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SKEPTIC

A rational look at pseudoscience and the paranormal in the British Isles

Past-life Regressions: Fact or Fantasy?
Science and Pseudoscience in History
The Houdini File
Silpho Moor UFO Revisited
The Charlatans' Market
Skeptics at the SPR

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Hits and Misses

Steve Donnelly

UFOs on TV

Presenters of TV chat shows are not normally renowned for their skepticism regarding paranormal topics. However, the *Granada Up Front* team on 20 April provided an admirable exception to this general rule. The format of the programme is to have one or two proponents and opponents of a particular topic 'up front' in the studio and also to include a large studio audience which contains selected guests. For this particular programme, which was on the subject of UFOs, the proponent was ex-police sergeant Tony Dodd whilst I attempted to present the skeptical viewpoint. At the beginning of the programme, presenter Lucy Meacock showed a photograph of a UFO (the usual indistinct type of image which we all know and love) which she said had been sighted in the North Manchester/East Lancashire area the previous Saturday and asked anyone in this region who had seen the UFO to phone in and let them know. The discussion, as is often the case on this type of show, was rambling and inconclusive, but at the end of the programme the presenter announced that 110 people had rung in to say that they had seen a UFO the previous evening—a testimony surely to the fact that something strange had been hovering in the night skies over Oldham and Rochdale. It was, therefore, a big surprise to skeptics and UFOlogists alike when, in the final seconds of the programme, Lucy Meacock took from her pocket the BBC canteen saucer which had been used to make the fake UFO photograph!



Stealth Craft

The focus of UFO sightings in Britain will almost certainly switch to nearer London later this year. According to the *Economist* a squadron of F-117A Stealth fighter-bombers will be deployed in Britain this summer and will probably be assigned to the Alconbury base about 80 miles north of London. The Stealth craft are quiet, almost invisible to radar

and are almost certain to give rise to a spate of UFO sightings. There has been speculation that the sighting of Stealth craft may be the explanation of a number of UFO sightings in the North-West of England over the last year or so.

Gynaecological Ghosts

It is perfectly normal for children to look up at a sky filled with fleecy clouds and see monsters in the cloud shapes. It is perhaps less normal when adults see a face in the patterns of light and shade in a photograph of the surface of Mars and conclude that it is a real face carved by aliens into a slab of rock. (See *Hits & Misses* in *B&IS* 3.1). An even more bizarre manifestation of this ability to see meaningful shapes in random patches of light and shade was reported in *Take a Break* on 16 June. Mother-to-be Jacqui Deevoy went to her local hospital for an ultrasound scan along with her husband Max who brought along his camera to take a few souvenir snaps from the screen of the ultrasound scanner. When the photographs were developed they revealed not only the healthy foetus but a couple of intruders—one of whom Jacqui described as a frog-eyed woman. The other resembled a gentleman, who to my knowledge has never before featured in paranormal manifestations—Captain Birds Eye from TV commercials (probably a sign that the baby was going to be a big consumer of fish fingers). The frog-eyed lady was identified as Max's deceased grandmother who had had 'a face a bit like a frog's'. Fortunately by the time Jacqui's pregnancy came to term the intruders had vacated the womb, rendering the birth easier than it would otherwise have been.

Nessie Reward

The colony of large creatures which inhabit Loch Ness are once again going to have their peaceful existence disturbed by monster hunters. According to the *South Wales Echo* the bookmakers William Hill has offered a £250 000 reward to the first person able to prove that Nessie exists during a weekend monster hunt later in the year. If the proof is not forthcoming during this particular weekend then there is a smaller reward of £25 000 for anyone who conclusively demonstrates Nessie's existence over the next three years. William Hill also plans to give £1 000 prizes for the best Nessie photographs (a kind of creative photography competition?). According to a spokesman from the bookmakers there have been more than 800 sightings since 1933 but to claim the big prizes it will be necessary to provide more than a photograph or an echo sounder trace. Presumably, if a couple of the monsters could actually be captured, William Hill would be able to organise the first Monster Derby.

Tumescent Thailand

All over the North-East of Thailand statues are being erected. Some are large, some are small, and many have their tips painted bright red. They are large phallic symbols known as *palad khik* in Thai and have been put up by superstitious villagers who believe that there is nothing better than an erect, painted, wooden willy for warding off sickness. According to the *Independent* on 8 May, the reason for these penile erections is an illness known as Sudden Unexplained Nocturnal Death Syndrome (SURDS) which has been striking Thai labourers in Singapore, Malaysia and Saudi Arabia as well as in Thailand. The Thai villagers believe that the statues are particularly effective in keeping this condition at bay. Medical researchers have not yet found an explanation for SURDS which may have claimed the lives of several hundred otherwise fit young men over the last 10 years or so. With an absence of any medical explanation the villagers have fallen back on more traditional explanations and are blaming the deaths on female ghosts. As well as putting up the phallic images, many men have started painting their fingernails red and wearing women's sarongs before going to sleep to ward off the (presumably heterosexual) female spirits.



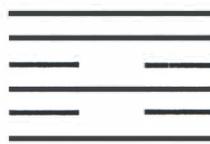
Strange Ways of Governor O'Friel

In the wake of the events at Strangeways prison last Easter, governor Brendan O'Friel gave a press interview in which he talked frankly about the 25 days of violence and destruction that gripped the prison. O'Friel is a devout Roman Catholic who was educated at a Jesuit college in Lancashire and firmly believes that no less a personage than the devil was behind the prison riot and occupation. 'I certainly believe very clearly in the devil', he said. 'I am not looking for easy answers. None of us understands the battle that goes on between good and evil, but there was a manifestation of it at Strangeways. Something was going on for which we do not have a totally rational explanation'. The prisoners at Strangeways not only had to put up with

cramped, overcrowded conditions but also with the missionary zeal of O'Friel and his team of five prison chaplains of different denominations who had developed their religious work to the point that the prison had 29 weekly services and religious meetings. He found it highly significant that the riot had begun in a chapel, that another chapel was destroyed and that rioters desecrated a cross and some religious vestments. During the first week O'Friel became increasingly concerned that something terrible was going to happen on Good Friday. 'The omens were pretty bad. Good Friday was also the 13th'. He appealed to congregations of all denominations to pray for Strangeways and is convinced that the spiritual outpouring which resulted from his appeal averted disaster on this day. With Manchester's chief constable, James Anderton in direct contact with God and the governor of Strangeways seeing the devil in every evil act I would suggest that any atheist criminal in Manchester have a getaway car standing by to drive him to nearby Liverpool in the event that he is about to be apprehended by the long arm of the law.

I Ching at IBM

家人



I Ching Hexagram No. 37
CHIA JEN—The Family

If you see a computer executive throwing yarrow stalks (or even three coins) on the ground and looking contemplative then you will almost certainly be watching an IBM manager who has taken a course in self improvement and who is consulting the Chinese oracle the *I Ching*. According to the *Independent on Sunday* the *I Ching* is sometimes regarded as a supernatural fortune

telling device and sometimes as the hidden voice of the subconscious mind. The coins (or more traditional yarrow stalks) are used for the (random?) selection of one of 64 'hexagrams' which make up the *I Ching* or *Book of Changes*. Each hexagram has an associated text in which can be found guidance when the user asks a question of the oracle. Instruction in this ancient Chinese practice forms part of IBM's in-house training course called 'Fit for the Future' and more than 600 employees have attended the course. I dusted off my copy of the oracle, and using three Chinese 1 Fen coins asked the *I Ching* what it felt about a high technology company such as IBM practising ancient Chinese arts. The hexagram selected was *Chia Jen* 'The Family' which included the suitably inscrutable text 'For *Chia Jen*, what is most advantageous is that the wife be firm and correct'. IBM executives please take note!

Steve Donnelly is a physicist, a lecturer in electronics, a member of the Manchester Skeptics and the UK Skeptics and co-editor of the *Skeptic*.

The Houdini File

Number One

Frank Koval

In *The Houdini File*, I will be analysing and commenting on a number of previously-unpublished letters from Houdini (1874–1926) to Harry Price (1881–1948). The correspondence arose from the two men's interest in spiritualism, and the fact that they were both building up what were to become two of the most extensive collection of books on magic and psychic matters.

Harry Price later became the ghost-hunter of Borley Rectory fame, writing such best-sellers as *The Most Haunted House in England* and *The End of Borley Rectory*. His methods of investigating ghosts and other psychic phenomena were so unsound that Anita Gregory, a prominent present-day researcher, has been led to comment that 'Harry Price set back psychical research for fifty years'.

Houdini wrote this first letter on returning home from a six-month tour of Great Britain—his last visit here, as it turned out. He refers to the large number of books that he had bought during the tour.

The earliest magic book in Houdini's collection at the time of this letter was *Natural and Unnatural Magic* by Gantziony, written in 1489. It is in the author's fine German handwriting and his illustrations coloured by hand. He had the second (1635) edition of *Hocus Pocus Junior* and a well preserved copy of the first (1658) edition of John Baptista Porta's *Natural Magic*.

On Houdini's death, his vast book collection was left to the Library of Congress, Washington, D.C., who catalogued 5,200 volumes on magic and spiritualism and a staggering collection of 40,000 playbills and newscuttings.

Rullman, referred to in the postscript, was Leo Rullman,



278 West 113th Street
New York City
August First 1926

Dear Mr. H.P.,
We have "arrived" home safe.
Am havin an awful time with the books I brought
back.
Never realized the amount, until I tried to get them
into my home.
Its a good thing I played my entire tour, and
was too busy to look at all the book shops.

Drop me a line when ever the "spirit moves" you.
Regards best wishes
sincerely yours as always
the same

Houdini

Two collectors, Rullman and Mullholland are
going to get up a Bibliography of their own, do
you care to get in touch with them??

The Harry
Price Collection

collector and dealer in secondhand and antiquarian magic books. Mulholland was John Mulholland, magician and distinguished editor of *The Sphinx* for many years.

I have tried to trace Harry Price's letters to Houdini, but without success. They are not at the Library of Congress, nor are they at the University of Texas at Austin. It is a pity that Price himself did not generally keep copies of his letters to Houdini, and so I drew an almost complete blank at the University of London Library, where the Harry Price Collection is housed.

Frank Koval is a teacher, writer and conjurer and is a member of the Manchester Skeptics

Many Happy Returns

Melvin Harris

Are 'past-life' regressions evidence for reincarnation?

Carl Jung wrote: 'With a free and open mind I listen attentively to the Indian doctrine of rebirth and look around in the world of my own experience to see whether somewhere and somehow there is some authentic sign pointing towards reincarnation.' For many thousands in the Western world the signs have arrived. For them, hypnotic regressions have lifted the heavy veil that once shrouded the subject, and the domestic tape-recorder has become the great ally of Truth by capturing 'authentic accounts' of long-forgotten life-cycles.

It all began with the Bridey Murphy case in 1952. *The Search for Bridey Murphy*, by Morey Bernstein, topped the best-seller lists in the United States and was translated into five languages. It spawned a motion picture; a disc from one of the recordings sold tens of thousands of copies; and all over the United States tape-recorders began purring away at innumerable regression sessions.

Twenty years after the Bridey Murphy sensation, a much more impressive case of past-lives startled the public. The Bloxham tapes were first presented as a BBC television documentary produced by Jeffrey Iverson. Then they were included and enlarged on in Iverson's book *More Lives Than One?* The tapes were regarded as 'the most staggering evidence for reincarnation ever recorded . . . amazingly detailed accounts of past lives—accounts so authentic that they can only be explained by the certainty of reincarnation.' Inevitably they achieved international renown.

The tapes themselves had been accumulated for years by an elderly Cardiff-based hypnotherapist named Arnall Bloxham. Bloxham had been unable to study as a doctor and had turned to hypnotherapy. He was a life-long believer in reincarnation, but his interest in past-life regressions did not emerge until quite late in his career. Despite that, he managed to accumulate a cupboard full of tapes of his experiments with more than four hundred people.

Jeffrey Iverson first heard about this collection at a party. As a producer with the BBC in Cardiff, he was constantly on the outlook for programme ideas; and, in October 1974, he called the Bloxham's house. After listening to the calm old man's claims, Iverson concluded that, if his claims were true, the recordings could represent the largest investigation ever undertaken into regression. Iverson thought that, if Bloxham's tapes could be verified, 'then that single famous case . . . *The Search for Bridey Murphy*, was just a tune on an Irish fiddle compared to his symphony of voices.'

Iverson began listening to the tapes and discarding those he felt could not be researched and proven. Gradually, he came to concentrate on a limited number that seemed to

contain information that 'coincided remarkably with known but quite obscure periods of history . . . in which people talked about cities and countries that they apparently never visited in their present lives.'

Two outstanding cases emerged from this weeding process. In one, Graham Huxtable, a Swansea man, regressed to a squalid life aboard a Royal Navy frigate engaged in action against the French some two hundred years before. But the most important case involved a Welsh housewife named Jane Evans.

