-horned animals have been inadequately described and misinterpreted as unicorns, and two-horned animals may well have been made into unicorn-like one-horned animals.

The unicorn myth

Of all the fabulous beasts, the unicorn is special in that it is very beautiful, and has no interest in man.

It is the composite of power and purity, force and love, of strength and righteousness. Bigger than a horse, as powerful as an ox, and armed with a single horn over a metre long, it is a noble beast that symbolises true and deep love. The single horn is bright and so sharp that it pierces flesh with ease. And the unicorn itself is coloured, with a pure white body, and the horn black, white and crimson from bottom to top.

The unicorn is a noble creature, living alone with no need of man. It lives far away, in deserts and on the tops of



Mary Evans

Unicorn from Münster's Cosmographia, 1543

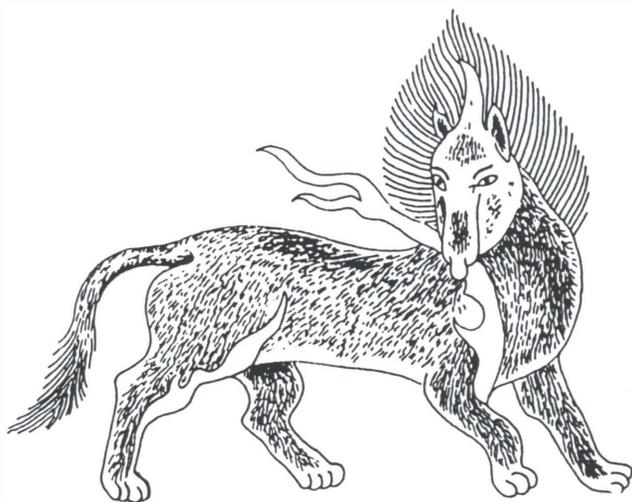
mountains. The unicorn is powerful, too powerful for any man to hunt. If desperately outnumbered and cornered, the unicorn will leap from a cliff to land impaled upon its horn—unharmd, to then run away to safety. But the unicorn may be taken by trickery and guile. Use a pure lady, young and innocent. A virgin is recommended. Dress her with care and seat her in a pretty glade and wait: a sweet song may help.

The unicorn is noble;
He keeps him safe and high
Upon a narrow path and steep
Climbing to the sky;
And there no man can take him;
He scorns the hunter's dart
And only a virgin's magic power
Shall tame his haughty heart.

Mediaeval German folk-song

The unicorn is a creature of love. It is too powerful for man, but is enchanted by a woman's capacity for love. The unicorn passing by a virgin or young maiden cannot help but pause, to approach, to lay quietly with his head resting lightly in the lady's lap.

Your unicorn is now vulnerable, and may now be attacked. But do not aim to capture him, because no man can restrain such power. All you may do is take his life. As he



The Chinese unicorn, or k'ilin

lies gentle and quiet, without warning thrust in your sword with all your strength. And again, and again. You may yet fail, and the beast may still escape. But you may just succeed, you may still the savage heart, the strong limbs, the beauty and the glory.

The horn is magic, destroying all poison. Place your food or drink into a cup made from the horn and however poisoned it may have been it will now be safe to eat. Or add a sliver of horn to your drink to purify it. Just place a horn on the table and any poison nearby will make the horn 'sweat'. A little horn ground and taken (called 'sugar of the horn') will even cure sickness. Beat and boil the horn in wine and your teeth will be made white and clear.

The Chinese unicorn

'Science' is associated with western democracies. But the lack of science is not so restricted. On the other side of the world the Chinese had their unicorn too. The Chinese unicorn, the *k'ilin*, is a most significant animal, the foremost of all the 360 animals on earth. The unicorn has the body of a deer, the tail of an ox, the hooves of a horse, a short, fleshy horn and five-coloured coat.

The Chinese unicorn is so gentle that it takes care when walking not to tread on the tiniest of creatures, and will not eat even grass, but only dead plants. To harm such a peaceful beast is naturally most serious; even to just come across a dead unicorn is unlucky. The Chinese unicorn lives a thousand years, and is a good omen. One of four magical propitious animals (with the Dragon, Phoenix and Tortoise) the unicorn's appearance foretells the birth of an honourable ruler.

Apparently in the 13th century one of the Emperor Ghengis Khan's armies was turned back from its path of conquest by a *chio-tuan*, a variant of the Chinese unicorn, announcing 'It is time for your master to return to his own land'.

The source of the myth

It all started with the Talmud, where a great ox with one horn was the lead animal in Adam's herd, and was Adam's first sacrifice to God. Come the flood the poor unicorn's huge size meant that there was no room for it to join Noah's refugees in the Ark, and the unicorn had to swim along

behind occasionally resting the tip of its horn on the Ark.

Christians found the idea of the unicorns' extinction in the flood repugnant. Extinction itself was considered blasphemy—no all-powerful God would allow one of His creations to be lost. The myth was established and given substance by Ctesias, a travelling, writing Greek physician; he went as court physician to Persia in 416 BCE. Ctesias described an Indian animal as being larger than a horse and white, with a dark red head and dark blue eyes. A single horn 450 mm long came from the forehead, the bottom pure white, the upper part sharp and crimson and the middle black. And this horn either powdered or made into a cup, protected from poisons, convulsions and epilepsy. This animal sounds mainly like the Asian rhinoceros, with part Indian wild ass, part Tibetan antelope, and a lot of imagination and gullibility. Indeed it the sort of account we would expect from second-, third-, and more, hand accounts of traveller's tales, each re-teller eager to impress others of the wonders they have seen.

The authority of the Bible

On several occasions when writing in the Old Testament about the strong and untamable wild ox the authors had used the Hebrew word *re'em* or oxen. But the Jews of Alexandria translating these books into Greek (in about 250 BCE) substituted the Greek word *monokeros*, or one-horn. In Latin this became *unicornis*, (*unus*, one; *cornu*, horn). The dominant English translation of the Bible, the Authorised (King James) Version of 1611, widely used by the Protestant Churches, continued the use of 'unicorn' (although the Revised Standard Version has reintroduced 'wild ox'). For example:

God brought them out of Egypt; he [Israel] hath as it were the strength of a unicorn. (*Numbers 23:22*)

But my horn shalt thou exalt like the horn of a unicorn: I shall be anointed with fresh oil. (*Psalms 92:10*)

Will the unicorn be willing to serve thee, or abide by thy crib? Canst thou bind the unicorn with his band in the furrow? Or will he harrow the valleys after thee? (*Job 39:9-10*)

This mistranslation was due to the Alexandrians' ignorance of the wild ox (from which modern domestic cattle are descended), in their time having been hunted to rarity, but knowledge of the Indian single-horned rhinoceros. Also the influence of early Assyrian and Persian artistic style where oxen were pictured only in profile, with only a single horn visible, contributed to the misinterpretation. The original authors and editors of the Bible had no intention of implying that the *re'em* had a single horn, as demonstrated by their use of the plural horns in 'the horns of the unicorns' (*Deuteronomy 33:17*); they were just inadequately describing an animal that was so familiar to the original authors and readers that no description was needed or given, and having trouble with an appropriate translation for its name.

Now the wild ox was massive—nearly seven feet tall with tremendous strength and ferocity. And these attributes came to be associated with the mistranslated unicorn, especially so when the wild ox became extinct in the 16th century.

Personal experience of travellers

Early descriptions of the Indian rhinoceros, some by eye-witnesses and others based on hearsay, bolstered belief in the unicorn. One of the best and most accurate is from Pliny the Elder:

The Orsaean Indians hunt an exceedingly wild beast called monoceros, which has a stag's head, an elephant's feet, and a boar's tail. The rest of the body is like that of a horse. It makes a deep lowing noise, and one black horn two cubits long projects from the middle of the forehead. This animal, they say, cannot be taken alive.

Marco Polo, the explorer of Asia, wrote in 1298:

There are wild elephants in the country and numerous unicorns which are very nearly as big.

Marco's 'unicorn' was actually the rhinoceros, an animal new to Europeans. The single-horned rhinoceros certainly fit this usual description of the unicorn as far as power goes, and the rhinoceros is the only animal with a central horn. Though of course the rhinoceros' horn is nowhere near as long as a metre or so, and the colour is wrong. In fact the rhinoceros was a great disappointment for unicorn-hunters, being greatly ugly and unattractive in its habits. Again from Marco Polo:

They delight in living in mire and mud. It is a hideous beast to look at, and in no way like what we think and say in our countries, namely a beast that lets itself be taken in the lap of a virgin. Indeed, I assure you that it is quite the opposite of what we say it is.

Similar stories from many travellers were collected by Charles Gould in his *Mythical Monsters* (1886). The number of accounts of unicorns suggests that maybe the unicorn is real, but the discrepancies between these accounts argue that they could not be based on the same, common animal. Gould suggested that possibly the animals described were recently extinct, with the descriptions having been corrupted by poor memories and errors in their retelling. Another possibility offered was that the unicorns had been produced as hybrids, between horses and deer. And thirdly, Gould acknowledged the contribution of 'embroidery of fancy, designed to enrich and adorn an article esteemed rare and valuable'.

The authority of the New Testament

The authority of the Christian Bible was enough to inspire belief in the unicorn as a real animal. This belief was strengthened in the Middle Ages by the European Christian tradition of the Bestiaries: natural histories written to glorify God, to reveal His purpose in His created animals. The

Bestiaries portrayed the unicorn as small and very fleet with a great shyness of man, and fascination with the beauty and love of maidens. We also have the symbolic representation of Jesus Christ as the unicorn. Many times the scene of a unicorn (Jesus Christ), small (humble) and with a single horn (the unity of God), resting his head (the Incarnation) in the lap of a virgin (Mary) and about to be killed (the Passion) by a hunter (the Holy Ghost) was exploited. Alternatively this pretty picture is an allegory for sex to some. Says Willy Ley: 'After all, what is white, dark at the base, and tipped with red, and loses its power in the lap of a virgin?'

With such Biblical and Church authority supporting the personal experience of traveller's anecdotes the unicorn was accepted as real throughout the middle ages. Edward Topsell's 16th century *Histories of Beasts* bases its argu-

ment for the existence of unicorns on a quotation from the Bible and the literal truth of the Bible: 'Likewise, in many other places of Scripture, we will have to traduce God, Himself, if there is no unicorn in the world.'