Mrs Evans described six past lives. They were remarkable not so much for their number and diversity as for the sheer, almost overwhelming amount of detail that was packed into her account of three of them. In her three minor lives she was first a lady-in-waiting to Catherine of Aragon in the 1500's, then a London sewing girl named Anne Tasker living about 1702, and finally Sister Grace, a nun living in Des Moines, Iowa, who died in the 1920's.

Of Mrs Evans' three major lives, two centred around the town of York. The earliest was set in the third century during the rebellion of Carausius, the Roman admiral who seized power in Britain and declared himself emperor. Jane Evans was then Livonia, the wife of Titus, tutor to the young son of Constantius (governor of Britain) and his wife, Helena. As Livonia, Mrs Evans describes how Constantius has to return to Rome and how the rebellion is engineered in his absence. As a consequence, Livonia, Titus, and the rest of Constantius's household flee from Eboracum (York) to Verulam (St Albans), where they live apprehensively until the rebel regime is overthrown by an army led by Constantius. Yet her husband's triumphant return brings only sadness for Lady Helena. Roman power-struggles dictate that her husband has to divorce her and contract a new marriage with Theodora, daughter of Emperor Maximinus. Helena, therefore, decides to stay in Verulam with Livonia and Titus. There they are influenced by the Christian wood-carver Albanus, and Titus becomes so zealous in his new faith that he volunteers for the priesthood. On the eve of Titus's induction as a priest, Roman troops swoop down on Christian houses and burn them. Titus dies in the melee, and Livonia apparently dies in some terror a short while afterward.

Mrs Evans's next life in York also ended tragically. It unfolded in the year 1189 in the north of the city, where 'most of the wealthy Jews live.' She was then Rebecca, wife of Joseph, a rich Jewish moneylender. The times were troubled for Jews. Anti-Jewish uprisings had occurred in 'Lincoln, London and Chester.' In York Jews were subject to abuse

and threats. One member of their community, Isaac of Coney Street, was even murdered by a mob.

By the spring of the next year it was obvious that violence was inevitable. Rebecca and her family prepared to leave the city, but they were too late. An armed band broke into the next-door house, killed the inhabitants, looted the place, and then set fire to it. Joseph, Rebecca, and their two children were able to run only as far as the castle of York. But even there they were unable to find safe shelter. They finally found refuge of a sort when they entered a church, took the priest and his clerk captive, and hid in the cellar. Later, from the safety of the church roof, they could see flames and hear distant mobs screaming 'Burn the Jews, burn the Jews!'

Rebecca's family's respite was short-lived. Their captives escaped and alerted soldiers, who came to the church. At this point in the story, Jane Evans became '... almost incoherent with terror' as the soldiers took her daughter; then, whispering 'Dark... dark', she presumably died.



Evan's other major life was in medieval France around 1450. At that time she was apparently a young Egyptian servant named Alison in the household of Jacques Coeur—the outstanding merchant prince of that period. She was able to talk at length and knowledgeably about Coeur's intrigues, about the King's mistress Agnes Sorel, and about the clash between the Dauphin Louis and King Charles VII. She knew a great deal about Coeur's possessions and his extraordinary house at Bourges. Her knowledge of the clothes worn by her master was accurate: 'tunic edged with miniver, redhose... shoes of red Cordovan leather... a jewelled belt around his waist and a chain around his neck.'

She was again accurate when she related Jacques Coeur's fall from favour. He was once close to the king, but after the death of Agnes Sorel a rumour spread that Coeur had poisoned her. Coeur was indeed arrested, tried on a number of charges, and imprisoned. But Alison knew only of his arrest. According to her, when the soldiers came for her master he gave her a poisoned drink, and she ended her life by accepting it.

When television viewers saw Jane Evans under hypnosis and heard her astonishing stories, they were understandably impressed. She did not seem to be acting. When fear and anguish came into her voice, it was clear that she was racked with real emotions. And her easy grasp of often difficult names of people and places made it seem that she was indeed remembering things that she'd once known intimately. But Jane Evans in her un hypnotized state was adamant that she knew nothing of Jacques Coeur, nothing of Carausius and his times, and nothing of the massacre of the Jews of York.

Iverson concluded: 'The Bloxham Tapes have been researched and there is no evidence that they are fantasies. In our present state of knowledge about them, they appear to convey exactly what they claim: a genuine knowledge and experience of the past.' But were these tapes ever researched as painstakingly as they should have been? Is it possible that quite another phenomenon rather than reincarnation can account for these rich narratives?

Are past-life regressions really evidence for reincarnation? Or could they be glimpses of ancestral memories? Both theories have their followers. Yet rigorous research provides a distinctly different answer. These regressions are fascinating examples of cryptomnesia.

To understand cryptomnesia we must think of the subconscious mind as a vast, muddled storehouse of information. This information comes from books, newspapers, and magazines; from lectures, television, and radio; from direct observation and even from overheard scraps of conversation. Under normal circumstances most of this knowledge is not subject to recall, but sometimes these deeply buried memories are spontaneously revived. They may re-emerge in a baffling form, since their origins are completely forgotten. This is cryptomnesia proper.

Because its origin is forgotten the information can seem to have no ancestry and can be mistaken for something newly created. The late Helen Keller was tragically deceived by such a cryptomnesic caprice. In 1892, she wrote a charming tale called 'The Forest King'. It was published and applauded, but within a few months it was revealed that Helen's piece was simply a modified version of Margaret Canby's story 'The Frost Fairies', published twenty-nine years earlier. Other authors have fallen into the same trap.

In a similar fashion a number of cases of automatic writings, supposedly from discarnate spirits, have been traced to published works. For example, the famous Oscar Wilde scripts of the 1920s were gradually shown to be derived from many printed sources, including Wilde's *De Profundis* and *The Decay of Lying*.

But could such unconscious plagiarism account for Bridey Murphy and her offspring? Were these past existences nothing but subconscious fantasies yielded up in order to please the hypnotists? Were they simply a pastiche of buried memories made gripping by the sincerity that accompanies cryptomnesia? In 1956, Dr Edwin S Zolik of Marquette University set out to answer these questions.

After Dr Zolik hypnotized his subjects, he instructed them to 'remember previous existences', and they obliged by providing convincing accounts of past lives. In a waking state they assured him that they knew nothing about these

previous lifetimes. But, when rehypnotized and reexamined, the subjects were able to remember the sources used in constructing their past-life adventures. In brief, Zolik's detailed analysis showed that past-life memories could easily be nothing but a mixture of remembered tales and strong, symbolically coloured emotions.

Zolik recommended his method of probing for real-life origins of reincarnationist material to anyone seriously interested in the truth. Unfortunately, few, if any, of the enthusiastic hypnoregressionists took any notice of his advice, and session after session was committed to tape and marvelled over, without any effort being made to verify the origins or meaning of this material. Hypnotherapist Arnall Bloxham, for one, recorded more than four hundred past-life regressions without ever once digging for the possibly mundane origins of these alleged lives. On the other hand, the Finnish psychiatrist Dr Reima Kampman devoted years to the systematic investigation of the cryptomnesic origins of past-life accounts.

Dr Kampman of the Department of Psychiatry at the University of Oulu, Finland, began his work in the 1960s. He found his subjects among large groups of volunteers drawn from the three highest grades of the secondary schools of Oulu. All who were able to enter a deep hypnotic state were selected for closer study. Kampman found it relatively easy to induce past-life recall as a response to his instruction: 'Go back to an age before your birth, when you are somebody else, somewhere else.'

His most amazing subject was a girl who conjured up eight past-lives. Her lives took place in ancient Babylonia, in Nankin, in Paris, in England, and finally in revolutionary Russia. Her thirteenth-century life—as Dorothy, an innkeeper's daughter—brought to light 'a very explicit account of contemporary happenings'. And she astonished everyone by singing a song that none of the listeners was familiar with—she called it 'the summer song'. The language of the song was later studied by a student 'with high honours in the English language'. He had no difficulty in identifying the words as examples of an old-style English, possibly Middle English. But the girl had no memory of ever having heard the words or the music of the song before.

The solution to this riddle came during a later experiment. She was asked to go back to a time when she might have seen the words and music of the song or even heard it sung. She then regressed to the age of thirteen and remembered taking a book from the shelf in a library. It was a casual choice, and she merely flicked through the pages; yet she not only remembered its title but was able to state just where in the book her 'summer song' could be found. The book was *Musiikin Vaiheet*, a Finnish translation of *The History of Music* by Benjamin Britten and Imogen Holst. And the mystery music was, of all things, the famous 'Summer Is Icumen In' with the words rendered in a simplified medieval English.

A spate of similar successes led Kampman to conclude that he had demonstrated 'that the experiences of the present personality were reflected in the secondary personalities both in the form of realistic details and as emotional experiences. The recording of a song from a book simply by



turning over the leaves of the book at the age of 13 is an outstanding example of how very detailed information can be stored in our brain without any idea whatever of it in the conscious mind, and how it can be retrieved in deep hypnosis'. These findings allow us to look at Bloxham cases with more understanding.

But the case is very different with the Bloxham tapes. Graham Huxtable proved unable to help in an investigation, and Jane Evans flatly refused to cooperate. As a result, the only course was to scrutinize the texts and laboriously search for the probable origins of their 'previous lives'. The extravagant claims made for these tapes led me to undertake the search. I decided to concentrate on the six past-lives of Jane Evans, since Iverson considered them to constitute 'the most consistently astonishing case in Bloxham's collection'.

My investigation soon showed that the claims made for the tapes were false and the result of misdirected and inadequate research. For example, one of Jane Evans's minor lives, as a handmaiden to Catherine of Aragon, could easily have been based, sequence for sequence, on Jean Plaidy's historical novel *Katherine, The Virgin Widow*.

But Evans's three major lives proved to have the most illuminating ancestries. Her recital as Alison, a teenage servant to Jacques Coeur, the fifteenth-century French merchant-prince, was said to prove that she 'knew a remarkable amount about French medieval history'. Yet in her waking state she said, 'I have never read about Jacques Coeur. I have never even heard the name.'

Jeffrey Iverson even concluded that she could not have picked up her many facts from standard sources. After all, she knew so much, including inside knowledge of the intrigues surrounding the king's mistress Agnes Sorel. Among other things, Evans was able to fully describe the exteriors and interiors of Coeur's magnificent house—she even gave

details of the carvings over the fireplace in his main banquet hall. Even more surprising, she spoke of the carved tomb of Agnes Sorel that was housed in a church. According to Iverson, this tomb 'had been cast away by French revolutionaries and spent a hundred and sixty-five years, until its rediscovery in 1970, out of sight in a cellar'. But like a number of observations in the book *More Lives Than One?* this claim does not stand up to scrutiny.

The truth is that the Sorel tomb was placed in its present setting no later than 1809. It has been a tourist attraction for the whole of this century, and it is described in detail in H D Sedgwick's *A Short History of France* published in 1930. The book was popular for decades and often found in public and school libraries. Apart from that, the tomb has been referred to in many other books and photographed frequently.

The circumstances are very much the same with Jacques Coeur's house. It is one of the most photographed houses in all of France. Fine, explicit photographs of it are included in Dame Joan Evans's book *Life in Medieval France*. There one can see the stone carvings over his fireplace and gain a sound idea of how the place looked, both inside and out. There is little doubt that Jane Evans has seen these or similar pictures. And there is overwhelmingly strong evidence that the rest of Jane's material was drawn from a source not known to Iverson, the 1947 novel *The Moneyman* by C B Costain. The book is based on Coeur's life and provides almost all the flourishes and authentic-sounding touches included in Evans's 'past-life' memory.

In particular, the novel very neatly answers an important question raised by Iverson and other commentators: Why doesn't Alison know that her master is married? As Iverson puts it: 'How is it that this girl can know Coeur had an Egyptian bodyslave and not be aware that he was married with five children?—a published fact in every historical account of Coeur's life? . . . If the explanation for the entire regression is a reading of history books in the twentieth century, then I cannot explain how Bloxham's subject would not know of the marriage'.

Costain's short introduction to his novel clears up the mystery. He writes: 'I have made no mention of Jacques Coeur's family for the reason that they played no real part in the events which brought his career to its climax . . . When I attempted to introduce them into the story they got so much in the way that I decided finally it would be better to do without them'.

The view that Evans's tapes were simply the result of cryptomnesia could still be contested if it were not for the confirmation provided by the vetting of her remaining two major lives. As Rebecca, the Jewess of York, Evans was supposed to have met her death during the massacre of 1190. At that time, most of the Jewish community died in the York Castle Keep, but Rebecca's death came in the cellar episode and a formidable legend has grown up. It is now asserted that the church is St Mary's of Castlegate and the crypt was actually discovered *after* Jane's regression. The truth is that the original television programme script stated that there were *three* possible churches that could qualify as the place

of refuge. St Mary's was chosen to film simply because it was the most convenient, since it was being converted into a museum. And it was this conversion that led to the uncovering of an aperture under the chancel. For believers, this was naturally a *medieval* crypt and proof of Rebecca's story. A very different view is presented by a report of the Royal Commission on Historical Monuments. On York (vol. 5, 1981) it says, 'Beneath the East end of the chancel vault with a barrel-vault of stone rubble, probably a later insertion and now inaccessible'.

For all that, the furore over the crypt is meaningless, since the Rebecca regression is clearly a fantasy. It is an amalgamation of at least two different stories of persecution taken from widely separated centuries.

The proof that we are dealing with a fantasy lies in the historical absurdities found in the tale. Rebecca repeats four times that members of the Jewish community in York were forced to wear yellow badges, which she described as 'circles over our hearts'. But the Jewish badge was *not introduced* until the following century, and then the English pattern consisted of two oblong white strips of cloth that represented the tablets of Moses. The yellow circle was, in fact, the badge worn by Jews in France and Germany after 1215. This is one aspect of Jewish history over which there are no legitimate doubts.

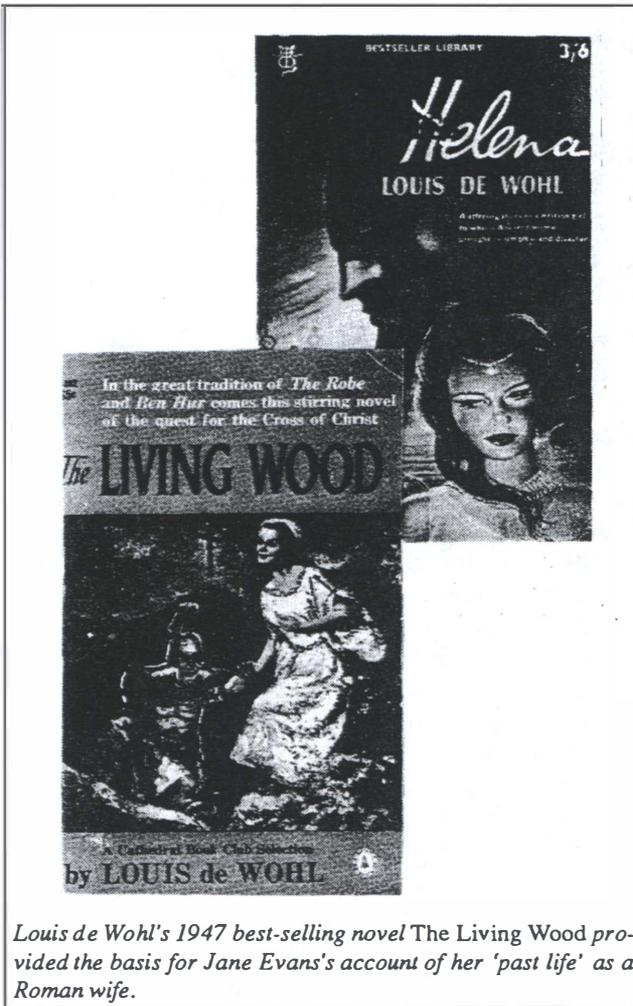
Further absurdities were discovered in passages from the tapes that were *excluded* from both the book and the film. In these revealing passages, Rebecca repeatedly speaks of living in the ghetto at the north of York. This ghetto was a quarter without street names in which only the rich Jews lived and she pointedly mentioned a poor Jew who had lived in 'the middle of York in a street called Coney Street'.

Now there never was a special Jewish quarter in York. The Jews lived scattered among the Christians in Mickle-gate, Fosgate, Bretgate, Feltergayle, and near the centre of town in Jewbury. The idea that a Jew would live on Coney Street because of his poverty is ludicrous. Coney Street was, in truth, the choice place for many of the rich Jews to settle, including Josce, the head of the Jewish community!

As for the notion of the ghetto itself, this involved a leap in time of over three hundred years, since the first ghetto was not set up until 1516 in Venice. It was established on an old foundry site. The very name is derived from the Italian *geto*, or foundry.

This means, inevitably, that Jane Evans has the ability to store vivid stories in her subconscious and creatively combine and edit them to the point where she becomes one of the characters involved. The clinching proof that this is so is provided by the Livonia regression. It is the purest regression of all, as it is based on one source only.

This particular life involves a turbulent period in Britain's history: a time of rebellion and instability. The name of the Roman governor of Britain during this period is unrecorded in existing historical records. Evans's past-life memories seem to fill this gap for us by stating that Constantius, father of Constantine the Great, was in charge. After consulting his reference books, Iverson happily concluded: 'Nor can the regression be dismissed as a fiction



Louis de Wohl's 1947 best-selling novel *The Living Wood* provided the basis for Jane Evans's account of her 'past life' as a Roman wife.

built around a blank area of history. Livonia knows a considerable number of verifiable historical facts that fit perfectly into her vision of the missing years. No modern student of history could contradict the names and events she describes. . . ' After hearing the tape, Professor Brian Hartley, an authority of Roman Britain, seemed to agree, since he commented: 'She knew some quite remarkable historical facts, and numerous published works would have to be consulted if anyone tried to prepare the outline of such a story'.

Professor Hartley was right, much painstaking research went into the making of Jane's story; but the research was undertaken by the late Louis De Wohl. In 1947, he wrote the best-selling novel *The Living Wood*, and Jane's life as Livonia is taken directly from that novel. Brief comparisons will show how.

Livonia's tale opens in Britain during 286 A.D. She describes the garden of a house owned by the Legate Constantius. His wife is Lady Helena, his son Constantine. The son is pictured as being taught the use of shield, sword, and armor by his military tutor Marcus Favonius Facilis. This entire sequence is taken from Book 2, Chapter 2, of the novel, in which Constantine trains in the use of arms and armour under his military tutor Marcus Favonius, called 'Facilis. . . because every-thing was easy to him'. De Wohl based this character on a real-life centurion whose tombstone is now in Colchester Castle Museum. But his account

of this centurion's life is pure fiction, since Facilis died in the first century A.D.

Livonia then describes a visit by the historical character Allectus. He brings Constantius an urgent message from Rome, but despite its urgency Constantius 'stopped at Gesoriacum to see Carausius who is in charge of the fleet'. This section is drawn from the same part of the novel as the above, in which the visit leads to the takeover of Britain by the rebellious Carausius, who is aided by Allectus. Iverson writes: 'Livonia gives a basically accurate picture of this quite obscure historical event'. Quite so, but only because the whole of the material rests on De Wohl's research.

In the same way, *every single piece of information* given by Jane Evans can be traced to De Wohl's fictional account. She uses his fictional sequences in exactly the same order and she even speaks of his fictional characters, such as Curio and Velerius, as if they were real people.

There are two minor differences worth noticing, since these involve her editing faculty. In the first instance, Evans takes a minor character, Titus Albus, a Christian soldier willing to die for his faith, and recasts him as a tutor to Constantine. But only the name itself is taken from De Wohl, for all of Titus's feelings and actions are those of De Wohl's character Hilary. Hilary is converted to Christianity by Albanus, ordained as a priest of Osius, and killed during a violent campaign against his faith. All these things happen in turn to Jane Evans's Titus.

In the second instance she takes another insignificant character, Livonia, who is described as 'a charming creature with pouting lips and smouldering eyes', and amalgamates her with Helena. A composite character is able to act as both an observer and as someone who voices Helena's sentiments, thus making the story that much fuller and far easier to relate.

This feat of editing reveals a little of the psychology behind these fantasies. Hilary is an eminently desirable male in the novel described as having 'a beautiful honest face with eyes of a dreamer'. He is also secretly in love with Helena. As Titus he becomes the lover of Livonia of the pouting lips and smouldering eyes—in other words, of Jane Evans herself. And there we have all the combustible material that fuelled a young girl's daydreams. And all inspired by an exciting historical novel.

In conclusion, I should emphasize that in investigating regressionist claims, I chose the most difficult and best-known cases available. They had remained unchallenged for years and were regarded as impregnable. A BBC documentary team had checked them out in every detail. They were triumphantly marketed as 'the most staggering evidence for reincarnation ever recorded. . . accounts so authentic that they can only be explained by the certainty of reincarnation . . .' Yet in the end they turned out to be nothing but fantasies, pure and simple.

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Return To Silpho Moor

Roger Ford

A re-assessment of the Scarborough sky crash of 1957

Perhaps, after all, the most mysterious thing about the Scarborough Saucer Crash, is the fact that after thirty three years no one has come forward to claim responsibility for staging the 'hoax' that this event allegedly was. As far as the writer can ascertain, after such a length of time, the whole matter seems to have been settled by sundry 'experts' solely on the basis of what they were prepared to believe about ufological possibilities. Evidence, what there was of it, was indeterminate, and even with the 'crashed saucer' to work with no one seemed able to make an informed impartial judgment in the matter. As is all too frequent in ufology the investigation was apparently approached as an exercise in belief system thinking. And who is there, even these days, who can say that they would have fared any better given the kind of information available at the time.

One of the main protagonists is known to the author, and this source still insists that the actual artifact, the anomalous aeroform, that fell from on high into a field in Scarborough, a seaside resort on the East Coast of Yorkshire, is out there somewhere. Probably in the possession of the widow of the last known holder of the 'saucer'. Her present whereabouts are unknown, but it is likely that she does not even know she has it, as it could be among her late husband's effects, gathering dust in garage or attic. An ignominious end for a Saucer from the Stars, wouldn't you say?

Perhaps, even at the outset, the scenario was such that even if the story were true it stood very little chance of being accepted as such. So, what really happened?

The story goes that on the evening of 21 November, 1957, a trio, composed of Mr D and two companions, were travelling in Mr D's car on Silpho Moor. Now even in those far gone, and unswinging times, Silpho Moor had a certain reputation, and one is left to wonder what these three were doing there in the first place. According to my informant they were, at that time, well known local 'tycoons', whose reputations might have suffered a severe setback had their presence on the Moor been discovered. A writer, rejoicing in the pseudonym of Anthony Avendel (who, it is rumoured, was eventually 'bought off' and went on to found his own publishing company, still extant, on the proceeds) gave the three gentlemen's names as Frank Hutton, Charles Thomas and Fred Taylor. But my informant, Mr P. Longbottom (also an alias) intimated, without categorically stating such, that these names were as suspect as his own in the context of the story of Silpho Moor. All very confusing I'm sure. But that's ufology, and things only got worse from there on in.

As the three witnesses were driving along minding their own businesses, whatever that might have been, they espied, in the evening sky, a 'glowing object' which fell to the

ground very near to where they were. It is noted in the *Flying Saucer Review* account that immediately prior to them seeing the object the car had stalled. However as it is also mentioned that they were at the time going up a steep gradient it is not really necessary to invoke 'electromagnetic effects' for the car's sudden seizure. Cars in those days would, and often did, seize up and stall, for the most mundane of reasons. Especially when struggling up a steep gradient with a full load. The car having stopped, Mr Hutton got out and, taking a torch with him, went to find the object they had seen fall from the sky. He found that the object had fallen only a matter of forty yards or so from where the car had ground to a halt. Having located the object he hurriedly returned to the car to fetch his two companions to see what he had found. In doing so he either left a young couple, who had also been on the Moor, standing over the object; or, he passed them making their way towards it as he was returning on the trot to the car. Whatever, when he and his two friends returned to the scene of the sky crash both couple and saucer were allegedly gone. I'll bet Mr Hutton and Co. said 'dash it all', or words to that effect.

Although the saucer was later recovered for the princely sum of £10 (don't laugh—you could nigh on retire on that amount in those days), the couple who allegedly performed the saucer snatch were never named. In fact they are quite mysterious, in that they turned up out of nowhere to perform their dastardly deed on the Moor, then returned to oblivion. It is not certain that they were the ones from whom the saucer was eventually reclaimed as whoever returned the saucer did not volunteer the object, but responded to an advert for such an object that was placed by the main protagonists in the local press. So said my informant, and he should know, as it was to him Mr D brought their find for the 'message' it allegedly contained to be deciphered. But really, given the loss of the original, there is no real guarantee that the one returned was the one which fell upon the Moor.

All the extant accounts, and my informant, agree that the saucer which was the subject of the following investigation was shaped something like a child's spinning top. It was 18 inches in diameter, measured nine inches through the centre, weighed 35 lbs, and was composed of the most mundane materials. It was seemingly made to such specifications as could have been duplicated, or bettered, by Terran manufacturing processes. In other words, it looked a bit 'home made', in more ways than one.

According to Mr Longbottom, whom I interviewed in late '89, even in the early stages of the investigation there were 'rumours' of 'D' notices being served on the local press to stop reportage of the incident; individuals akin to the Men

to stop reportage of the incident; individuals akin to the Men In Black showed up for a brief spell, and 'poltergeist' effects were experienced in the witnesses' homes. Everything out of *The Good Ufologists Guide to Alien Behaviour*, it might seem.

As the investigation proceeded, and the saucer was broken open, there was found inside, not advanced alien automation, but a coiled copper spring or 'tube' into which had been stuffed a 'copper scroll' upon the pages of which (17 of them in all) were incised words of cosmic wisdom. Instructions as to the disposal of the scrolls were 'scratched', in similar characters, on the outside of the saucer, and looked as shown here.



Well, I agree, they only look like chicken tracks really, but the ones on the 'copper scrolls' were eventually 'deciphered' by my informant after some 100 hours of work.