Elaboration by rationalism

Also popular, from 3000 BCE to the present day, has been the motif of a lion and a unicorn fighting. This has been explained as representing the overthrow of an older matriarchal moon-worshipping society (the unicorn) by a patriarchal sun-worshipping society (the lion). Or, the succession of spring (with the vernal equinox in the zodiacal sign of Taurus) by summer (with the summer solstice in Leo). The variety of shapes of the unicorns in these illustra-

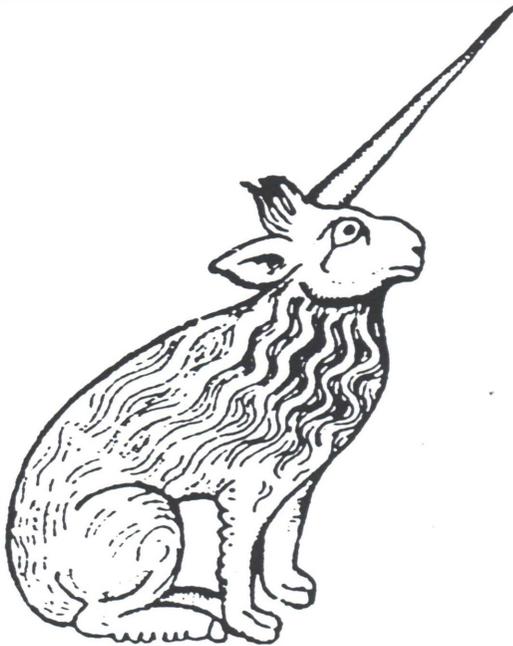


Unicorn from the British Coat of Arms, 1693

tions, as though bulls, antelopes and goats had been the models for different artists, suggests the lack of real unicorns on which to base the artwork, or even as the basis for a consensus as to what animal a unicorn resembles most.

British Knights returning from the Crusades brought back tales of sightings of wild antelopes native to the middle east. These antelopes have their paired horns set so close together so that they appear as a single horn when seen from the side. With the horn itself as a souvenir (one fine example is still to be seen at the abbey of St Denis, and another in King Edward's collection at Buckingham Palace), and copies of local art showing the animals in profile, the idea of a single-horned ('unicorn') animal was not far removed. Supported by the authority of the Bible, these crude sketches and memories of glimpsed sightings became part of British heraldry.

The unicorn features on the crest badges of the Scottish clans of Cunningham, Stewart of Appin, Ramsay and



Unicorn from 13th Century French illuminated manuscript

Oliphant and Melville (and as a supporter for the arms of the City of Bristol). When Scotland was united with England and Wales in 1603 one of the two unicorns from the Scottish royal arms joined the English lion (displacing the Welsh dragon) on the new British coat of arms, and is still there today, complete with collar and chain tethering the unicorn (symbolism for England's domination of Scotland). This parochial (English) nationalism persists in the nursery rhyme:

The Lion and the unicorn were fighting for the crown,
The Lion beat the unicorn all around the town.

This may have been inspired by this older account by Spenser in his *Faerie Queen*:

Like as the lyon, whose imperial powre
A proud rebellious unicorn defyes,
T'avoide the rash assault and wrathful stowre
Of his fiers foe, him to a tree applies.
And when him running in full course he spies
He slips aside; the whiles that furious beast
His precious horne, sought of his enimy,es,
Strikes in the stroke, ne thence can be released,
But to the victor yields a bounteous feast.

Intuitive belief in the medical benefits

The unicorn has been based variously on the bull, antelope, goat and horse, with solid or cloven hooves. In Moslem countries it was often represented as a dog or wolf. Although the body varies, the horn is relatively standardised as long, straight and slender, with spiral markings. This suggests that while the artists' model for the body varied, the horn was inspired for all by the same structure: the slender, straight tooth of a male narwhal. (The rhinoceros' horn has a wider base, is shorter, and slightly curved.)

The narwhal is an aquatic mammal (an air-breathing relative of the whales) living in the arctic seas. From time to time a dead narwhal would be carried south by the currents to be washed up on some Scandinavian or British

beach. Any local rustic finding such a carcass could hardly miss the opportunity for cash rewards: cut the tusk free and *voila*—one rare unicorn horn for sale. Narwhal horns were rare, but there were just enough to keep the legend going. The rarity of the horns must have added to their allure. Certainly they were greatly valued for their prestige, for their medicinal powers, and for their anti-poison properties. Not surprisingly only kings and princes could afford even a little one. The king of Denmark in 1600 was so very rich and powerful that he sat on no less than a throne built of unicorn horns.

The unicorn horn was known as the 'alicorn'. Many different horns, from black bucks, other antelopes, and so on, were passed off as alicorns wherever a profit could be made. The 'true' alicorn, known as *unicornum verum*, was found in the ground. These are actually the enduring tusks of long-dead mammoths, and were greatly prized (until doctors and patients lost their faith). The false alicorn, *unicornum falsum*, from the narwhal and available in larger quantities, was strictly distinguished in northern Europe.

The value of the unicorn horn lay not just in its rarity, beauty or mystical associations, but in its reputed medicinal potency. St Hildegard in the 12th century first ascribed magical medicinal properties to the unicorn. These powers were later transferred from the animal's body to its unique horn. It was the treatment of choice for epilepsy, impotence, barrenness, worms, the plague, smallpox, and other diverse ills.

The unicorn horn turned bad to good: eat a little finely-powdered horn and almost any disease would be cured, or fashion a cup from the horn and any poison in your drink will be neutralised. As to the price of a unicorn horn, some valued it weight for weight as equal to gold. Others valued it at ten times their weight in gold. In Shakespeare's time one then at Windsor Castle was valued at £10,000.

In China the unicorn was the Asian single-horned rhinoceros, and the rhinoceros' horn was greatly treasured. It is still believed to have some of these properties today, for its aphrodisiac powers. Indeed, the desire for the aphrodisiac properties of rhinoceros horn, and the willingness to buy it for exorbitant amounts of money, is a major incentive for the illegal hunting threatening the continued survival of the species.

Intuitive belief in the unicorn

We have then the personal experience of travellers, the authority of the Bible, and rational argument producing support from other areas such as the zodiac. What is the individual left with other than intuition? Do you believe in the unicorn or not? Lewis Carroll parodied the power of intuitive belief in *Through the Looking-Glass*:

...and he [the unicorn] was going on, when his eye happened to fall upon Alice: he turned round instantly, and stood for some time looking at her with an air of deepest disgust. 'What - is - this?' he said at last. 'This is a child!' Haigha replied eagerly. . . 'We only found it to-day. It's as large as life, and twice as natural!' 'I always thought they were fabulous monsters!' said the unicorn. 'Is it alive?' 'It can talk,' said Haigha solemnly. The unicorn looked dreamily

at Alice, and said, 'Talk child.' Alice could not help her lips curling into a smile as she began: 'Do you know, I always thought unicorns were fabulous monsters, too? I never saw one alive before!' 'Well, now that we have seen each other,' said the unicorn, 'if you'll believe in me, I'll believe in you. Is that a bargain?' 'Yes, if you like,' said Alice.

Science: test the medical claims

In the 17th century medical sceptics (led by sceptical Renaissance Italians) doubted the pharmaceutical value of the unicorn's horn. With the placebo effect recognised as the 'cause' of many claimed cures, doubt entered. With the seeds of doubt, doctors and their patients lost their faith. Without faith, the unicorn's horn was valueless. Serious books established this opinion and its use declined. Powdered unicorn's horn had been included in the *British Pharmacopoeia* for nearly a hundred years, from 1651 to 1741, but was omitted from the 1746 edition.

Science: repeat the observations

The reality of the animal diminished as the continents were explored without the unicorn's home being discovered. The explanation of the mystery of the unicorn's horn began with the realisation that Columbus' West Indies, and America, are not India, and the subsequent search for the North-West passage to India. Those brave sailors exploring the northern Atlantic and Arctic oceans saw the living narwhal, and their descriptions exposed the narwhal's tusk as the major source of the unicorn's horn. At about the same time the past existence of mammoths as the source of *unicornum verum* was being appreciated.

Disbelief in the unicorn spread slowly. The recognition of the narwhal did much damage to the legend. And the exploration of the dark continents left less and less land for the mythical beast to survive in. The fundamentalist believers in the infallible Bible clung to the unicorn rather than accept that any word in the Bible may be wrong. Nevertheless, the unicorn's decline was well under way by 1700, though disbelief in the medicinal powers of the unicorn's horn took a little longer.

Scientific deduction and experiment

In 1827 Baron Cuvier, a prominent and respected zoologist, declared that a unicorn is biologically impossible. His reason was that in all cloven-hoofed animals the separate bones making up the skull meet and fuse in the middle of the forehead; this junction is called a 'suture'. Because the bony horns of cattle, goats, and others, grow out from the skull bones, and because such an outgrowth could not arise from a suture, Cuvier declared the single-horned animal impossible. (The rhinoceros does not count here because its horn is not bone, but very densely compacted hair.)

Cuvier was wrong, however, about how the horn grows. Horns do not grow out from the skull bones. Instead they grow from a 'horn bud' in the soft tissue covering the skull bones. The horn grows from this bud forward to form the horn, and backward to fuse with the skull bones behind. With this pattern of growth the type of skull bone behind the horn bud, suture-line or not, may not be important; maybe the growing horn will fuse just as well with sutured

bones as in the middle of the bone.

Dr W Franklin Dove working at the University of Maine tested this possibility in 1933. Dove anaesthetised a day-old Ayrshire bull-calf, removed its two horn buds, and re-inserted the horn buds together in the centre of the forehead over the suture. Instead of the pair of curved horns typical of Ayrshires, this animal grew a single, very straight horn, curving slightly upwards at its tip. And, this horn was pale gray at its base and black at its tip. The similarity to the ancient descriptions of mythical unicorns was uncanny.

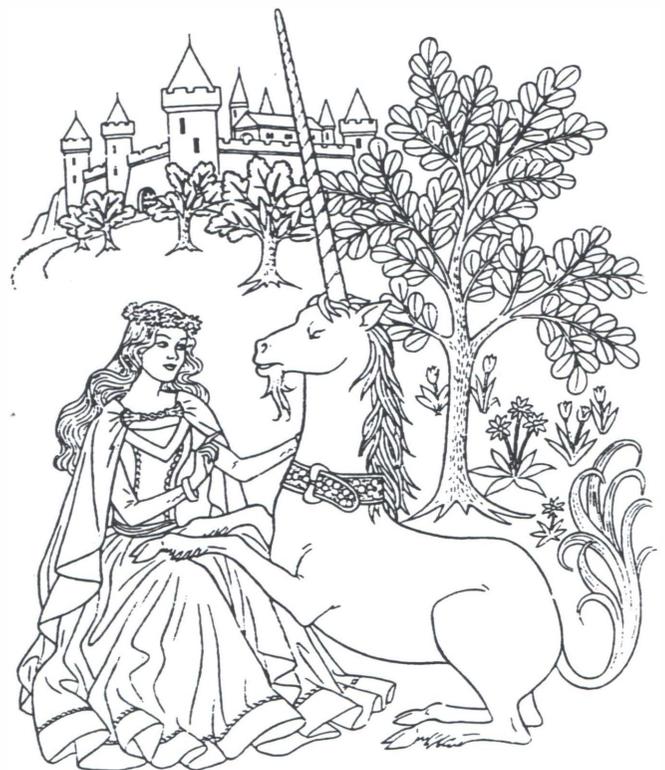
Unknown to Dove a few years earlier Dr Odell Shepard had described the production of 'unicorns' by a similar operation by African Dinkas and Karrirs using cattle, and by Nepalese using sheep. One of their reasons for doing this was apparently to mark the leaders of their herds. Maybe they had made unicorns? And maybe some of these animals had been traded to Europe where they had inspired the descriptions by the ancients such as Pliny?

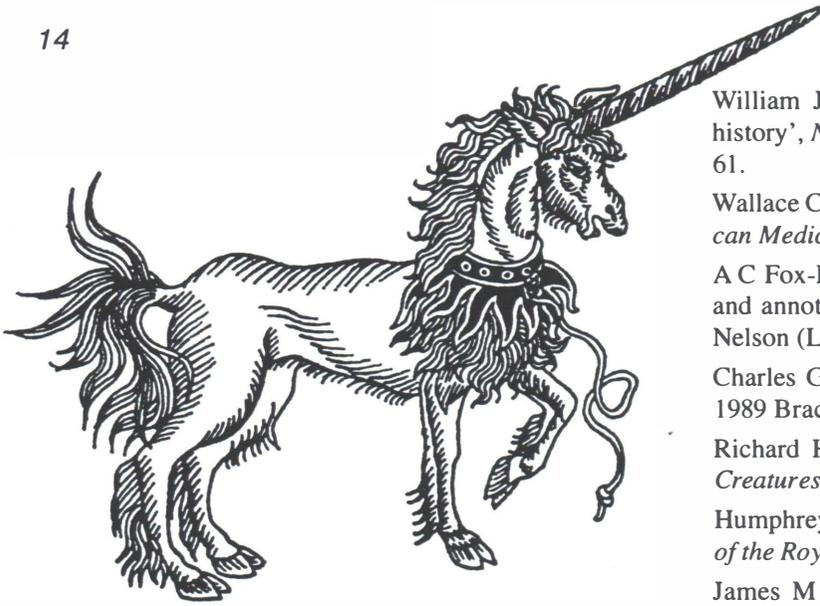
In 1984 the USA's Ringling Brothers Circus exhibited four goats with single, central horns as 'living unicorns'. These may have been animals created surgically by Dove's method. Animal rights activists protested.

Conclusion

We have seen how personal experience, intuition, rationalism and authority had all contributed to the unicorn myth. And how then sceptical, untrusting science, with its need for the repetition of observations, its ability to deduce, and its ability to test claims and deductions by experiment, has reduced the myth of splendid magical animals to man-made leaders of the herd.

Of all the ways of 'knowing', of personal experience, intuition, rationalism, authority and science, only science tests its knowledge. Only with science is the unreliable knowledge discarded and the reliable knowledge conserved.





Science has been criticised for its production of false concepts, and for its delays in discarding its false concepts, but then only science does test its concepts, and only science does discard those found to be false.

The lack of any reality to the mythical unicorns has been so evident for some that they have used the unicorn as the epitome of an idealistic animal 'totally insulated from all exogenous rhythms', as a stand-in for the 'null' hypothesis; hence its appearance in a 1957 research paper 'Biological Clock in the unicorn'.

Is then the final fate of the unicorn? To have been reduced to a classical non-animal for the use of theoretical biologists? No, the solitary power of this beautiful animal with its unbridled love of innocence will continue in our myths.

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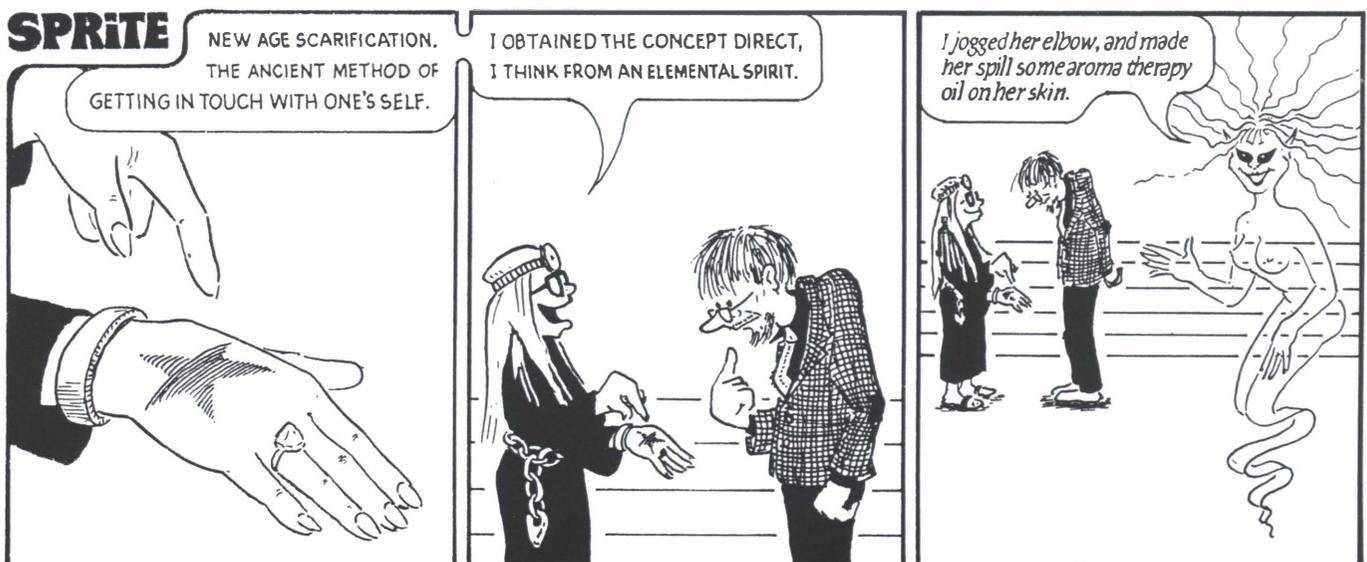
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The Mystery of Me

Charles Ward

Thoughts on the nature of consciousness

MORE THAN SIXTY YEARS AGO the schoolboy answering to my name stood up in class, summoned by the teacher to expatiate upon a passage of some English prose which had just been read aloud.

It happened to be his favourite subject and therein lay a trap, for he was inclined to echo the elegant and dated language of the classic books. Intending to explain that he was not acquainted with what the author had in mind, he began: *Unconscious as I am...*

As you can imagine, his further observations were unheard as the entire class exploded in unseemly merriment. When the schoolmaster had restored order, *Sit down*, Ward was his weary request, with which the red-faced youngster ruefully complied, the shamed possessor of a lifelong engram, as you see.

Of course the remark, even had it been completed, was utter nonsense. I can see that now. The basis of being a self, a person, someone I think of as *I*, is consciousness. However, as John Clarke so admirably expressed in an article he wrote ('Dissecting the Soul', *The Skeptic*, 7.6), inseparable requirements for personality are a living body and one particular function which the organism sustains—that of memory. Take either away and there is no longer any evidence that the *person* exists.

Clarke reminded us that, as you can't be the same thing as something you own, to talk about 'my soul' is absurd. Is it not also nonsensical to speak of 'my body'? I should certainly not press a claim to ownership, merely (with the assistance of Occam's razor) to sole occupancy. I should not know what to make of myself were it not for the

physical machinery whereby the phenomenon of me was produced and is sustained. Which leads to the apparently bizarre, but interesting, conclusion that, in a strict sense, no person is ever unconscious. The body sleeps, or is at a much dimmed-down state of awareness (though still responsive to stimuli), but the *person* has been turned-off completely (there being no sense of *I*-ness).

The *Sunday Dispatch* once ran a story about a man who had not slept for forty-six years and who claimed to have felt none the worse for not sleeping. He would simply relax for an hour or two and spend the time reading books and magazines. The rest of us have to accept the fact, whether we like it or not, that 'our' bodies (we mustn't get bogged down with semantics) require about one-third of available life-time to do their sort of battery-recharging.

I appear, therefore, to be a string of blips—flashes of self-awareness occurring at intervals. What I know as me could be described as a strip of self-awareness in time between the parameters of birth and death, punctuated by episodes of extinction. So why should a final extinction, turning out to be permanent, give me cause for concern? Extinction is happening to me all the time—well, usually at regular nocturnal intervals—and I am quite accustomed to the fact. I cannot call it an experience, since I never notice the actual moment when I am no longer here (or anywhere apart from dreamland). If I don't recall it, *I* wasn't there, though 'my' body was.

I-wash!—do you say? Well, could you explain where I'm mistaken?

Another thing. I keep, out of habit, referring to 'my



memory'. But can that be right? It was once a useful function, a means of recalling all sorts of things, whenever I wanted. No longer. And not only that. Memory has become not merely unreliable, but also, it would seem, frustratingly hostile.

You would not question, I am sure, that there is a lifetime of knowledge and experience locked up among those neurons in 'my' head. From time to time, bits come floating to the surface of consciousness, pieces from the past three-quarters of a century, fresher than yesterday. So I know that 'my' memory has not vanished. Everything is there and in working order.

Except that the genie—if you will excuse the fanciful metaphor—who responded instantly (well, more or less) whenever, in a manner of speaking, I rubbed my chin or tapped my brow, has apparently retired from full-time employment. And, if that's not enough, this fabulous power, able to enlighten with the speed of light, has not lost the talent but has developed—or so it would appear—a somewhat malicious streak.

Brains, I know, don't work like computers, although you hear people talk as if they did. No keys to press, no silicon chips, printed circuits, disks. But they do *store*. How, is a mystery. Do thoughts take up space?

And brains can *retrieve* what has been stored. The other day I was shown a photograph of someone I had never met. It occurred to me that her face bore some resemblance to that of a film actress long vanished from the silver screen. Was it the shape of the chin? I didn't recall the film star's name but believed there was an 'L' in it. The matter was of no importance. I continued with what I was doing. A few seconds later, totally uninvited, the name popped up complete with the imagined 'L'. Now, if that's not marvellous, I should like to know what is.

In what vast library was selection made? (I was an addict.) How many 'L's were scanned in association with pictured chins of numberless actresses, not to say actors (I might have been mistaken about the gender), that I had gawped at in a cinema, before a particular combination, among this endless film parade, brought about some soundless acknowledgement among those neurons, releasing the solution to the puzzle like a packet from a slot-machine?

That's weird, but so is the way I am reminded of a lot of trivia in which I am not in the least interested. Given a task of immediate importance such as telling me where to locate the screwdriver I had in my hand this morning and now require to use, that's a different matter. Into consciousness come persuasive suggestions where the tool could possibly have been left, as well as a number of locations which seem most unlikely. *But you never know*. Was that a subliminal cackle? I spend half the morning searching in vain.

I try repeatedly to think of what I was doing when the screwdriver was in my hand. I demand this vital information, but it is callously denied. Dammit, I know that the information is stored as to where exactly I should look and that instant recall is possible. But 'my' brain is against me—or, at any rate, this retrieval function is. The tool is not lost. I am being prevented from finding it.