This 'message' is the most interesting part of the whole Silpho Moor affair. It purports to be from an extra-terrestrial called Ulo. What he, she, or it, had to say might have been news in those days, but from subsequent 'alien messages' it can now be seen that it was the same mixture as before. Avendel, whoever he was, was seemingly the most sensible of those who came in contact with the saucer, as he seemed to accept the message as 'genuine', but in terms of an earthbound initiative to make certain facts known. He told the press: 'I accept this as a message, but I don't accept that it has come from another planet. I think it was devised as a method of presenting certain ideas to the public—either by way of propaganda or advice.'

So what was it that 'Ulo' had to say for himself? As usual the message revolved around mankind's unenviable ability to turn planet Earth into a Cosmic charnel house. He stated the obvious by pointing out that we are a 'fierce' species, a condition he blamed on our lack of a common language. He insinuated that we would not get far in space because of sudden changes in speeds and direction and other reasons, and warned us to change our ways—or else. This strange message, which contained nothing that we did not already know, and some things which our science was on the verge of disproving, should, according to those 'hieroglyphics' on the outside of the saucer, be only handed to a 'philosopher'. Perhaps it lost something in the translation and what Ulo had really meant was 'Skolar'.

Despite the expanding ludicrousness of the affair, those bone fide UFO groups which undertook investigations did so in all seriousness. Samples were sent for analysis. Statements were taken. Diagrams were made. One group even went so far as to have the damned thing 'psychometrised' and by this means discovered that the object was dropped from a Mercurian Scout Ship, which, having thus delivered this momentous message, went on to Yeovil. (Perhaps, after all, there is something about Yeovil that I have been missing

all these years.) It was further determined that the object was driven by 'electromagnetic propulsion', and that it was deliberately 'guided' towards that particular car by a second object of much larger size (the Mercurial Scout Ship), and that it was 'exploded' to fall at a predetermined distance from the car. After all that it's a wonder it got down in one piece.

My own informant, some 32 years later, was still inclined to the opinion that the object might not have been of terrestrial manufacture even though it was made of the same materials, and apparently according to the same principles of manufacture, as domestic hot water tanks. At the time the mystery eventuated it ended very much 'you pays your money and you makes your choice' with one of the investigating groups, with at least one member claiming alien contact, deciding to accepting the saucer as a genuine piece of extra-terrestrial hardware. While the other group, who perhaps did not benefit from Alien Advice, decided that it was a 'hoax by person or persons unknown'. Everybody, it would seem, missed the point completely.

The point is that this sort of thing is pointless. Even if the saucer and the 'message' had actually come from Mercury it could have been confidently ignored, and left to rust on Silpho Moor. The 'message' relayed nothing we did not already know, and the saucer apparently could have been cobbled together by a half-way competent plumber. If this is an example of the best that a superior alien culture can attain then they are probably best ignored, as they have nothing to offer except a kind of unconstructive puerile paranoia, and manufacturing techniques that would clearly benefit from subcontracting to Taiwan. Therefore if, in the face of all that interplanetary ineptitude, the Silpho Moor Saucer turns out to be a message from ET, then before we can all faint from the cosmological charitableness of it all perhaps we should ask ourselves 'what's in it for them?', and so possibly avoid being taken for an interplanetary ride—metaphorically speaking.

In the end it is hardly likely that the Silpho Moor affair was anything but what it appears to be. Some kind of well meaning hoax by persons or persons unknown, who allowed their Atomic Anxieties to get the better of them and tried, in their own way, to do something about it, little realising that the Human Race is the way it is because that is the way it wants to be. If we really were as socially sane as all these unnaturally altruistic aliens seem to assume, we would never have started playing with Atomic Matches in a Global Gunpowder Factory in the first place. So hoax or genuine 'Ulo's' Message from Mercury (and those which have followed, and are following, and will continue to follow its example) has as much chance of persuading the Human Race to eschew its present sociologically suicidal strategies, as I would have trying to persuade a lion to become a vegetarian. For better or worse we are what we are—The Ape Who Would Be God—and it is time we matured and accepted our destiny. To be Human is enough. Anything else would be too Alien.

Roger Ford writes for the *UFO Debate* from which this article is reprinted with kind permission.

Science, Fringe Science and Pseudoscience

Cornelis de Jager

1. THE SCIENTIFIC METHOD

In 1515 a new map of the heavens was published with, in the style of those days, somewhat extravagant and baroque drawings of the constellations (Stabius, Heifogel & Durer, 1515; Fig. 1). The maps were the result of a fine cooperation between three scientists: the mathematician Stabius, who determined the stellar coordinates, Heifogel who calculated their positions on the maps, over which the famous artist Albrecht Durer drew the constellations. Durer was an ideal renaissance person, being both artist and scientist. His interest in astronomy dated from his acquaintance with Regiomontanus, in whose house Durer lived after the death of Regiomontanus.

These new maps marked the beginning of scientific mapping. In earlier times a literary tradition existed in North West Europe in which the primary interest was the constellations rather than the positions of the stars. If stars were added to maps, they were usually just placed at their 'appropriate' positions; for example, Aldebaran was placed at the eye of the bull, Algol in the head of Medusa, and so on. In the new maps the measured positions of the stars were the basic data. The new methods of rational science that were developed in the renaissance were based on the gradually emerging concept that observations have to come first, and that these are followed by hypotheses or theories that have to explain the observed phenomena. Obvious as this seems to modern eyes, it was a breakthrough of a new method of thinking and one of the markers of the start of the glorious development of science in later centuries.

But modern science did not emerge instantaneously. Particularly at the end of the Middle Ages occultism and science were intertwined. Astronomy had clear astrological roots; indeed in ancient times there was no real distinction between the two. To the ancient peoples in the Middle East the planets, wandering across the background of fixed stars at a distance thought comparable to the scale of the Mediterranean area, could hardly be other than light signals bringing messages of the Gods to the earthly mortals. Hence, understanding these messages was of great importance, and careful analysis of planetary motions through the constellations was a first task to that end. Regular patterns in these motions were discovered, and in a way this was the beginning of an analytical approach to planetary motions. Thus began a more modern kind of astronomy, which gradually reduced the significance of astrology, although it was a long process. Kepler still used to produce horoscopes; the one of the famous Bohemian general Albrecht Wallenstein

(1583–1634) is well known. It seems, however, that Kepler was not really sure of the value of astrological predictions.

In the same way as physics was intertwined with magic in those days, chemistry was intertwined with alchemy. Bacon and even Newton still practised a form of alchemy.

As a manifestation of the breakthrough of rational thinking based on the experimental method, and in order to promote modern scientific methods against the strong conservative forces, the scientific academies emerged in western Europe. The Accademia dei Lincei in Italy, founded in 1603, was the first academy of the modern kind. The name lincei (lynxes) was well chosen and was meant to illustrate the militant character of the new body and its aggressive attitude to the still strong altarpieces of the past. Not much later, in 1617, the 'Nederduytsche Academie' (also called the Eerste Duytsche Academie) was founded in Amsterdam 'after the Italian example'. The revolutionary aim of this body was to teach in the national language (duytsch, cf. oldsaxon: thiudisk, Old German diutisc, which means the people or the peoples'), in contrast to Latin, which was until then the language of science. This humanistic and libertarian body met with much opposition from the Calvinist clergy, a powerful establishment in seventeenth century Holland:

Het quijl dat loopt hum uit zen mongt,
Zoo schelt hij d' Akademy,
[Slaver spills from his mouth,
As he abuses the Academy.]

one of the academy members wrote.

In 1662 the Royal Society was founded in London. Its aims, particularly the experimental base and the rejection of mysticism, were clearly defined; the Society was founded "to improve the knowledge of natural things, and all useful Arts, Manufactures, Mechanic practices, Engynes and Inventions by experiments—not meddling with divinity, metaphysics, moralls, politicks, grammar, rhetorick or logick".

In 1666 the Academie des Sciences was founded in Paris and many more followed. The 'Koninklijke Nederlandse Akademie van Wetenschappen' was only founded in 1808, after the unification of the Seven Provinces into the Kingdom of Holland.

The modern scientific method, as it has been established over the centuries, can be illustrated by the development of ideas on the planetary system and of celestial mechanics. The systematic observations of the planetary motions led the ancient Greeks, notably Ptolemaus, to develop the geo-

centric system of planetary motions. The introduction of the heliocentric system by Copernicus was partly based on neoplatonic considerations, but although his theory still deals with epicycles, the new developments started by him can be seen as an application of Occam's razor, still one of the basic principles of the empirical method.

William of Ockham, the fourteenth-century English philosopher and theologian who died in 1349 (probably in the Great Plague) introduced the principle: "Non sunt multiplicanda entia praeter necessitatem", which means that things should not be multiplied beyond necessity. In still other words: if several explanations are proposed for an observed phenomenon, the simplest explanation, demanding the least number of hypotheses, is most likely to be the correct one.

Typical cases of not using Occam's razor are statements like the following:

"There are pyramids in central America. The natives there could not have invented pyramids independent of the Egyptians. This proves ancient Egyptians have travelled to Central America". It is easier to think the natives were intelligent enough to develop fairly basic structures like a pyramid;

"Human beings are too dumb to do certain clever things. These could only have been done by extraterrestrials. This proves that extraterrestrials have visited Earth". It is more likely that humans do possess a fair amount of intelligence;

"A contemporary Indian Saint, by the name of Sai Baba, is able to create material objects out of nothing, thus violating well-known physical conservation laws". A simpler explanation is that Mr Baba is a skilful magician.

After Copernicus a long struggle with facts was needed before the heliocentric system was generally accepted. For more than half a century Copernicus's system was hardly known. Johannes Kepler, using Tycho Brahe's magnificent observations, introduced elliptic planetary motion, but he still had to discover his three laws to describe the motions properly. At about the same time, Galilei's telescopic observations gave additional but indirect support to the heliocentric system through observations of Jupiter's satellites and the phases of Venus. The main significance of Galilei is, however, his work on the fundamentals of mechanics, and, in addition, that his action substantiated the fundamental question of who should decide what is true—the Church or scientists?

Further progress came when Kepler's three laws were reduced to one by Newton, who demonstrated that all celestial motions can be described by the law of universal gravitation—another obvious case of Occam's razor. The next step came with Einstein's further refinement, which explained certain hitherto unexplained aspects of celestial mechanics, that had come to light thanks to new and better observations.

This brings us to two of the great developments of our century: those of quantum mechanics and of relativity. With all their apparent paradoxes the ideas developed in the sciences of the very small and very large are often counter-intuitive. This is perhaps the reason why many authors of popular literature postulate that a change of paradigm (a complex of generally accepted views) should have oc-

curred in science with Bohr and Einstein. Also, many non-physicists have misconceptions about quantum mechanics, the most remarkable being the statement, sometimes heard (historical!) that "After Heisenberg it is clear that everything is uncertain in the surrounding world", which is thereupon used to postulate the reality of certain paranormal phenomena! But both the layman and the more philosophically oriented person are in that case making the same mistake when they ignore the fact that these branches of physics obey exactly the same principles as those on which earlier scientific developments were based. To be specific, the new developments:

are based on observational evidence;
arose from classical physics and its laws,
(notably the conservation laws);
are based on the assumption of isotropy
(being valid in the whole Universe).

Undoubtedly, the new 'laws' will, in turn, be changed or refined when more and better observations become available. Hence, there is no discontinuity in the scientific method and, while the new results may seem odd to laymen, they are forced upon us by the overwhelming evidence of a wealth of coherent and reproducible observations.

The preceding discussion illustrates the methods of modern science. The basis is empirical evidence, but the 'laws of nature' are not proofs in the mathematical sense. Any such law derived from the study of observations and cemented by theories can be no more than a transient step in the progress of science. "Conclusions, based, as they must be, on rational evidence can never be more than tentative" (Asimov 1986). Some scientists therefore say that there is only one certainty in the scientific process—the rational view. Or they say, with the Dutch writer Multatuli (1820–1887): "Nothing is certain, not even this statement".

2. EXTERNALLY IMPOSED LIMITS TO SCIENCE

Science is perhaps the most powerful tool developed by mankind to influence his destiny, but society is not always pleased with the results of scientific research. When these threaten to lead to harmful applications or to undermine established authority, it may happen that society or social groups wish to prevent them from being made public. Examples are available even to the present day.

Galilei is, of course, the classical example. When his ideas seemed to conflict with current religious views he had to abjure them in public. It seems absurd, but the inquisition had the power. This attitude is still encountered daily. In modern times Nazi authorities, sadly enough supported by a few prominent scientists, forbade the study and teaching of relativity, because it was 'Jewish Science' and for not being 'volkisch'—indeed, relativity does not respond to common experience. Lysenko is another notorious example: he suggested, against evidence, that genetic properties might be lastingly acquired from the environment. By itself it is not wrong to make such a statement for in a way it is an aspect of Darwinism. But it was well known that the evolution of species takes a very long time—a rough estimate is 10 000 years for the origin of one new biological species. Lysenko stated that a few years were sufficient. But he postulated his



Fig. 1. Detail of the star map by Stabius et al. (1515)

ideas primarily because they were assumed to be in accord with dialectic materialism and he did not verify his claims in a scientifically rigorous way.