Smart alects have told me that it is my own fault. That I

don't actually want to find the blasted thing. That I need an excuse for not doing the job that needs doing. That the memory genie is only doing what I have secretly wished.

The truth is beginning to dawn. It's no use going on talking about 'my' memory. It is not something I possess—rather the other way round. The real 'I' is made up of memories. Without them there is no person—just a glove puppet with another hand inside.

To return to the computer image, there is a programme built into the machine. One day, indifferent to the experiences and observations which I have been storing with persistence all my life and have invited it to retrieve on numberless occasions for my own delectation and the entertainment of my friends, it will, quietly and without compunction, delete the whole caboodle from its memory bank.

That's how I shall be the death of me.

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The Eyes that Spoke

Martin Kottmeyer

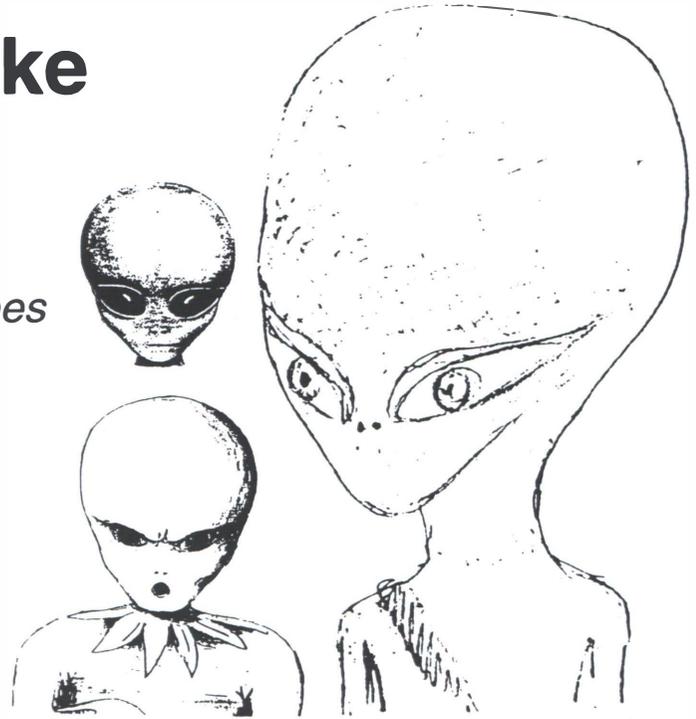
Part one of a two-part investigation into earthly origins of alien stereotypes

IN HIS FINAL BOOK *Aliens From Space*, Donald Keyhoe briefly recounted his involvement in starting the investigation of Barney and Betty Hill that eventually led to John Fuller's publication of *The Interrupted Journey*, the first major work of the alien abduction mythos. Keyhoe was mystified more than anything else by the hideous faces of the aliens. The heads were oddly shaped with no ears, and compressed noses and mouths. Worst of all were long slanting eyes which extended along the side of the head creating a sinister look. 'What caused the subconscious minds of these two people to create these pictures from their imaginations has never been fully explained' [1].

Keyhoe could not accept the case 100%, he later admitted in a 1975 interview, but he did not reject it either. As mysteries go, Keyhoe's question seemed safely rhetorical. Who knows why anyone dreams of one monster and not another? How would anyone even begin to investigate such a problem?

What could not have been foreseen was how serendipity might step in to break this minor mystery. The local PBS station a few years ago decided to rerun the old TV series *The Outer Limits*. It was one of the most visually amazing programs of my youth, and I eagerly tuned in to experience once more such sights as the horrifying Zanti misfits, the bee girl, moonstone, Borderland's ionic gate, the downshifting time machine of 'Controlled Experiment,' and David McCallum's evolution into a megabrain.

It was during the showing of the episode 'The Bellerio Shield' that I felt the uncanny frisson of déjà vu. The eyes of the alien were unusually long and wrapped around the side of the face. It quickly hit me these eyes were just like the wraparound eyes that were drawn in *The Interrupted Journey* and the later more detailed drawing the Hills did in collaboration with the artist David Baker [2]. Though I couldn't articulate it at that instant, there were other similarities which had contributed to the sense of a close relationship: no ears, no hair, no nose, and a cranium shaped like a bullet tilted backwards 45 degrees. I was excited by the possibility of a match because I was reasonably sure there were few or no other examples of aliens with wraparound eyes in science fiction cinema. Moments later, however, my excitement became subdued. It dawned on me that *The Outer Limits* was a series of the mid-Sixties and the Hill case dated to the early Sixties—1961 or 1962. 'The Bellerio Shield' couldn't have been an influence. Still, the book came out in 1966. Could the lag be significant?



After the program ended, I dug into my library for a round of late night research. 'The Bellerio Shield' aired on 10 February 1964. The Hill's UFO encounter happened in the morning of 20 September 1961. That probably should have killed the idea of any kind of influence, but the resemblance was just so compelling I couldn't shake the feeling there had to be a relationship. I reread *The Interrupted Journey*. To my delight I discovered there was no mention of wraparound eyes in the earliest account. Betty's dreams, written down a matter of days after the UFO sighting, mention men with Jimmy Durante noses, dark or black hair and eyes and a relaxed human appearance that she said was 'not frightening'. This is all quite different from the final product. The changes emerge in the hypnotic regression with Dr Simon. The most salient issue was to know when the wraparound eyes were first described. That turned out to be during a hypnosis session involving Barney dated 22 February 1964. Not only did 'The Bellerio Shield' precede Barney's first mention of wraparound eyes, it did so by only 12 days! I was immensely pleased.

I ordered the script of the show next. My thoughts were so distracted I realised I had missed the dialogue. This yielded additional evidence for the relationship. Judith, played by Sally Kellerman, is conversing with the Bifrost alien and asks it if it can read her mind. It answers, 'No, I cannot read your mind. I cannot even understand your language. I analyse your eyes. In all the universes, in all the unities beyond all the universes, all who have eyes, have eyes that speak...'. Judith, intrigued, asks how it speaks her language. It elaborates, 'I learn each word just before I speak it. Your eyes teach me' [3].

In saying all eyes speak, the Bifrost alien is conveying a truth and simultaneously dodging the human/alien language barrier by a unique dab of poetic license.

In the same hypnosis session in which Barney drew the wraparound eyes, there is this exercise in confusion: 'Yes.

They won't talk to me. Only the eyes are talking to me. I—I—I don't understand that. Oh—the eyes don't have a body. They're just eyes...' [4]. Barney's confusion about the talking eyes is one most viewers probably shared over the writer's gimmick employed by the episode's creators. The notion shared by both texts that the eyes can talk defies dismissal via appeal to commonness or coincidence. By any measure, the case for influence here is not just satisfactory, it is exemplary. At least one abduction researcher has granted this point [5].

The discovery of this pseudo-memory will not shock hypnosis experts. They have long been aware of the danger of confabulation in regression work. There was no reason to expect *The Interrupted Journey's* narrative to be immune from such contamination. Belatedly, Keyhoe's question thus finds itself answered with the mundane corollary that Barney had watched the science fiction/horror series *The Outer Limits* shortly before his subconscious was called upon to imagine what a scary alien ought to look like. Betty's dream aliens were too normal to justify the fear he displayed during the original UFO experience.

Barney's confabulation has other interesting repercussions. As Thomas E Bullard has pointed out, 'wraparound eyes' is a term that has become common in the abduction literature [6]. Case after case can be pointed to of people describing alien abductors with the eyes that wrap, curl, or taper around the head. Some that UFO buffs may recognise include: Carole Wayne Watts, 1967; 'Canadian Rock Band Abducted', 1971; David Delmundo's 1972 contact with the turban-sporting Ohneshto; the 1977 Langenargen abduction (a major German case); the Andreasson Affair; Harrison Bailey; South Dakota Connection (MUFON, March 1983); Paris Colorado; the Mirassol abductions; 'Jennifer'; Tom Holloway, DDS (in Boylan, 1994) [7]. Others exist, but this will suffice to indicate the influential nature of the Hill case on the history of the imagery of abduction experiences.

Before the Hills, wraparound eyes seem largely, probably totally, absent from the UFO literature. Cinematic aliens sporting wraparound eyes are similarly largely absent. But not totally. I eventually discovered one other instance. It is an unnamed mutant in the film *Evil Brain from Outer Space*, a Japanese film imported in 1964. Interestingly, one of the heads of Projects Unlimited which provided the monsters for *The Outer Limits* was named Wah Ming Chang. He was a talented sculptor and designed most of the head sculptures for the series. This may hint at cultural roots in Eastern myth or kabuki theatre, but I'm not prepared to follow the trail the distance to prove it.

The motif of the speaking eyes did not share in the popularity of the wraparound eyes. There is one example in Edith Fiore's *Encounters*. The abductee named Victoria describes aliens communicating by simply looking at each other. It is tempting to speculate that the alien bonding practices involving staring described in *Secret Life* are descended from Barney's talking eyes, but there are many complicating factors such as strong hints of *Star Trek's* Vulcan mind meld and a rich cluster of psychological symbolisms in staring eyes, such as love, intimacy, super-vision, contempt, and predators, that seem more rewarding

avenues of interpretation. The paucity of speaking eyes probably reflects the poor nature of verbal memory compared to visual memory. The confusing nature of the idea of talking eyes probably doesn't help. It may also be that hideous eyes have a defining role in creating an appropriate paranoia-inspiring iconography. As Keyhoe apparently sensed, they are more believably alien. The eyes say 'Them.' To the psychosocial theorist, the eyes whisper 'Us'.

Postscript

I enjoy noting that I found one other instance of speaking eyes in recent months. I happened to watch an episode of *Unsolved Mysteries*, which had a segment on the 'Allagash Abductions'. They were offering a re-enactment of the event, very atmospheric, a spooky drone and distant siren in the background while the Jack guy, very tranced out, intones this: 'They're saying things—they're explaining things—with their eyes. In my head—they're saying: "Don't be afraid..."'. I cracked up. As it happened I had a copy of Fowler's book on the subject, but had never got around to reading it. It turns out that one of the other Allagash guys, Charlie, also mentions an alien communicating in this mode: 'It was almost like he said it with his eyes' (page 121). The other two abductees don't mention this; indeed one even deflects a leading question by the questioner—Ray: 'What do the eyes say?' Jim: 'I, I can't make it out, but there's a noise. I hear a noise'.

Needless to say I found all this rather odd and amusing given the fact that all this tracks back to the *Outer Limits*. I'm hopeful this televised event leads to more speaking eyes in the future.

Notes

1. Keyhoe, Donald, *Aliens from Space*, Doubleday, 1973, pp. 243–5.
2. 'New Drawings of Hill Abductors', *UFO Investigator* (April 1972), p. 34.
3. *The Outer Limits*, 'The Bellerophon Shield', Scene 24.
4. Fuller, John. *The Interrupted Journey*, Dell, 1966, p.124.
5. Bullard, Thomas E, 'Folkloric Dimensions of the UFO Phenomenon', *Journal of UFO Studies* #3, 1991, p. 40.
6. Bullard, Thomas E. *UFO Abductions: The Measure of a Mystery*, FFUFOR, 1987, p. 243.
7. Kimely, Tony L. 'Carroll Wayne Watts: Contactee, Hoaxer or Innocent Bystander,' *Official UFO*, 1, #11, October 1976, p.33; *Flying Saucer Review*, 29, #3; Stevens, Wendelle. *UFO Contact from Undersea*, Stevens 1982, p. 148; Schneider, Adolf & Illobrand von Ludwiger. 'Brilliantly Shining Objects and Strange Figures in Langenargen', in *Interdisciplinary UFO Research MUFON-CES Report #11*, 1993, p. 341; *Andreasson Affair*, p. 25; Rogo, p. 130; *MUFON Journal*, March 1983, p. 3.; *UFO Contact from the Reticulum Update*, p. 341; *UFO Abduction at Mirassol*, p. 298; *Journal of UFO Studies* #3, 1991, p. 100; Boylan, Richard J & Lee K. *Close Extraterrestrial Encounters*, Wilflower, 1994, p. 99.

Martin Kottmeyer lives in Carlyle, Illinois, and writes widely on 'alien abductions' and ufology.

This is an updated version of an article which originally appeared in The REALL News. In our next issue, Martin Kottmeyer investigates the possible origins of the alien image made famous by Whitley Strieber's book Communion.

Skeptic at Large

Wendy M Grossman

The futility of trying to 'categorise' skeptics

ONE OF TOBY HOWARD'S *Psychic Diary* columns convinced me that I really ought to take a brief sojourn to read *Psychic News*. I've found it remarkably entertaining over the last couple of months. There was the case of the two mediums who were squabbling over a single 10,000-year-old spirit. There was the frustration over a Kilroy program they criticised for being loaded against them; from the sounds of it, though, the chief problem was the medium who was channelling a spirit called 'Kung Fu'. Now they're happy about a program to be shown next Friday—which suggests we ought to get out and tape it to see how good they can be when we're not around to upset them. Perhaps they'll manage to reach the giddy heights of that David Frost infomercial-style thing from a couple of months ago.

Normally I'd have let all this go without comment. Except that this week's issue (29 April 1995) has a long, back-page feature on 'The psychology of scepticism'. (Obviously they can't mean us, since we don't spell it that way.) I thought it might be worth running through some highlights of this piece, which 'delves into the mind of the hard-bitten sceptic', contributed by Dr Victor Zammit, which *Psychic News* describes as 'spokesman for the Association for the Scientific Investigation into the Afterlife (ASCIA), and solicitor of the Supreme Court of New South Wales, Australia'.

Zammit comes up with eight categories of skeptics: those who misuse power or money; those who have a vested interest in maintaining the consumer society; those who seek advancement and funding through traditional universities; academic psychologists; thinking skeptics who are disgusted with the cruelty and intolerance of religion; those brought up as atheists; career professional skeptics; unclassified skeptics who refuse to investigate.

Let's see if I can give examples from a few of these categories. Corrupt policemen bash psychics because they're denying there is an afterlife in which they will be called to account. Big record companies and publishers bash psychics because if we became spiritually attuned we would buy soothing music instead of 'discordant commercial' stuff and psychic books and magazines instead of daily newspapers. I won't give examples from the next four—they're pretty obvious. 'Pathetic creatures' like James Randi pander to the media's hunger for personalities and quick conclusions, and also use the weakest cases to attack the whole field—oh, and he also claims that if you investigate any well-known debunker you will 'very likely find they

are getting funds from one of the secular financial sources mentioned above' (that is, universities, major manufacturers, the media, and so on). Finally, unclassified skeptics are all those other closed-minded people.

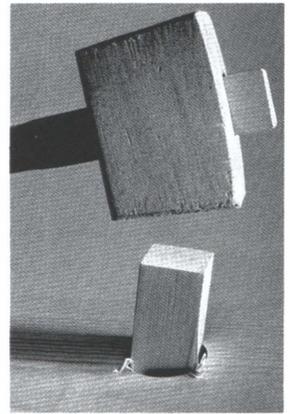
Now, my world naturally revolves around *me*, so my first impulse was to see if I could recognize myself in any of these categories. I mean, I usually think my general skepticism comes from things like reading Asimov's critique of astrology at an early age, and having a good science education generally. This seems to apply to most skeptics I know; the rest mostly seem to have studied magic. Zammit also really never comes to grips with the notion of partial skeptics—people who perhaps reject spiritualism but believe in astrology; or reject astrology but are convinced there's something in alien abductions; or think alien abductions are ridiculous, but trust homeopathic remedies to deal with hay fever. But that's another matter.

So: no mention of science education. No mention of magic. Am I being paid by academic institutions, particularly psychology departments, whom I don't want to offend? Not that I know of. What about those big publishing and recording interests? Well, I do get paid sometimes to write for newspapers, but it's just about always about computers. I'm not sure why this should be. Come to think of it, most of the features I see in newspapers are pretty heavily pro-paranormal. As for book publishers, anyone who's ever tried to sell a skeptical book will tell you it's a hell of a lot easier to sell them a treatise on 'Healing Contacts with Penguins' or 'Angels in our Midst'. Recording, now that's an interesting one. In my days on the folk scene, I remember we used to complain a lot about those commercial record companies who (a) never recorded any of us and (b) when they did demanded we do it all their way. Well, it was their money. But we don't like the New Age white noise that they're releasing now a whole lot better.

So, there you go. It would be interesting to do a survey and see how many readers of *The Skeptic* actually fit these categories of Zammit's. Anyone out there want to coordinate something like that? After all, if we're going to be really skeptical, we should include our own motives and dis-beliefs. Shouldn't we?

Wendy Grossman is the founder of *The Skeptic*, and a writer and folksinger.

We regret that inauspicious entrails have prevented the appearance of this issue's Psychic Diary. It will return in the next issue.

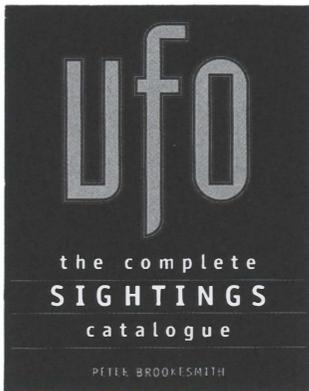


Reviews



Beneath the mythmaking

Peter Brookesmith, *UFO: The Complete Sightings Catalogue* (Blandford, 1995, hardback, 176 pages, £14.99)



This is the book I would put into the hands of anyone who wanted to know what the UFO phenomenon is, and why anyone should take it seriously. In many respects it is the best book on the subject ever compiled.

What makes it so is the author's conviction that UFO research starts with the *UFO experience*: sightings by individuals who have genuinely

seen something anomalous and honestly reported what they perceived. The fact that 'seen' is not synonymous with 'perceived' is the paradox which underlies the phenomenon and gives UFO research its fascinating complexity.

Brookesmith is a skeptic—but in the best sense; he is not a blind debunker, but an open-minded observer who recognises that there are many cases which continue to challenge explanation even after extensive investigation. He is himself a UFO experimenter: in 1993 he saw—as did many others—two flying objects which he was unable to identify. Only long and hard digging revealed that what he had seen was a Russian rocket re-entry.

But not all sightings can be so positively determined, and Brookesmith is committed to no blanket explanation. Secret military artifacts; folklore, psychosocial factors, unrecognised natural phenomena—all make their contribution. The one 'explanation' for which he finds no evidence is intervention by otherworldly beings, whether gods, demons or extraterrestrials.

Most UFO books get bogged down in controversy, history or extravagant theory-peddling. Brookesmith's book avoids all these traps by sticking to cases, each provided with background, brief summary and an assessment. The individual cases are linked by a thoughtful and well-informed commentary which places them in a meaningful perspective. Only once is the author guilty of exaggeration, and that is in the ridiculously false title. Once the book is opened, his text is simple and factual, lucid and literate: his knowledge and judgment are evident in every sentence.

Readers who have held aloof from the UFO phenomenon, discouraged by its absurdities and exaggerations, will find that this balanced, open-minded account provides

them with good reasons to take it seriously. Those who are already involved will welcome this reassurance that they are not wasting their time. For Brookesmith demonstrates that beneath the mythmaking and the media hype lie genuine puzzles and anomalies.

Within its terms of reference, this is quite simply the best book on the UFO phenomenon I know.

—Hilary Evans

Conspiracy theory

Graham Phillips and Martin Keatman, *The Shakespeare Conspiracy* (Arrow, 1995, paperback, 230 pages, £6.99)

Shakespeare was a spy who was murdered by Sir Walter Raleigh. This may sound like one of the *Guardian's* famous April Fool jokes, but Phillips and Keatman's claim is perfectly serious and they produce a wealth of detail to support their theory.

In a well-researched piece of literary and historical detective work, the authors reveal possible links between Shakespeare and a variety of figures involved in the murkier aspects of Elizabethan and Jacobean politics. They argue that Shakespeare and his fellow playwright Christopher Marlowe worked as couriers for the Secret Service under Thomas Walsingham.

So little is known of Shakespeare's life that this claim cannot be convincingly proved or disproved, but Phillips and Keatman have found records of a 'Willm Halle' who was a secret agent at the time. They link this William Hall with the mysterious 'Mr W.H.' to whom Shakespeare's sonnets are dedicated, interpreting the text of the dedication to mean that person referred to as the 'onlie begetter of these insuing sonnets' was Shakespeare himself under the alias 'W. Hall'.

Walsingham's Secret Service conspired to discredit Sir Walter Raleigh, who spent 13 years in prison as a result. Raleigh was accused of plotting to murder James I, and one of the chief witnesses against him appears to have been a secret service agent called William Hall. Shakespeare drew up his will on 25 March 1616, a few days after Raleigh's release, and died on 23 April from a sudden, violent illness which may have been caused by poisoning. Phillips and Keatman argue that if William Hall was Shakespeare, he may well have considered his life in danger once Raleigh was free.

Phillips and Keatman provide a wealth of interesting background material. In discussing the myths which have grown up around Shakespeare's life, they reveal that much

of what is generally accepted about Shakespeare is supposition rather than fact. I thoroughly enjoyed their sceptical view of the Stratford tourist industry and their discussion of some of the better-known theories as to the supposed true authorship of Shakespeare's plays.

In three highly entertaining chapters they investigate the theories that Shakespeare's plays were really written by Bacon, Marlowe, the Earl of Derby or Lord Oxford, revealing that each of these theories depends on scanty evidence and highly dubious textual analysis. Unfortunately the same can be said of their own theory.

Although Phillips and Keatman's arguments are fascinating and persuasive, they admit that their conclusions depend largely on circumstantial evidence and a complex set of suppositions. The result is a complicated and intriguing story which would make an ideal plot for a novel, but cannot be established as fact. Having said which, the extent of their research is most impressive, and despite my reservations, I would recommend this book to anyone with an interest in Shakespeare.