In my own country, where freedom of thought is assumed to be one of the fundamentals of society, a storm arose a few years ago when Buikhuizen in Groningen (and later in Leiden) wanted to study the biological basis of criminality. His opponents feared that his results might eventually support racial discrimination. This all finally led to a lamentable embargo on the continuation of his research. Just recently (1988), a nearly similar case arose when Swaab, in the Netherlands Academy Institute for Brain Research, found some indications that homosexuality might be related to slight differences in structure of the hypothalamus (a part of the brain that is involved in many human actions and sentiments). When this hypothesis appeared in the press the reactions were numerous; various opponents, including a university professor, stated that such results should not be published because they would tend to isolate homosexuals in society. It was gratifying that in this case the research did go on when the initial turmoil had abated.

We see that scientific progress may be endangered by the resistance of established social groups, or even society as a whole, to ideas that seem to conflict with their current views or ideologies. The upheaval caused by the recent publication of S Rushdie's book does not exactly fall in this category but it is a related phenomenon.

On the other hand, the horrible reminiscence of the kind of 'research' performed in Nazi concentration camps makes it clear that there is a very justified fear of intolerable scientific research. While this example remains an exception, there is a general fear of undesirable applications of scientific results. In this connection voices are sometimes heard advocating the prevention of nuclear research (because it produces atomic bombs and radioactive matter), or of DNA research and genetic engineering (because it may eventually allow mankind to control genetics), and more such examples could be given. The point that should be made here is that science can always be applied for the better or the worse. Society should not try to prevent research—in actual fact, society cannot if powerful groups are strongly interested in the research. Society should, however, develop systems to control the *applications* of science. This is a

problem for society as a whole, but it is indispensable that in its practical realization politicians are supported strongly by science.

3. FRAUD IN SCIENCE

Scientists are human; they may err, like others. Sometimes they publish fraudulent results—unacceptable, but a sad truth. The usual picture of the honest and unimpeachable scientist is not correct in every case.

We have our little sins. Observed data are plotted and the result would show a number of points only slightly scattered about a nice straight line, were it not that two of the ten points are grossly deviating. The scientist then looks again at these two points; checks the observations and their processing and is finally pleased to see that either these two data points can be deleted because the observations were made in bad circumstances, or an error has been made in the discussion. There is nothing, in principle, against a corrective treatment if it is done honestly and if the same additional care is given to all other data points. Maybe points that still lie on the straight line would appear to be greatly deviating after such a correction! Still worse is the attitude of deleting points just because they are deviating. Rejecting undesired empirical data is called 'immunizing'. It is known that Mendel fiddled with his results, and Nobel prize winner Millikan, the first to determine the charge of the electron, immunized his data by deleting deviations; thus he got 'more consistent' data. In Millikan's case the results still happened to be correct; guided by the right intuition he appeared to have deleted the right data, but in how many unknown cases is the literature polluted with erroneous results because people wanted to present 'nice' data?

It is hard to state in all cases whether a result is really due to fraud. Blondlot's 'discovery', during the early part of this century, of the N-rays was certainly not. His finding was simply the result of his strong desire to confirm the existence of the rays whose presence he suspected from a first experiment. His co-workers did not want or dare to oppose him. Twenty papers on the N-rays had been written before the matter came out into the open. A similar situation may be at the root of the recent finding by Pons and Fleischmann who claimed to have discovered the secrets of nuclear fusion at room temperature. Intriguing as the results seemed to be, they prompted many laboratories to try to repeat the experiment in spite of the fact that there were so many inconsistencies in the communicated results that many specialists immediately expressed doubts. All experiments done elsewhere invariably yielded negative results. Most laboratories have now stopped their 'cold fusion' experiments.

Cyril Burt, from the study of twins that had been separated after their birth, concluded that intelligence is primarily determined genetically. Whether Burt was right or wrong, two of his 'co-authors' did not exist. Recently eleven papers written by scientists at Stanford University were officially withdrawn because the published results had been obtained fraudulently (Norman 1988). McBride (1988) describes a researcher found guilty of deliberately falsifying the results of an experiment. A recent case of fraud in geological science was disclosed by Talent (1989). We can refer to Maddox (1988) on fraud in a study of the regulation of the

immune responses. More such instances are described in a few recent books, such as those by Broad & Wade (1983) and Kohn (1986). These saddening experiences naturally have led some people to consider ways of warranting integrity in the biomedical sciences (Culliton 1988a), as well as in general scientific practice (Shamoo 1988; Culliton 1988b).

4. PSEUDO-SCIENCE AND FRINGE SCIENCE

"Pseudoscience uses the scientific terminology but not the scientific criteria" is perhaps the simplest definition. There is "no well defined demarcation line between science and pseudo-science, but one of the features is the lack of an independent testable framework of theory, capable of supporting, connecting and explaining the claims" (Grove, 1986). In pseudo-science it is often hard to falsify a statement, which means it is difficult to prove it is not true. "The virtue of science as a system is that it can and does sort out its errors. Pseudo-science does not" (Gould, 1986). But more is needed to describe pseudo-science adequately. The 'seven sins of pseudo-science' were recently described by Derksen (1989). The three most important sins in his opinion are: speculation based on insufficient observational evidence; unfounded immunizing; unfounded abduction (abduction = drawing conclusions from coincidences; as a first step this is not wrong and is common practice in science).

Many cases of pseudo-science, bad science or non-science are around. The catastrophe theories of Velikovski and his followers try to explain certain properties and regularities of the planetary system by fantastic and unfounded assumptions involving collisions of celestial bodies. The various recurrent hypotheses on Atlantis also fall into this category.

A large group of pseudo-scientific theories is based on the mistake of taking correlation for causation. An instructive example is: the levels of street illumination in many countries have increased since 1950 and so have the levels of criminality. A plot of criminality against the level of street illumination (for the USA, but the same would perhaps have been found for other countries too) shows a remarkably straight line with correlation coefficient of about 0.9. Does street illumination therefore create conditions for crime? And would crime subside as a result of switching off street lights?

Correlations between sunspot numbers and terrestrial phenomena are incredibly popular since a correlation was found, in the twenties of this century, between the water level in Lake Victoria and the sunspot number. The course of time sometimes cures such mistakes: continued observations showed that the correlation, in fact, does not exist. Sunspots have been correlated with the quality of harvests, of wine, of numbers of suicides, etc. A further example from the years '50-'60 is the so-called Piccardi tests, in which the behaviour of colloids in laboratory experiments seemed to be correlated with the sunspot number (Piccardi 1960). In all cases studied the correlation is weak or absent, while tests at different institutes yielded different results. The experiments are continuing, with improved techniques, but results remain meagre and although theories have been advanced, a satisfactory physico-chemical explanation for the correlations is still absent. If the period over which

correlation is sought is short enough there is always correlation—positive or negative. But even if a perfect correlation were found over a long period of time, the case can be considered solved only when the causal relation is also found (see the example of the street illumination). This is what is lacking in most pseudo-scientific correlation analyses.

An example of pseudo-scientific reasoning is provided by the following account of an experiment performed in the Netherlands in the mid-fifties, of which I was an eye-witness. To check the reactions of a certain Mr A, interested in flying saucers, some of his friends filled a little children's balloon with gas and let it go. When it had acquired a height of some 25 m Mr A was alerted. He observed the little roundish object, first with the naked eye, and thereafter with binoculars, until it gradually had disappeared into the blue sky. After that he first carefully measured the angle with the horizon at which it had disappeared. He then declared: "My first observations are these: (a) this is a material object; (b) it disappeared from Earth into space at an angle of 28 degrees with the horizon, hence the important conclusion: it did not disappear behind the horizon, and (c) it moved into a southern direction and no motor noise was heard".

Thereupon he inquired at the Meteorological Office about the wind direction at 5 km altitude. Being asked by others from what source he got the assumed height of 5 km, and not, say 20 m or 20 km he answered, that this was indeed a problem. But as a working hypothesis and no more than that he wanted to examine the consequences of this first assumption; when the consequences would fit into a coherent picture he would consider this assumption as correct. One of the reasons to begin trying 5 km was that he had not heard any motor noise.

Anyway, the Meteorological Office replied that at 5 km the wind was blowing north (opposite to the direction as ground level). Mr A then concluded: "working hypothesis confirmed. I assumed 5 km because I could not hear any motor noise. The object was moving against wind direction. Hence it must have had a motor. And since I did not hear it, it should indeed . . ." etc. I describe this experience in so much detail because it has so many elements in common with 'well proven UFO reports' of the kind we see so often in newspapers and in UFO journals. But, how many of the 'working hypotheses' that appear in the scientific literature may have run into similar, or perhaps somewhat more complicated pitfalls?

5. DOUBTFUL SCIENCE AND NON-SCIENCE: HOMEOPATHY

Much rumour was caused by a paper by Davenas *et al.* (1988) who showed that a certain biologically active substance kept its properties even when diluted to the fraction 10^{-120} . Fig 2 shows how, as a function of the log to the base 10 of the dilution, the activity of the molecule does not decrease, but rather shows a kind of alternating behaviour. A critical examination (Maddox *et al.* 1988) of the way of experimenting, by a team consisting of John Maddox, editor of *Nature*, the scientist Walter W Stewart and a famous magician (James Randi) experienced in debunking fraudulent scientific practice, failed to confirm the results and brought to light that the data were suspiciously lacking the

statistically expected sampling errors. This case was not really one of fraud, certainly not by the leader of the group, Jacques Benveniste, who had already openly declared the results as 'absurd' and who had expressed his surprise that the results never appeared when the experiments were done by himself! He was, however, too careless in not checking the work of his co-workers who, apparently, assumed that if experimental results disagreed with expectation they might be wrong and had to be rejected. It was a case of immunizing the data. His results were used though to support the basic principle of homoeopathy.

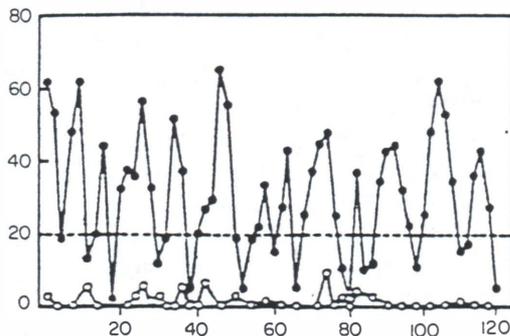


Fig. 2. Plot of the results of Benveniste's experiment. Ordinate: activity of the IgE molecule. Abscissa: log to the base 10 of the dilution.

Homoeopathic medicine is widely used in the Netherlands as well as in many other countries. Homoeopathy was introduced by Hahnemann (1755–1843) who, somewhat in the line of ideas put forward by Hippocrates (fourth century BC) and Paracelsus (1493–1541), introduced the principle of curing an illness by letting the patient take diluted extract of the substance that causes the illness: 'similia similibus curenter'—like cures like. Homoeopathic drugs, if taken in large enough doses, would cause the illness, but in actual practice they are served to the patient in extreme dilutions. The procedure for producing these medicines is to dilute them (mostly in water) by a factor of 10 or 100 (these are called D1 and C1 respectively) and to repeat this procedure N times yielding dilutions D_N and C_N . Each time, the bottle containing the dissolvance is shaken. Shaking is said to be necessary to commute the properties of the dissolvance to the water. Dilutions of D30 or C30 (meaning 10^{-60}) are normal, and Benveniste (Davenas *et al.* 1988) even went up to D60, i.e. 10^{-120} .

Many non-physicists are unaware what these strong dilutions mean. The Earth's oceans contain about 10^{46} molecules of water. This means that with a dilution of C60, 10^{74} oceans like those of the Earth would be needed to contain only one molecule of the original substance. Or: the mass of our Universe is estimated at about 10^{56} g. If completely composed of water it would contain 10^{78} molecules of water. Hence 10^{42} universes filled with water would be needed to contain one molecule of the original substance. In 1987, I presented this little calculation in a lecture at the Technical University Twente. A professor of Science Policy then smilingly counter-remarked: "That may be true, but you neglect the effects of shaking the bottle, during which the properties of the substance are communicated to the wa-

ter". He was not sensitive to my remark that the changed properties of the water had never been shown, not even by the most delicate spectrochemical analyses, and that exceedingly strong forces, more than those exercised in manual shaking, would be needed to overcome the associated intermolecular forces.

In spite of the fact that homoeopathic drugs are just water with an alleged memory, these drugs are very popular. This may be so because they are associated with adjectives like pure, natural, non-industrial. Indeed, the substance is pure enough: few things are purer than plain water. But there does exist a large and growing homoeopathic industry that makes large profits.

There are two reasons why these drugs help, in spite of the fact that they do not work. First, many of the usually reported common illnesses are fictitious; the patient wants attention and when this is given, in whatever way, he/she may already feel better. The other reason is that in many cases a placebo appears to work. The reasons are not yet fully clear by recent pharmacological research seems to indicate that a patient, believing in the physician and his treatment, produces endorphines, which act as a kind of drug, and thus have a healing or in any case some pain-relieving effect—but only for slight illnesses from which they might have recovered anyway. Recent research seems to show that acupuncture works in the same way.

6. ASTROLOGY

The second example that I want to discuss is astrology. The popular 'natal effect'—the relation between the sign of the Zodiac under which one is born and his/her character—has been checked variously by double-blind methods and is found not to exist, as could be expected (Carlson 1985; Dean *et al.* 1985).

The same applies to the forecasting value of horoscopes. In 1988 January I was confronted in a TV interview with the forecasts of Mr Gielis, perhaps the most renowned Dutch astrologer. Most of his various forecasts were of the usual style, and were nothing more than intelligent guesses, so well known from astrology predictions (such as an earthquake in South America, flood in Asia, and the death of a well-known politician—in that connection I forecast on another occasion that Khomeiny would die in 1988 or 1989 and I was right!). There was however one specific forecast: an aircraft crash on 10 April 1988. When asked for further details he added that the uncertainty in the astrological data yielded a spread of plus or minus ten days in the expected date. From the statistics of aircraft crashes in the months thereafter I learned that there is about one incident mentioned over TV or radio every three weeks. So, statistically, Gielis was right: there might be an aircraft crash in the 20 days around 10 April 1988. Actually, as statistics also teaches, there need not be one, and it so happened that there was no accident in the six weeks around that day. Neither did Gielis foresee the dramatic collision of two Italian military planes at an air show in Germany, in late August 1988, in which, in addition to the pilots, about 70 spectators were killed; nor did he forecast the tragic accident involving a US Boeing that crashed over Scotland, later that year. This all confirms current scientific ideas on the value of horoscopes and astrological predictions.

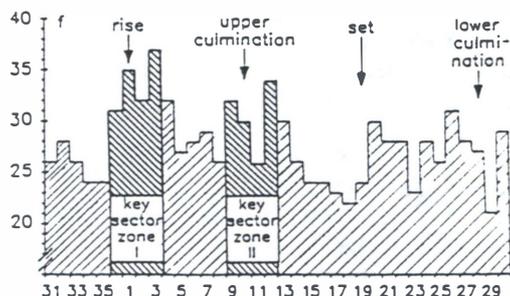


Fig. 3. The Mars effect from Ertel's (1988) study. The apparent Mars orbit is divided into 36 sectors. The zero point is at the rise of the planet. The sample contains 4391 sportsmen. There are significantly more sportsmen born when Mars is in its first sectors.

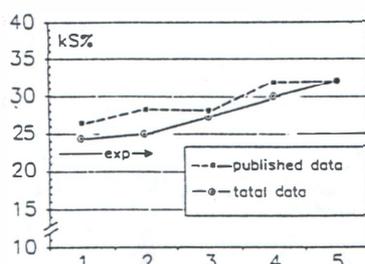


Fig. 4. The eminence effect. The higher the degree of eminence, the clearer the effect. The solid line refers to the total amount of data ($N = 4391$) studied by Ertel (1988); the dashed line is for data published earlier ($N = 2888$).

There is, however, one finding of birthday statistics that needs more attention. The French statisticians M and F Gauquelin (1955, 1979) investigated the positions of the planets at the moments of birth of eminent sportsmen. To that end the apparent orbit of a planet at any particular day is divided into 12 sectors, of which six equal sectors are above and six equal sectors below the horizon. The sectors below and above the horizon therefore usually do not have the same length. They took care only to include natural births, not those that were accelerated by medical operation. They found, from the study of a sample of 2088 sportsmen from France and Belgium, that more of them were born when Mars was in the first or fourth sectors after its rising above the horizon than one would expect experimentally. The difference was 3.7 per cent, which is statistically significant for such a large sample. In addition, they found some indications that the effect is stronger, the more eminent the sportsmen. But there are a few questions: first, Mars does not stay in each sector during the same period of time and how do non-sportsmen respond to the statistical analysis; and next: what are the criteria for selecting top sportsmen. The first problem could be cured by the suggestion of the statistician Marvin Zelen of working differentially, by making the same statistical analysis for non-sportsmen born at the same time and in the same region as the sportsmen examined: for the two kinds of persons Mars has the same apparent orbit. A comparison of the number of births of the two categories should then yield more reliable results.

When Gauquelin applied this new procedure to his own

material he again found a deviation that was statistically significant because, surprisingly enough, non-sportsmen did not show the 'Mars effect'. This result needs independent checking, which has since been carried out by various researchers. In the following I will only describe two of these checks. The first was an investigation by Kurtz, Zelen & Abell (1979a), who repeated the study for 408 US sportsmen, for which they found no significant result. An analysis of the same data by Rawlins (1979) who also included the other planets up to Saturn, as well as the Sun and the Moon, yielded a distribution of births over the 7 (celestial bodies) times 12 (sectors) = 84 bins that just fitted to a Gaussian with the expected sigma-value. Rawlins found that the distribution over the Mars sectors showed a maximum in sector 10, not in 1 and 4 as it should be according to Gauquelin. An immediate criticism of this study is that the Mars effect could never have been found from the data available to Rawlins because the number of data points per bin is too small and hence the resulting standard deviation too large to unveil the small effect found by the Gauquelins.

The result by Kurtz *et al.* (1979a) was thereupon attacked by Gauquelin (1979) who questioned the US result on two accounts: first, that only births from before 1950 should be included, because for these births it is more certain that they were natural births. The second remark is that the US study did not deal with real top sportsmen, for instance there were basketball players in the US sample. The following is a quotation from Gauquelin & Gauquelin (1979): "I recommend that basketball players not be included because they have given the most disappointing results in the European sample". The word 'disappointing' suggest that Gauquelin excluded unsuitable groups from his sample in order to get 'better' statistics. In my opinion this weakens the reliability of his results.

The remainder of the discussion (Gauquelin & Gauquelin 1979; Kurtz, Zelen & Abell 1979b) was a quarrel on the definition of top sportsmen that did not advance the solution of the problem. For me, this debate may still be classified as inconclusive. I will not describe the many heated discussions that took place during the few years thereafter, some of which were not at the required scientific level. However, important progress was made in a thorough statistical study by Ertel (1988) who investigated 4391 sportsmen, including the samples of the Gauquelins and of Kurtz *et al.* With this larger data set a finer subdivision of sectors appeared possible. Criteria were established to define in an objective way the degree of eminence of sportsmen: five classes were defined. The Zelen test was thoroughly applied. The result was that the Mars effect appeared clearly and beyond any reasonable doubt (Fig. 3). In addition the 'eminence effect', already suspected by Gauquelin (1955), came out clearly (Fig. 4).

To call this result surprising is perhaps an understatement. But one has to note that what has been found is a correlation. It should be confused with a causal relation. It has not yet appeared possible to find an explanation for the Mars effect. It seems most difficult to assume that the position of Mars in the sky might have any effect whatsoever on the bodily qualities of newly-born children.

I therefore suggest instead that a relation may be sought in the following direction: it is known that biological species have favourable periods of birth; individuals born outside the 'best' period have less chance of surviving. It may be that remnants of this effect do still exist in some way in *Homo sapiens* and that these show up most clearly in the bodily best developed subjects—the sportsmen. Such an effect may appear in the results in the observed way because the years of birth of the subjects investigated cover a finite number of Mars revolutions. That may give rise to spurious frequencies in what is essentially a Fourier analysis. Such frequencies could only be filtered out by studying births over a very long period, but those data are not available. It is clear that this remark can only be verified by a thorough analysis of the data set studied by Ertel. Until an explanation is found, a remarkable correlation remains.

7. A FEW CONCLUDING REMARKS

In this paper I have not dealt with the following paranormal phenomena *per se*: paragnosia, telekinesis, psychic surgery, spiritism, reincarnation. We can say about each of these curious and often interesting experiences: they invariably boil down to credulity and superstition; they tell of deceit or just pure misunderstanding or merely of the wish to be interesting. But in all those cases in which alleged paranormal phenomena have been really thoroughly examined, with tight scientific criteria, the result has been nil. "Parascience has so far failed to produce a single repeatable finding, and, until it does, will continue to be viewed as an incoherent collection of belief systems, steeped in fantasy, illusion and error" (Marks 1986).

The question may then be asked, why should one bother about the widely spread belief in paranormal phenomena, or dispute the value of pseudoscientific studies? Why care about homoeopathy? If people are happy with their superstition, why not leave them in their quasi-religion?

One answer is that public mental health is indeed important, particularly when (e.g.) people suffering from real illness approach a quack, herb or witch doctor, rather than to go to a physician; or when they ask for the help of a psychic rather than thinking themselves. In The Netherlands the matter is presently being debated of whether costs of so-called alternative medical treatment should be included in the official health insurance regulations. It is of importance that it be generally realized that in this way the government would be financially supporting an illusion with money that could be better used for other purposes. One of the top civil servants in the Dutch Ministry for Welfare, Public Health and Culture (a Dr Z.) has connections with someone who Dr Z. claims is able to distinguish clean from filthy water in a paranormal way, even in a closed and opaque bottle. Teaching people to think clearly may be of general interest, particularly when the managers of society are involved.

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Cornelis de Jager works at the Laboratory of Space Research in Utrecht. This article is the text of a lecture given at the combined meeting of the Royal Astronomical Society and the Nederlandse Astronomen Club at Lunteren, The Netherlands, on 29 March 1989, and is reprinted with the kind permission of the Royal Astronomical Society.

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Heaven and Earth

Michael Hutchinson

Towards the end of 1988 *The Skeptical Inquirer* received a letter from a theoretical biologist in England who claims to be 'one of those rare beings—a scientist who is also psychic'. The writer said he was studying fellow psychics but didn't spend time and effort in taking precautions against cheating. He studies these psychics 'in situ', or 'when they are not even aware that they are being watched'.

The psychic scientist also told SI that psychics are like magicians: 'They do not play tricks on one another'. Although I don't know about the tricks that psychics might play on each other, I do know for a fact that magicians are always showing each other tricks. Perhaps the difference is that magicians admit that they are doing so.

At the end of a letter in which he announced his intention to bring about the voluntary dissolution of the CSICOP our theorist showed the limitations of his psychic ability. He asked to be sent a sample of *The Skeptical Inquirer*. It's a pity that his psychic ability couldn't tell him all he needed to know about SI, or at least that sample copies are never sent out on demand.



The appearance of a hypnotist on television this Easter weekend reminded me of the following report in the August 1989 edition of CSICOP's *Legal Briefs*. It may answer some of your questions about stage hypnosis.

Martin St. James is one of the best known international stage hypnotists. He has lived and performed in the UK, USA and Australia. In May of 1989 he was charged in Melbourne with performing hypnosis without a licence. Although St. James approached CSICOP for help, they declined, for reasons they don't explain in *Legal Briefs* and which I find hard to imagine.

In court, St. James said that there was no such thing as hypnosis and that he was a 'mind magician'; he was directing people's imagination on stage and they were playing a part in a fantasy. He said that he gave the illusion of control and that the volunteers on stage would know everything they were doing.

Although Professor Graham Burrows, President-elect of the International Society of Hypnosis gave evidence for the prosecution by telling the court that hypnosis is 'an altered state of consciousness brought about by indirect or direct suggestion', the magistrate, Linda Dessau dismissed the case. She said she did not propose to waste any more court time with the case. A very wise decision I am sure. If only we could be confident that other magistrates and judges would be so wise when dealing with unproven claims of the paranormal.



I see that author Ian Wilson is still convinced that the Shroud of Turin contained the body of Christ (*Sunday Times* 8 April). He insists that there is a large margin of error in the carbon dating tests which show the Shroud was made between 1260 and 1390. In addition he cannot see how a 14th-century artist could have produced such an artifact. There is little doubt that Wilson has seen Joe Nickell's book *Inquest on the Shroud of Turin* in which Nickell describes how such an image could have been produced by a technique known to have been used in the thirteenth century (see *B&IS* 2.6 p. 15). Adding to this the fact that there is no evidence that the Shroud existed before about 1355 and it was first described in 1389 as 'cunningly painted, the truth being attested by the artist who had painted it' I cannot understand how anyone can still be so stubborn in his belief. Wilson is not alone though. There are others who still want to believe, including a woman at the British Museum's 'Fake?' exhibition where a full size transparency is on display described as a 'remarkable image'. On being told by a companion that carbon dating had shown the Shroud to be a fake, she expressed her doubts about the test results. Amazingly though, even the British Museum are somewhat uncommitted in their book *Fake?* which has been published in conjunction with the exhibition. Following their description of the carbon dating tests and results they say: 'However, until it can be properly established how this striking image came into being, the mystery remains incompletely resolved'. If that's the case, why have it on show in a fake exhibition?



Michael Hutchinson is a member of the UK Skeptics and British distributor for Prometheus Books.

Psychic Diary

Toby Howard

All argument is against it; but all belief is for it.

—Samuel Johnson

on the appearance of the spirit of a deceased person.

Do you ever wonder if you're normal? Is what you believe typical of the population as a whole? Do you care?