—Chris Willis

The roots of chemistry

Carl Gustav Jung, edited with an introduction by Nathan Schwartz-Salant, *Jung on Alchemy* (Routledge, 1995, paperback, 228 pages, £8.99)

This volume presents the writings on alchemy of the famous psychoanalyst and student of Sigmund Freud. Other important scientists including Sir Isaac Newton have worked in alchemy, as the editor is at pains to tell us on the first page. But surely, Carl Jung, who died in 1961, was the last reputable scholar to try to draw value from the medieval alchemical literature.

Schwartz-Salant is a leading Jungian analyst with an interest in alchemy himself. He has done an admirable job of extracting Jung's comments from his complete, extensive, and scattered works. The editor has organised this opus not in order of publication or writing, but has gone to the considerable trouble of locating it under eight topical chapter headings. Thus, we have Jung's scattered thought on alchemy in logical and cohesive order. It remains nevertheless an exceedingly difficult topic to comprehend. We are therefore quite dependent on the editor's introduction to guide us through its complexities. According to Schwartz-Salant, Jung sees a developmental process at work in the transformations aimed at in alchemy, which is echoed in the growth of the psyche (page 11). Jung's special achievement is 'his remarkable ability to decipher a goal-oriented process amidst the all but unintelligible maze of alchemical texts' (page 39).

If you think of alchemy as a pre-scientific forerunner of chemistry, you are quite right. Alchemy provided some very practical inventions such as black powder and the making of porcelain. It also created a number of useful instruments and procedures, such as distillation, which were later used by chemists. It did not disappear with the growth of chemistry, however, but rather lived on as a magico-religious occult art with relations to astrology.

Jung saw the human psyche or soul, as only partially

individual, but also part of a collective or communal subconscious. He found this common subconsciousness in myth and religion. He taught that the relation between nature and psyche was not merely causal, but that there also existed connections which went beyond space and time. Jung perceived significant symbols and images in alchemy which reflected the dreams and insights of his patients. The alchemical processes of transmutation and change especially appeared to him analogous of the growth and development of the psyche.

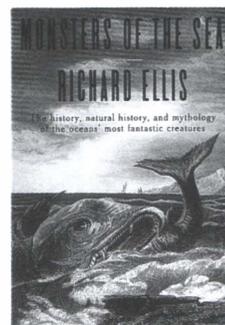
To me the whole argument sounds a lot like astrology or the interpretations of the prophecies of Nostradamus. But, who am I to argue with a towering genius of the century, a man who was professor at several Swiss universities, and received honorary degrees from around the world? I shall cite only one example which I found interesting.

A woodcut from a medieval text (Figure 8.5, page 199) shows a man making love to a woman. Jung explains this is not a species of pornography, but has only symbolic meaning, and that the action really takes place in the unconscious and reflects the way in which instinctive energy is transformed into symbolic activity. I have difficulty believing Jung since the early renaissance German inscription speaks of 'my embrace', 'sweet love' and 'you need me as the cock the hens'.

—Wolf Roder

Strange waters

Richard Ellis, *Monsters of the Sea* (Robert Hale, 1994, hardback, 429 pages, £22)



The megamouth shark, a deep-water plankton feeder, was discovered in 1976, when one of them swallowed the parachute anchor of a survey ship, perhaps mistaking it for a swarm of plankton. In Walt Disney's *20,000 Leagues under the Sea*, a giant squid attacks the Nautilus in a storm at night. The attack was originally filmed on a clear day,

but the strings of the massive squid puppet showed up against the clear sky, so the entire sequence was re-shot. Some cetologists believe that sperm whales hunt squid by stunning them with ultrasound, then collect the prey by skimming the sea floor with open mouth. A 1957 study lists fourteen instances of sperm whales getting their lower jaws entangled in deep sea cables, and drowning. This book is full of such curiosities.

Richard Ellis is a natural history artist and an avid compiler of facts, the author of 'coffee table' books like *The Book of Sharks* and *The Book of Whales*. *Monsters of the Sea* is a compilation of facts, not only scientific data but also facts about myth and fiction, since with the notable exception of sharks, most marine monsters 'began as myths, and ... acquired a corporeal reality as their true existence became known'. It is profusely illustrated, but the illustra-

tions are all black and white and small, and only about five per cent are by Richard Ellis himself.

There are chapters on the giant squid and other squids, octopuses, the Loch Ness Monster (all right, so it's not marine), sea serpents, mermaids, whales, and sharks. Over 800 sources are cited. But this is no mere scissors and paste compilation. Ellis is opinionated and witty. I giggled aloud, on a bus, at his description of a rubbishy film called *Tentacles*.

One chapter, headed 'Blobs and Globsters', concerns amorphous mounds of animal material which have turned up on tidal beaches in Florida, Tasmania, New Zealand, and Bermuda. Hard to cut though somewhat elastic, 'like cutting a car tyre', they have been identified as mounds of blubber, whale skin, shark skin, collagen tubers, parts of a giant octopus, and of course, creatures from outer space. The whale and shark identifications appear untenable. Ellis suggests that 'the authorities were embarrassed by their inability to identify the mass'. The octopus hypothesis is plausible, except that no octopus of sufficient size is known to science.

The Loch Ness Monster chapter was mostly written before the story was published of how the 'surgeon's photograph' was faked (see *The Skeptic*, 8.3, page 5), and might have needed extensive rewriting. 'Rather than modify it, however, I have to let it stand [and] include this addendum', says the author.

In fact, recent material is added without rewriting old material, throughout the book. The biology section, in the chapter on the giant squid, seems to end with 'the scarcity of hard data' and is followed by ten pages of giant squids in films and fiction. Then we return unexpectedly to biology, with news of a new collecting technique, and 'perhaps the shroud of mystery is lifting'.

If I had to make a complaint, it would be a mere niggle, that the arrangement of the book seems a bit haphazard. But anyone who is entertained by information will find this book delightful.

—Donald Room

A Fortean miscellany

Steve Moore (Editor), *Fortean Studies Volume 1* (John Brown Publishing, 1994, paperback, 350 pages, £19.99)

Fortean Times started life twenty one years ago. It was an amateur magazine reporting a broad range of weird and anomalous phenomena to a small group of dedicated researchers. Times have changed. The magazine is now professionally produced and has found its niche in the mainstream market. To its credit, the magazine still carries well-researched articles on Fortean phenomena. However, the editors are occasionally presented with worthwhile articles which are too long or detailed for the popular market. Their solution is to occasionally publish this material in a series of *Fortean Studies* books.

The first section of the book presents the remnants of Charles Fort's autobiography. It is not an easy read. The original manuscript was apparently 261 pages long, and of these, only 76 remain. As a result, the text often jumps

from one topic to another and is difficult to follow, even with the extensive notes by individuals familiar with Fort's early life. Although this manuscript may be of interest to some historians, it is difficult to disagree with Fort's own conviction that the work is not one of his greatest literary achievements.

A second set of articles contains detailed reports into classic Fortean phenomena. This includes chapters on luminous owls, mysterious airships, Devil's hoof-marks, giant octopus, crypto-bats, monstrous felines, anomalous phenomena around Lake Constance, and reports of Fortean phenomena from early Chinese history. All of these chapters present both source material and possible explanations in great depth. As well as being superbly referenced, nearly all of the chapters display the type of open-mindedness which characterises good quality Fortean research. For example, when discussing the mysterious snow prints which appeared all over Devon in 1855, Dash considers the possibilities of animal tracks, water monsters and even UFOs. The authors devote time to the types of explanations which will be of most interest to skeptics. For example, Mike Dash considers how the snow prints may have been caused by hoaxes, gypsies and religious groups. In another article, Anne Silk discusses how certain features of alien encounters (for example, the appearance of their large oval-shaped black eyes) might be explained in terms of ocular anomalies involving polarised light.

A third set of articles concentrates on individuals rather than phenomena. This includes a short biography of Joan Petri Klint, a 16th century Swedish scholar who collected and documented early reports of miracles and other anomalies. Another article discusses the life of Paul Kammerer and his Law of Seriality. The article explains the theory (devised, in part, to explain coincidences) and then charts the reactions of eminent scholars (such as Koestler, Einstein and Jung) to his ideas.

A final section of the book presents a comprehensive index to the 1993 issues of *Fortean Times*. These are indexed in several ways including names, subject matter, book reviews, places and dates, and form an invaluable resource for those who regularly consult Fortean material.

In short, all of the articles are interesting, thoroughly researched, detailed and present balanced discussions concerning the wide range of possible explanations for the phenomena in question. This is an easy field in which to 'sell out' and simply present the public with mysteries. I think the Fortean team should be congratulated for resisting the temptation and producing such a scholarly tome.

—Richard Wiseman

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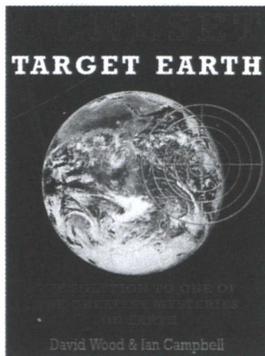


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You name it—they've got it

David Wood and Ian Campbell, *Geneset: Target Earth* (Bellvue Books, 1994, hardback, 318 pages, £25)



Heard of any of the following? Rennes-le-Chateau, The Cathars, King Arthur, The Albigensia Crusade, Osiris and Set, The Theosophical Society, The 'Eve' hypothesis, Comte de St Germain, *The Condon Report*, Tesla, The Philadelphia Experiment, Hoagland and the 'face' on Mars, Stonehenge, Lazarus, Jules Verne,

and don't forget JFK and his untimely end... Have I got a conspiracy theory for you!

These two enthusiasts have dragged all and sundry into a broad-ranging hodge-podge of historical inaccuracy, doubtful leaps of logic and farcical geometry to warn us that the Earth could be hit by a comet someday.

It's rather ironic that in the introduction, Messrs Wood and Campbell chide other authors for overlooking 'the fact that they make references to items with which they are familiar, but of which the new reader has no knowledge'. Ironic, because the authors then go on to do exactly that, in a fashion so incoherently smug that it is a chore to proceed. It helps to have read *The Holy Blood and the Holy Grail* (by Michale Baigent, Richard Leigh and Henry Lincoln) before tackling this hefty tome, as it covers some of the same ground, albeit in a much more readable—one could even say credible—fashion.

Wood and Campbell have assembled a mélange of history, politics, religion, masonry, mythology, geometry—you name it, they've got it. They sought 'mathematical perfection' and found it in a supposed geometrical geography which throws a mystical pentagram (the geometrical symbol too powerful to put into school maths books) across a small, mountainous region of southern France. It reminds me a great deal of the log calculations of my New Zealand countryman, UFO-enthusiast Bruce Cathie, whose *Harmonic 33* provided some little entertainment in my youth.

Like Cathie, there's a preoccupation with reducing everything to mathematical significance. It quickly dives into sheer lunacy when, in referring to an apparently significant mathematical ratio and its relationship to two allegedly mystical painters in on the Big Secret, the authors come to the triumphant conclusion that:

The name POUSSIN ends in SIN, the recognised mathematical abbreviation for a 'SINE' and the only common letters in POUSSIN and TENIERS are SIN, which in TENIERS are reversed and this process of a 'mirrored' image in occult matters is well known.

(The full capitals emphasis is, naturally, all theirs.)

It's also reminiscent of my early acquaintance with Immanuel Velikovsky and his cosmic collisions, for Wood and Campbell see the *Book of Revelations* as an account of

the massive destruction caused by the close passage of a comet or other celestial body.

'How better', they write, 'could one convey the shimmering transparent halo of pre-heated oxygen and how better the breaking up of the [cometary] body, other than to say "...and round about the throne, were four beasts full of eyes before and behind (*Revelations* 4:6)"'.

Underlying all this are references to how our intelligence was artificially accelerated by genetic manipulation by benign beings. In order to survive the coming holocaust, when the TYPHON-SET-DESTROYER-COMET-DEVIL STAR returns, Wood and Campbell urge the construction of deep shelters or space arks.

Wood and Campbell are right on one point—in all probability this planet will some day be struck by a decent-sized comet. But I didn't need a mathematically coded message hidden in the mountains of France to tell me that.

—Vicki Hyde

List therapy

Jack Raso, *Alternative Healthcare* (Prometheus, 1994, hardback, 267 pages, £23)

The cover of this book announces it as a comprehensive guide, and indeed it is. However, while it is, as one would expect from Prometheus Books, a skeptical book, its function and its appropriate audience are unclear. The book is divided into two sections, the first a rambling account of various alternative health fads and the author's encounters with their practitioners, and the second a glossary covering a vast array of such fads. The author's style is simple, supercilious and generally unexceptionable, except for his disconcerting tendency to break into long lists in mid-prose.

The first section of the book quite successfully conveys the absurdity and paper-thin logic of most of the ideas which lie behind alternative health. This is not a notable achievement, however: flipping the pages of any copy of the New Age magazine *Kindred Spirit* will give you the same with pretty pictures. The descriptions of the author's visits to practitioners are mildly interesting, but hardly nail-biting stuff, and they do not provide enough raw material for skeptical analysis of any particular alternative practice. This is in stark contrast to such books as *Examining Holistic Medicine* (D Stalker and C Glymour (Editors), Prometheus Books, 1989).

The glossary of terms in the back is extensive, but certainly not exhaustive. Another glance at *Kindred Spirit* (no, I don't subscribe—I found my recent copy lying around) will reveal more than one new idiocy with yet another permutation of the popular terms strung into a name. My copy talks about 'Signature Sound' (registered trademark), another import from the States, which is not in this one-year-old book.

It seems to me futile to attempt to track every little blip of a therapy which appears briefly on the alternative health scene. It is in the financial interests of alternative health promoters continually to invent new procedures and 'theo-

ries', but the differences are usually more apparent than real. As skeptics, to conserve our resources and preserve our sanity amongst this cacophony, we would do better to focus on the enduring nonsense, such as chiropractic or homeopathy.

I can't really recommend this book, since it lacks both excitement and substance, for which a snap-shot survey of the alternative health scene and an admittedly extensive bibliography cannot compensate.

—Martin Hempstead

Spirals of the mind

Henryk Skolimowski, *The Participatory Mind* (Arkana, 1994, paperback, 395 pages, £9.99)

I found this book extraordinarily difficult to read but I did learn something: I do not think in the same way as its author. If I were to write a book whose subtitle was to be 'A new theory of knowledge and of the universe', then I would attempt to construct a logical and coherent argument to support my beliefs. I would state my assumptions at the start and try to avoid excessive rambling. Unfortunately Henryk Skolimowski does not take this view. This is a pity, as much of what he has to say is interesting, and although I do not agree with his conclusions, some of his ideas possess merit. Skolimowski suggests that:

There is no objective reality in the absolute sense, as there is no such thing as objectivity independent of our cognitive faculties... What is out there is brought about by the alchemy of our mind... The nature of our mind is the nature of our knowledge is the nature of our reality.

If I understand him correctly, he is suggesting that our personal view of the universe determines how the universe appears to us. Consequently everybody experiences the universe in a different way. The difficulty with such a belief is that it means that we should give equal weight to everybody's view of the universe no matter how much it contradicts our own understanding of the universe. Skolimowski goes on to explain that our personal theory of the universe may be considered as a spiral which is enlarged every time we experience something new. People may only successfully communicate on experiences which are common to all their spirals of understanding.

The difficulty with this book is that based upon such nebulous statements, the author develops the now over-familiar diatribes about the aridity of science and the complete failure of Western civilization to relate in a meaningful and moral way with the rest of the universe. The West's only salvation lies in accepting the principles espoused in this book and repenting its wicked ways. I am parodying Skolimowski's views here but it is clear that he is not a scientist. He appears to misunderstand the theory of evolution and believes that the human race is at the pinnacle of the evolutionary tree:

Our deepest intuition informs us that we are a form of life that incorporates all previous forms of life. We resonate with other forms of life. We empathise with earlier forms of life because we have incorporated them into our

structures... the idea of evolution as the blind watchmaker is incomprehensible to human reason, if not absurd.

Henryk Skolimowski is a supporter of the views of Teilhard de Chardin and dismisses Richard Dawkins' *The Blind Watchmaker* as an exercise in ideology. Skolimowski has also misunderstood Roger Penrose's *The Emperor's New Mind*, claiming that in it:

[Penrose] shows (actually *proving* it mathematically) that the computer can never become an adequate analogue for our brain/mind...

Mathematics cannot be used to prove anything about reality—it can only be used to prove things about our (scientific) models of reality.

This book would have benefited considerably from careful editing—it is too long and contains errors of fact (Augustin de Morgan instead of Augustus de Morgan) which could have been easily corrected. If it were half its present length it would be a much better book. The prose descends into obfuscation on several occasions and is often repetitious. This is unfortunate as usually the writing is clear and direct.

My failure to understand or appreciate this book can possibly be explained by observing that the intersection between Skolimowski's and my spiral of understanding is probably very small, and possibly empty!

—Toby O'Neil

Even more odd bods

William R Corliss, *Biological Anomalies: Humans III* (The Sourcebook Project, PO Box 107, Glen Arm, MD 21057, USA)

Over thirty years ago, William Corliss was disturbed by some apparent problems in geology and archaeology, and he began to scour the literature for accounts of scientific anomalies in these subjects. Finding many, he widened his search to include apparent anomalies in other scientific disciplines, and in 1973 founded 'The Sourcebook Project', undertaking a systematic organisation of his work, with the ambitious plan to create *The Catalogue of Anomalies*. When complete, it will comprise 30 volumes. After 22 years, Corliss is approaching the half-way mark in his extraordinary endeavour.

Biological Anomalies: Humans III is the 14th volume in the series, and the third to be devoted to human beings. The first volume (reviewed in *The Skeptic*, 6.4) covered external attributes of the human body, including morphology and behaviour; the second (*The Skeptic*, 7.4) covered the internal structures of the human body; this, the final volume, deals with human evolution.

Corliss is primarily a collator and presenter of reports, and he assigns each 'anomaly' two scores out of 4: one is for 'data evaluation', where 1 represents 'many high-quality observations, almost certainly a real phenomenon' and 4 is 'unacceptable, poor-quality data'; the other measures 'anomaly evaluation' where 4 indicates 'Anomaly cannot be explained by modifications of present laws, revolutionary' and 1 is 'Well-explained, included only for purposes of comparison'.

As to the anomalies presented, the book covers four areas: the hominid fossil record, human genetics, unrecognised hominids, and human interface phenomena. There is an enormous variety of topics covered, and here I can do no more than list a tiny sample, to perhaps whet your appetite: the absence of the transitional fossils, abrupt changes in hominid morphology, giant hominid skeletons, human chromosomes lacking the 'baboon' marker, African nuclear DNA distinct from that of other populations, identical twins with different genomes, giant arctic hominids, the yeti, Chinese wildmen, Bigfoot, possible human communication with dolphins and microbes, psychic healing of animals, the anomalous distribution of human lice...

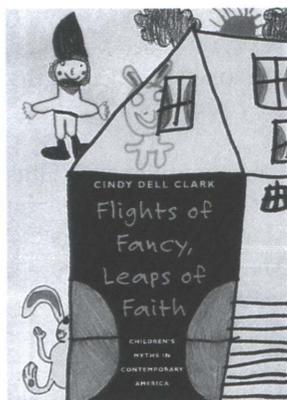
As well as the scores, Corliss also discusses possible explanations of his anomalies, but never allows his philosophising to intrude. He rejoices in the wealth of strange reports to be found, and as he says in an article about his work (*The Sceptic*, 7.5), 'The search itself is everything'. And what a search.

If titles such as 'The Human-Wasp Interface' and 'A Bizarre Human-Fish Phenomenon' appeal, then the incredible Sourcebook Project will be right up your street.

—Les Francis

Kid's stuff

Cindy Dell Clark, *Flights of Fancy, Leaps of Faith: Children's Myths in Contemporary America* (University of Chicago Press, 1995, hardback, 159 pages, index, £14.25)



This is an anthropological study of that strange and mysterious tribe, our children under age ten. It has all the scholarly appurtenances we expect from a technical work: footnotes, bibliography, an index; even an appendix on methods of studying 'child culture' and on drawing out 'native informants' is not missing. In other words, it is the proper work of scholarship we would

expect from the University of Chicago Press.

The book examines at length how children believe in three imaginary figures: the Tooth Fairy, Santa Claus, and the Easter Bunny. These immaterial experiences are by no means without importance or lacking in consequences. By insisting on certain activities and preparations, children themselves shape cultural practices actively. As part of the process of growing up, children mature by altering or abandoning their relationship to the mythical figures. When older children pretend to believe for the sake of their not yet wise younger siblings, they re-affirm the cultural validity of mythological experience. For small children the fantasy and interaction with mythical characters is clearly an important part of coming to terms with the world. In learning to tell real from make-believe children continue to develop their imagination and inner life.

Cindy Clark considers childhood belief in the Tooth

Fairy, Santa Claus, and the Easter Bunny as an indispensable forerunner to adult religious belief: 'Youthful beliefs form the developmental foundation for imaginal experience and for awe-inspired faith' (p. 4). Understanding of childhood fantasy can best teach us the 'nature of the mental and emotional capacity for faith...' (p. 102). The author definitely accepts childhood imagination as beneficial, and fostering adult religion as good.