Not long ago Gallup interviewed 60,000 adults in the British Isles to find out what, if anything, the 'average person' thinks about a wide range of issues: death, insurance, rude personal habits, restaurants, sex, terrorism, pets—to choose an eclectic, but representative, cross-section. Some of the results were published in *Are you normal?* (Cox & Co., 1989). While the statistical accuracy of such studies is bound to be the subject of controversy, it's interesting (and fun) to look at the results anyway. For example, would you be surprised to know that 81% believed that their pets understood what they said to them (I mean what the owners said, not the pets)? Or that the average punter has 197 books in the house? I'll pass over the fact that in the summer months 16% of men wear pyjama bottoms only, for something more relevant to these pages: all things paranormalish. Did you know that:

- more than one in ten British adults claim to have seen a ghost.
- overall, 40% believe in some kind of survival after death, but with a curious distinction between the sexes: over half of all women are geared up for the afterlife, but only a third of men.
- one quarter believe in reincarnation, and 1 in 6 said that they had had an experience of being visited by the spirit of someone who had recently died. (I have had this experience myself, and at the time it was very disturbing indeed; however, I see no reason to seek an explanation outside human psychology.)
- over half the sample believe in the reality of telepathy, the ability to accurately predict the future, and

the power of mind over matter.

- 20% believe in flying saucers, and that festooning yourself with lucky charms and mascots gets results.
- despite the tabloid fascination with all things occult, and the ever-bankable profiles of modern witches and warlocks, more than 90% think black magic is decrepit flabdoodle.
- 23% believe in horoscopes, 72% definitely don't, and 5% aren't quite sure.
- although only 25% will admit to belief in superstitions of one kind or another, half—myself included, I must admit—still 'touch wood' for good luck.
- 25% have, at some point, employed the services of professional fortune-tellers.

Some alarming statistics, with perhaps a few surprises. What are we to make of them? We must be careful. Skeptics are often accused of the sins of smugness and condescension: we are pictured saying to people 'How stupid you are to believe things which we can assure you are rubbish'. I believe such an attitude is unhelpful and divisive. The problem really comes down to balance: the voice of the pro-paranormal 'wow!' lobby sells papers; on the other hand, we of the 'HANG ON A MINUTE' school can hardly get a look in. As rationalists, we must seek opportunities to show the other side of the 'paranormal' coin. Explanations can be just as marvellous as mysteries.

Anyway, on the basis of Gallup's evidence, it appears that if you read *The Skeptic*, then you are certainly *not* normal. Do you care?

Toby Howard is a lecturer in computer graphics, a member of the Manchester Skeptics and co-editor of the *Skeptic*.



Skeptic at Large

Wendy M. Grossman

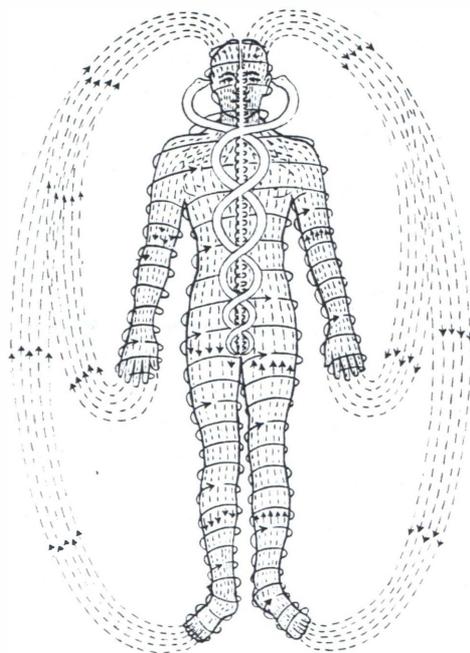
So there I was, sitting waiting at a bus stop in Kew when this small, plump old lady started talking to me. After the usual comments about the weather and the length of time between buses, she began talking about America. England, she told me, always lags years behind America. Take homeopathy, for example.

Um ... homeopathy? I was stunned. Yes, she said. America was much faster to adopt homeopathy than England. I decided perhaps I should stand up to be counted. The problem with homeopathy was not that Britain was slow but that the treatments were unproven. Oh, she said, I'm not going to argue about homeopathy. I know the facts. Did she, I asked, realise that if homeopathic principles were correct, every drop of water in the world would be salt water? I'm not going to argue about homeopathy, she said again. I know the facts.

Unskilful interviewing elicited the facts she knew. One, she had been brought up on it and had used it all her life. Two, the Royal Family believed in it. What was particularly fascinating to me (as an American, brought up with no Royal Family) was that the Royal Family's belief was offered to me as if it were clinching, scientific evidence. It's curious to come face to face with someone who seriously believes that through some kind of genetic magic the members of one large family are blessed with the ability to determine scientific fact without needing actual proof. If this is true, the various Royals really ought, for the good of mankind, to cease launching ships and attending charity galas so they can concentrate on finding a cure for AIDS.

What is really depressing is that that internationally revered institution, the BBC, has recently taken to applying similar standards for scientific evidence. If there is a wide swathe of the British population which believes that the Royal Family's endorsement is a form of scientific evidence, across the world there is a much wider swathe that believes the BBC applies rigorous standards to its programming (these people, remember, do not see, or even know about, *Neighbours*, *Wogan*, or *Gloria Hunniford Live*). For these people, publication by the BBC amounts to an endorsement.

In this sense, the BBC recently has failed its trusting public. The *Radio Times* recently ran an article promoting the BBC videotape and boon on 'zone therapy'. This therapy, claimed to be grounded in medical science, is the brainchild of an ex-miner from Yorkshire named Joseph Corvo and his mentor Hans Henbauch, a student of traditional Chinese therapies. Corvo is the 'greatest living master' of the technique. His theory is that various parts of the body belong to electromagnetic zones, and by understanding these you can cure all sorts of ailments.



How many people will pay attention to the qualified commentary by the BBC doctor, Barry Lynch? Lynch calls the therapy 'rub it better' and says he can feel his mind clamping shut as he watches the videotape and reads the book. He is surprised, he says, to learn that rubbing the tip of your nose improves digestion, that rubbing your big toe helps your pituitary gland work better, and that pulling out your tongue and wiggling it around tones up your whole body.

Those things surprise me, too. But what surprises me even more is that the BBC seems to feel that Lynch's medical knowledge is worth less as evidence as the therapy's efficacy than the personal endorsements of Terry Wogan, Gloria Hunniford, and Barbara Cartland. The BBC is supposed to be experienced enough to be skeptical about celebrities' endorsements of things. Consider the academic excellence the BBC demands of would-be personnel, and wonder.

Final note: the French Open Tennis Championships are going on as I write this, and Steffi Graf, the world's number one female tennis player, is reported to be suffering from a cold and allergies to the Paris clay. She is supposedly taking a stack of remedies for the condition, including Japanese oil drops. If it clears up by next week's final (as it has other years), what do you bet the oil gets the credit?

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



Reviews

Eysenck on Eysenck

H J Eysenck, *Rebel with a Cause: The Autobiography of Hans Eysenck* (Faber & Faber, hardcover, 310 pages, £14.95).

An apt title for this review might be 'Eysenck and Newton: the riddle of parapsychology, astrology and alchemy'. In referring to Isaac Newton together with Hans Eysenck I do not wish to imply that Eysenck is comparable in stature to so great a figure. The purpose of my associating the two men, which makes this autobiography worth reviewing here, is that they are known to the world as outstanding scientists in their own fields, but both have had a quite extraordinary penchant to dabble in irrational pseudoscience. This raises a puzzle for sincere sceptics which is not easily solved.

Eysenck is probably greatly under-rated at present, and this autobiography highlights several reasons why. For a while he was the target of a totally unjustified smear campaign at the hands of self-declared 'Marxist Leninists', particularly in the younger generation, and a lot of the mud thrown has stuck. Now, with the collapse of Marxist-Leninism in Eastern Europe, we are likely to see a change in the *Zeitgeist* of the times, and Eysenck's work is due for a re-assessment. In fact, Eysenck has made a very major contribution to the discipline of Psychology, and his name will stand out in the history of 20th-Century science when all the dust has settled. What he has done, in fact, is to apply the methods of hard science, notably physics, to the study of human behaviour and produce a revolution in thinking over nearly half a century in an area where it was badly needed. Many psychologists and others in the U.K. and elsewhere, who are working productively today do not even realize the enormous debt they owe to Eysenck. The main casualty of Eysenck's work has been psychoanalysis, which has been on the decline since its heyday in the 1950s, and many philosophers and others have followed in the wake of Eysenck's abrasive attacks. But on the positive side, Eysenck created a scientifically-based psychology both in the experimental and the clinical field where little else existed before.

Many people will be greatly disappointed by this autobiography. It is extremely frank about some unexpected detail (including his early peccadillos when laying the pretty nurses on the experimental couch in the days before his happy marriage!) but leaves out a lot that would be of interest. Also, it is appallingly inaccurate about some details, Eysenck preferring to rely on his fallible memory rather than resorting to available documents. As I have been personally associated with just a few incidents in his career I am in a position to know just how inaccurate he

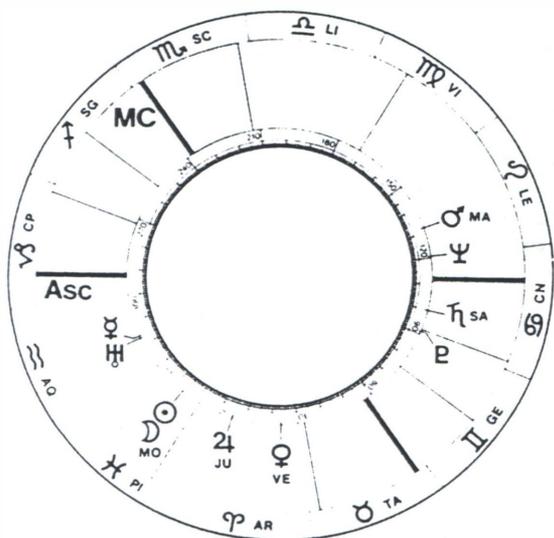
is in recalling the many things I know nothing about. But his inaccuracies appear to be due to carelessness and honest error rather than any attempt at self-aggrandisement. Eysenck is quite frank about his own carelessness and slap-dash methods, which accord so oddly with his insistence on very painstaking work in other respects, and his very serious devotion to science. He writes:

Having finished something—an article, a book, a theory—I want to get on to something else, without carefully going over things again and again, making painstaking corrections, reading proofs conscientiously, and generally making sure that everything is ship-shape and Bristol fashion (page 280).

The book reveals, to some degree, his involvement with parapsychology and astrology. Many people have been frankly amazed that he should, for instance, mount experiments to test whether rats could foresee the future, and thereby waste the time of serious scientific colleagues and technicians who could have been better employed. The early experiments, when the apparatus was not working properly, implied that rats *might* show precognition—so the *Journal of Parapsychology* was happy to publish the doubtful results (Eysenck, 1975): but when with his colleagues he ran experiments with apparatus working properly and there was no evidence of precognition, this journal refused to publish the results (are we surprised?) so the results had to be published elsewhere (Hewitt, Fulker and Eysenck, 1978). Nothing daunted, Eysenck went out to collaborate with someone who has been in the news in recent years (!) and published *Explaining the Unexpected* (Eysenck and Sargent, 1982).

Eysenck's involvement with astrology has also caused some surprise among serious scientists. He joined his name with that of a professional astrologer investigating the relation between astrological factors and personality (Mayo, White and Eysenck, 1978). Later investigation by David Nias showed that the postulated effect was all bunkum, and he collaborated with Eysenck in writing *Astrology: Science or Superstition* (Eysenck and Nias, 1982). This book is mainly devoted to showing what a lot of codswallop popular astrology is, but it also discusses the work of Michel and Françoise Gauquelin, which is at least on a different level from that of Mayo and similar astrologers. Eysenck devotes about 15 pages of the present autobiography to discussing the work of the Gauquelins, and in the same chapter criticises the 186 leading scientists who signed the well-known statement 'Objections to Astrology', referring to them as 'fanatics' (with the exception of Carl Sagan!).

Now we come to the similarity to Isaac Newton. Of



The astrological birth chart of Hans Eysenck

him it has been said that 'the amount of time and energy that he devoted to alchemy, rivalled that given to physics and mathematics' (Dobbs, 1975). But out of introverted caution Newton kept his strange devotion to alchemy very secret, and became President of the Royal Society, whereas Eysenck has blazoned abroad his involvement with similar nonsense, and so has been shunned by the Royal Society, and reckoned to be of little account by many contemporary scientists. I am glad to learn that he has been awarded the Distinguished Scientist Award of the American Psychological Association; the British Psychological Society has been meaner, and racked by political squabbles as it is, prefers to regard Eysenck as The Man You Love to Hate, to the amusement of some foreign countries.