Skeptics may take a different view. Tom Flynn, in his *The Trouble with Christmas* (Prometheus, 1993) has advocated doing away with Santa Claus altogether as he merely promotes religion, superstition, and commercial greed. In a similar vein Katie Hafner, in her *The House at the Bridge* (Scribner, 1995) reports (p. 68) the former GDR had a kindergarten policy against fairy tales under the slogan 'we do not dream, we deal with reality'. Perhaps 'the GDR frowned on tales of princesses and kissed frogs in favour of socialist realism' because the propaganda of the Nazi regime had extolled Grimm's fairy tales as a true mirror of the German soul. Some fundamentalist churches in the United States also will not celebrate Christmas or permit talk of pagan characters.

This book addresses an interesting question. How far do we encourage imagination and 'let's pretend' in our children, and where do we draw the line to introduce reality? Parents and teachers with different convictions find their limits will vary.

—Wolf Roder

Paradoxical dreaming

Celia Green and Charles McCreery, *Lucid Dreaming: The Paradox of Consciousness During Sleep* (Routledge, 1994, paperback, 186 pages, £9.99)

I've never had a lucid dream. My dreams have always been patchy performances where the scriptwriter has no care for a consistent plot, and learned English from a Professor of Gibberish. It is for this reason that I find the idea of lucid dreaming so fascinating. For according to Green and McCreery, lucid dreams are plainly and simply dreams in which we are aware that we are dreaming.

The author's aims are twofold: firstly, to provide a general introduction to the topic, and secondly, to propose a new theoretical framework for understanding lucidity. The book has two brief introductory chapters, three chapters on lucid dream phenomenology, three on lucidity in relation to other hallucinatory states, five chapters on practical applications, and lastly one chapter outlining a theory of dream lucidity.

Scepticism about lucid dreams used to be strong, but over the last fifteen years it has waned, due to ingenious and successful attempts by previous researchers to signal lucidity from the dream state. As a result, researchers discovered that lucid dreams are real dream states that last from one to six minutes, and which tend to occur mostly in the early morning. Also, as we learn in this book, the lucid dream differs from an ordinary dream in that it is (a) more pleasant, (b) offers more control to the dreamer, (c) entails a high degree of self-awareness, (d) gives greater reign to one's imagination, and (e) gives rise to more persistent

waking memories of the dream state.

The middle chapters deal with lucid dreams in relation to other hallucinatory states. Among other things the authors outline the similarities between lucid dreams and apparitions, out of body experiences (OBEs), false awakenings, and waking dreams. To explain these similarities they propose the concept of 'metachoric experiences'. In a metachoric experience fantasy replaces reality wholesale. Thus, apparitional experiences do not necessarily represent the partial imposition of an hallucinatory apparition on to a real visual field, but instead the whole visual field is replaced by an imaginal one.

At this point they invoke Occam's razor, insisting that the 'partial hallucination' view of apparitions requires two hallucinatory processes: positive and negative. The apparition is a positive hallucination, while the negative hallucination accounts for the absence of visual sensation in the space behind the apparition (hence the common opacity of apparitions). This, they argue, requires two processes whereas the metachoric view needs only one (fully hallucinatory) process.

Given the data Green and McCreery provide, this argument seems convincing. However, Green and McCreery implicitly assume that hallucinations must occur in a separate system from vision. Unfortunately they fail to acknowledge that evidence (from cognitive neuropsychology) for the 'cognitive economy' of brain function can easily (and parsimoniously!) permit a continuum of hallucinations from partial to metachoric within one processing medium. Presumably they are not aware that such evidence exists.

In chapters seven and eight lucid dreams are compared to false awakenings, OBEs and sleep paralysis. The authors argue that the physiological concomitants of sleep may not always occur during sleep, and consequently dream-like states may arise with varying degrees of continuity with waking reality. These chapters provide useful discussion for the sceptic who wishes to explain the abduction phenomenon. Indeed, some of the accounts provided by Green's and McCreery's sample seem little removed from the abduction scenario.

The last few chapters switch to practical concerns. Here the book fulfils its claim to be of use to the general layperson. Thus, the use of lucid dreams to pep up impoverished sex lives, help banish childhood nightmares, and enable a sense of control in the traumatised, are focal points for the authors' sparsely evidenced but optimistic discussion. Indeed, one feels that a future lucid dream science could have important benefits for developing people's awareness of 'inner space'.

In the final chapter Green and McCreery claim to offer a theoretical framework for the understanding of lucid dreams. However, this claim is perhaps too dignified in light of their actual proposals. Firstly they argue that lucid dreams may stem from highly changeable levels of arousal. Secondly, hemispheric asymmetries in arousal level produce the characteristic features of the lucid dream. On this point Green and McCreery offer two concrete proposals: (a) that lucid dreaming is characterised by a predominance of right hemisphere activity, and (b) that spontaneous lucid

dreamers have a relatively high levels of right hemisphere activity.

All these proposals taken together amount to something less than a 'theoretical framework', but at the very least what Green and McCreery do is provide the foundations for such a framework. However, this is an interesting and valuable book. One can only hope researchers will take up these ideas in the lab, to help uncover the 'valuable insights into the neurophysiology of normal cognitive functioning' that Green and McCreery, in concluding, promise us.

—Tony Lawrence

Psychic guidelines

Richard Wiseman and Robert L Morris, *Guidelines for Testing Psychic Claimants* (University of Hertfordshire Press, 1995, paperback, 72 pages, £7)

This is one book that, in my view, should grace the shelves of any person, skeptic or non-skeptic who has an interest in testing psychic claimants. In particular, it should be obligatory reading for any television producer about to produce yet another programme featuring badly controlled demonstrations of amazing psychic feats.

One of the problems that has beset the entire field of psychic research for many decades is the fact that many scientists have confidently assumed that their ability to conduct uncontroversial, cleverly designed and beautifully executed experiments in physics (say) would automatically transfer itself to experiments on human subjects in the controversial area of psychic research. And this is simply not the case. Particle detectors, and spectrometers, in general, do not wilfully deceive—an honesty and integrity, unfortunately, not always shared by self-proclaimed psychics.

Wiseman and Morris are well aware of the difficulties of dealing with fraud, and two chapters in this slim volume, 'The problem of fraud' and 'Working with likely tricksters' deal specifically with this issue. The theme of trickery also reappears at several points in other chapters. For instance, in the chapter on 'Formal research', I found a short section on the general types of cheating likely to be encountered in ESP experiments to be particularly useful—as was the advice to consult with magicians and the conjuring literature when planning experiments. (Richard Wiseman is himself a skilled conjuror).

My praise of the book is not entirely unreserved, however. I found aspects of the layout somewhat bizarre. In particular, the large white space between each chapter heading and the start of the text made it look as though the authors had simply forgotten to put in the illustrations. Also, I would take issue with the views that the authors express (quoting John Beloff) when discussing the advantages of testing subjects known to have previously engaged in fraud—I don't imagine that many skeptics would share the view that the notorious medium Eusapia Palladino exhibited any cast-iron, genuine phenomena. Still, overall the pros outweigh the small number of cons. Get yourself a copy.

— Steve Donnelly

Letters



Witchcraft

Has Nick Reeve in his review of *An ABC of Witchcraft* by Doreen Valiente (*The Skeptic*, 8.5) left his skepticism behind him?

Most people when they speak of witchcraft mean, I think, something akin to the dictionary definition of 'the pretended art of influencing events by occult control of nature and spirits'. As such it is alive and well in many parts of Africa.

There never was a religion called 'Wicca'. It is a modern invention which owes a great deal to the late Margaret Murray. It is a mix of the nicer aspects of paganism and various new-age philosophies. It is wholly beneficent and allied to concern for the environment. Good luck to it. But don't give it a spurious antiquity. 'Wicca' sounds like a Saxon word, but the pre-Christian Saxons worshipped the old Northern sky gods, Wotan, Thor and Frey. The Celts who they supplanted worshipped Cerunnus and Epona and had a cult of severed heads; their priests were the Druids who presided over human sacrifices and divined the future from the entrails of victims.

And of course the Roman world had many gods and temples to them, Zeus and Hera, Artemis and Apollo. There were many other pre-Christian cults, of course, in Britain as elsewhere: Mithras was favoured by the soldiers; there was a temple to Isis in London. (If modern 'witches' worship Pan, does this mean that they recognise the other gods of the Greek/Roman pantheon?)

None of these religions had much use for witchcraft—which is understandable, since its practitioners claimed to be able to bypass the priesthood to influence events. The Jews had much the same attitude. The Hebrew word translated as 'witch' in the King James version has several possible translations; a Jewish translation (Jewish Publications Society, 1985) gives 'sorcerer';

indeed the verse in Deuteronomy which mentions witches then goes on to refer to various other occult practices which were forbidden: necromancy, prediction, consulting 'familial spirits'. 'Poisoner', I understand, is one possible translation, but clearly the target of the Jewish law was occult practices—the 'Witch of Endor', obviously a medium was in danger of the death penalty.

We can however all agree that the 'witchcraft' scare which disgraced western Europe for approximately three centuries was an appalling instance of 'man's inhumanity to man' with its absurd trappings whereby educated and otherwise intelligent man believed utter absurdities like devil worship, flight through the air, sex with demons, etc. It is doubtful whether many of those convicted of these impossible crimes were sorcerers in the biblical sense—they were often completely innocent victims of prejudice and malice.

And we should not be complacent—there is still a 'Satanic' scare around, an import from the USA but taking root here. Remember the 'witchcraft' persecutions and beware!

**Elsie Karbacz
Colchester**

Martial arts and Microsoft

As Susan Blackmore points out (*Letters, The Skeptic*, 8.4), 'chi' may be a useful form of imagery for some martial artists (although I don't use it myself). However the problem is that some martial artists view 'chi' as having a very real existence and devote a lot of time to the 'development of chi' as an end in itself. It was these people that my article 'Mysterious energies and the martial arts' (*The Skeptic*, 8.3) was aimed at. As an extreme example I quote from an advert in a recent US martial arts

magazine: 'Master the power: Move objects with chi power without touching them. Move an object with your eyes only ...' etc., after that the advert gets a lot worse!

Jack Johnson wrote (*Letters, The Skeptic*, 8.4) in response to my article that his experience of the martial arts was 'a large number of people who simply enjoyed bashing other people senseless, for the sheer hell of it'. As someone who has been a practising martial artist for some 13 years this has not been my own experience. I think the martial arts has a lot to offer to a wide spectrum of people. However there are things we need to change and one of these is the uncritical acceptance of dubious claims.

On a different note, in the *The Skeptic* 7.4, Andrew Bulhak drew attention to the apparently occult nature of the PC software super-power Microsoft. Some numerological evidence has recently come to light that further strengthens Bulhak's case. The head of Microsoft is Bill Gates III. If you sum the ASCII codes for BILL GATES you get 663 (ASCII is a widely used standard in the computer industry for representing characters in the form of numbers). If you then add 3 for the III you get 666, the number of the beast!

What else could explain Microsoft's success? Hardly their record for shipping technically excellent, bug-free software on-time. I have a sneaking suspicion that Windows 95 won't in fact be delivered until the end of the millennium and, when it is, it may signal the end of the world.

**Andy Brice
High Wycombe**

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