This autobiography superficially presents Eysenck the extravert, the easy-going, amusing, reasonable fellow who even writes without rancour of a few ex-colleagues who have hated his guts and mounted smear campaigns against him. But behind it all the autobiography shows another, introverted Eysenck, passionately in love with certain ideas, and surprising many people by associating himself with some very strange causes, and some very strange people. Referring to Newton's preoccupation with alchemy, a biographer wrote:

We cannot understand how a mind of such power, and so nobly occupied with the abstractions of geometry, and the study of the material world, could stoop to be even the copyist of the most contemptible alchemical poetry, and the annotation of a work, the obvious production of a fool and a knave (Brewster, 1855, pages 374–5).

The same might be said of some of the cases of Eysenck's collaboration with very strange people in very strange causes. With Newton it was alchemy, with Eysenck it is parapsychology and astrology, although he prefers to call it 'cosmobiology'. Perhaps of all the many students of Newton's writings on alchemy, Maynard

Keynes came nearest the truth when he said:

Why do I call him a magician? Because he looked on the whole universe and all that is in it *as a riddle*, as a secret that could be read by applying pure thought to certain evidence, certain mystic clues that God has laid about the world to allow a sort of philosopher's treasure hunt to the esoteric brotherhood. He believed that these clues were to be found partly in the evidence of the heavens and in the constitution of elements ... but also partly in certain papers and traditions handed down by the brethren in an unbroken chain back to the original cryptic revelation in Babylonia (Keynes, 1946, p. 29).

Does this go some way to explain the strange riddle of Eysenck's preoccupation with parapsychology and astrology? Had he lived three centuries ago, would he too have been preoccupied with alchemy? If sceptics attribute belief in irrational systems such as alchemy, astrology and parapsychology to ignorance and lack of appreciation of the nature of science, they are making a big mistake. Belief is, to some degree, controlled by emotion, and we need the psychology that Eysenck has himself pioneered to get insight into the workings of what amounts to 'being in love' with strange and tantalizing ideas which, like wayward mistresses, seduce even the most brilliant of minds.

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—H B Gibson

Wary of Gurus

Joyce Collin-Smith, *Call No Man Master* (Gateway Books, paperback, 231 pages, £6.95).

Imagine a world where clairvoyance, precognitive dreams, telepathy and reincarnation are a normal part of everyday life; where *everything* has esoteric significance, and limitless spiritual energy is on tap. Such is the world of Joyce Collin-Smith. Hers is an extraordinary life, and this is an extraordinary book.

Because her searches for spiritual enlightenment ran in parallel with developments in the British esoteric scene from the thirties to the eighties, her memoirs form a valu-

able record. As a teenager she studied with Frank Buchanan's Oxford Group (later to become Moral Rearmament); next came ex-Gurdjieff acolyte P D Ouspensky and his wife 'Madame', leading to her lifelong involvement with Rodney Collin. In one bizarre passage she describes an encounter with the latter; as they face each other in meditation, Collin's face changes form: first he becomes Ouspensky himself, next a Tibetan and then 'with great rapidity a series of different faces superimposed themselves on one another—dark-skinned, middle-eastern, Mediterranean, a northern European, of several different apparent ages and types, some wearing headgear of one kind or another. My heart thumped as I watched.' What is one to make of this? It rather depends on your outlook: in Joyce's world, metamorphoses of hat-wearing entities are not particularly noteworthy.

In 1958 the Indonesian mystic Pak Subuh arrived, and Joyce became a follower of his 'Subud' movement. Her description of the repercussions of Subud's *Latihan* technique (an exercise supposed to invoke a mystical experience in the participant), is fascinating, and not a million miles away from Christopher Evans' super-skeptical treatment in his *Cults of Unreason*. The early sixties see a tentative new arrival on the scene: Maharishi Mahesh Yogi, and Joyce becomes closely involved. Years later, with the Beatles in tow, the Maharishi was to achieve worldwide notoriety, and the author's chronicle of the development of the Transcendental Meditation movement, and the decline of the Maharishi's ideals, is illuminating. Disenchantment with the Maharishi is followed by her nervous breakdown and contemplation of suicide. Her ultimate realisation is that the answer to her spiritual questions lies not in the words of 'masters', but within herself.

The author writes sincerely, with no attempt to convince the reader of the objective reality of the world she describes. If she has a central belief, it is that there are many paths to self-discovery and the development of a satisfactory relationship with the world. She embraces spiritual teachers, but her experiences have made her wary of those who adopt the role of guru or master. In her fifty years of spiritual adventures, she remains 'in praise of teachers but wary of gurus'. Those at all interested in the ways in which cults evolve, and 'masters' prosper and wane, will enjoy this book immensely.

—Les Francis

Channelling and reincarnation

Zoe Hagon, *Channelling: The Spiritual Connection: A Balanced Perspective* (Prism Press, £5.95); David Christie-Murray, *Reincarnation: Ancient Beliefs and Modern Evidence* (Prism Press, £6.95).

I was hoping for some elucidation from Zoe Hagon's book about how to do your own channelling, but though she offers some hints on preparation, she avoids this subject, as she feels it should not be learned from a book. Instead, she offers a series of anecdotes, devoted to telling us how wonderful channelling can be. She considers such aspects as using it for healing, for banishing evil spirits (oh, yes, there are evil spirits out there too), and for psychological

therapies.

Sources are rarely quoted, much of the evidence is mere hearsay, and little of it would stand up in a court of law. Supernatural explanations are put forward as facts, potentially important cases are retailed in such a way that there is insufficient evidence on which to base a balanced judgement. Hagon is so uncritical in her acceptance of other people's testimony that she gives me the impression that she could believe anything.

With Christie-Murray, we are on more scholarly ground. He offers a wide-ranging survey of reincarnationist traditions throughout world history, and then moves on to twentieth century evidence, paying especial attention to the work of Stevenson and Guirdham. But there is too much anecdotal stuff, and even Edgar Cayce gets a clean bill of health.

There is some fascinating material here, but I never feel easy about the claim (so often made) that there actually could be real proof of reincarnation that would not be susceptible to being re-interpreted in an alternative (though still paranormal) fashion. Christie-Murray dismisses the super-ESP 'explanation' for many of these cases, but I just don't think that there are any serious grounds for making such a judgement. We needn't expect that the paranormal operates according to our own canons of common-sense and reasonableness.

—Hobgoblin

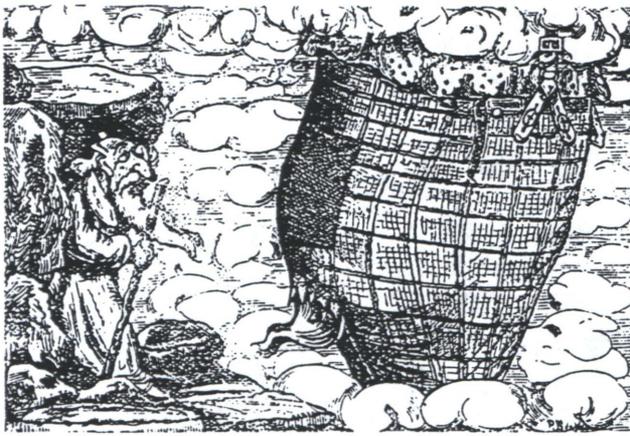
Blasphemy on trial

Nicolas Walter, *Blasphemy Ancient and Modern* (Rationalist Press Association, 96 pages, paperback, £3.95).

The author of this little book, as well as being the managing director of the Rationalist Press Association, is also secretary of the Committee Against Blasphemy Law. So, although he cannot be considered to be a totally unbiased observer, he nevertheless presents an interesting, though brief, account of blasphemy and the use of the law against blasphemy.

He reminds us that religious intolerance coupled with political power led to the slaughter of many Christians by other Christians, who held 'heretical' rather than 'orthodox' views. Today—fortunately—the blasphemy laws are not so strict, but the fact remains that they are still on the statute books. The blasphemy laws were originally used to suppress unorthodox or non-Christian views, but in the 19th century they were used more against atheistic and radical political thought. It was in that century that the battles against the laws were fought. Many people ended up in court charged with blasphemy, some of whom were quite willing to be there. The blasphemy laws appeared to have fallen into disuse for much of this century, though literature that could be considered blasphemous still appeared. If anyone wishes to read some blasphemies this book contains a few examples from well known authors. To this reviewer, they appear to be rather mild.

The only recent cases of the use of the law against blasphemy have been private prosecutions. In the mid-seventies Mary Whitehouse brought a private prosecution against the magazine *Gay News*, and won. More recently



MOSES GETTING A BACK VIEW

And it shall come to pass that I will put thee in a clift of the rock, and I shall take away my hand, and thou shalt see my back parts — Exodus xxxiii.23

there was an attempt to bring a prosecution against Salman Rushdie for *The Satanic Verses* by the Action Committee for Islamic Affairs, but this attempt was not allowed to continue. The blasphemy laws protect only Anglican Christianity.

The use of the blasphemy laws is arbitrary. To have a chance to be prosecuted for blasphemy may depend on your standing with Mary Whitehouse. Given the history of the use of the laws to suppress freedom of expression it does seem that they are laws we could do without.

—David Martin

Waiting for the Goddess

Riane Eisler, *The Chalice and the Blade (Our History, Our Future)* (Mandala, paperback, 261 pages, £7.99).

People used to worship a goddess and society was just and humane; hence belief in a goddess will lead to a just, humane society, thinks Riane Eisler. She gives a lot of useful information about Early Woman, and also the position of women in society today (battered, enslaved, discounted), but her book's worthy aims are scuppered by sloppy thinking and pious hopes. The problem is motivation: why should we save the world and be nice to people? The question has always been how to coerce people into being altruistic.

Eisler does not claim that a real goddess will come and bail us out, but (what's worse) recommends replacing bad propaganda with 'good': new myths and symbols, metaphors about life-giving chalices rather than life-destroying blades. Her conclusion is a morass of New Age/feminist buzzwords (chaos theory, feminist scholarship, Fritjof Capra, holistic, overcompartmentalised, metamorphosis) and invented ones (nucleation thresholds, androcracy, gylany). She suggests no political or practical routes to her ideal society. Instead she optimistically assures us that its arrival is inevitable due to the evolution of 'cosmic consciousness', so we don't have to exercise free will, moral choice and elbow grease. However, we can't return to Eden by believing in the 'collective mind', only by taking individual responsibility.

—Lucy Fisher

Three from Koestler

Arthur Koestler, *The Sleepwalkers* (1959, Arkana 1989, £8.99); *The Act of Creation* (1964, Arkana 1989, £8.99); *The Ghost in the Machine* (1967, Arkana 1989, £5.99).

Penguin is trying to sanitise Arthur Koestler. Three of his books have been reissued by them under the 'Arkana' imprint. Each has a little biographical introduction. From none of these could you learn that Koestler ever wrote science fiction or that he wrote at least one book on parapsychology or that he endowed a chair of parapsychology at the University of Edinburgh or that he committed suicide in 1983 in a pact with his wife. Penguin will not succeed, I hope.

They do accept, however, that he wrote *Darkness at Noon* (1940), *The Yogi and the Commissar* (1945) and *The Case of the Midwife Toad* (1971), and was nominated for the Nobel prize on three occasions. His obituary in *The Times* called him 'a consistently lucid and humane writer...' and continued, 'his reputation as one of the most versatile and protean writers of our century is thoroughly deserved.' All people literate in English should have read those books. They should also read the three reissued volumes: *The Sleepwalkers*, subtitled 'A history of man's changing views of the universe', shows amongst other insights how Copernicus, Kepler, Tycho de Brahe, Galileo and Newton shaped this vision; *The Act of Creation* proposes a theory of the conscious and unconscious processes underlying scientific discovery, artistic originality, and comic inspiration; *The Ghost in the Machine* attacks the problem of humanity's urge to self-destruction. This is a subliminal message: *read these books*.

—Frank Chambers

Exploring the paranormal

G K Zollschan, J F Schumaker and G F Walsh (Editors), *Exploring the Paranormal: Perspectives on Belief and Experience* (Prism Press, paperback, 230 pages, £7.95).

I found this book to be both interesting and infuriating. It embodies the excellent intention of examining the 'Paranormal' from a variety of perspectives—believing and skeptical, scientific, philosophical, psychological, and sociological. It casts a wider net than many conventional investigations—there are chapters on (for example) Near Death Experiences, LSD and Mystical Experience, and sightings of Sasquatch (Bigfoot), but they are all interesting, and in fact the Sasquatch 'flap' is exposed as a 'Collective Delusion'. Several chapters are devoted to the question of examining unconventional or unorthodox claims, and the problems of fraud and credibility; there are also some interesting chapters on belief in the paranormal, and its relationship to (for example) religious affiliation.

Much of the book is aimed at hard-line, nuts-and-bolts skeptics who rest their case on reductionist materialism, and points out quite rightly that (in the words of Chapter 1) although altered states of experience may seem weird from the viewpoint of our everyday consensus consciousness, we nevertheless have to put aside our preconceptions in

order to examine them—in a suitably critical manner, of course, although the writer (Charles Tart) appears to overlook that crucial addendum!

In fact, my main criticisms of the book are twofold. First, the way unusual states of mind (generated by drugs, unorthodox beliefs, or meditation) are uncritically described as 'paranormal' (with the implication that they are veridical accounts of non-material or spiritual realities). Second, the apparently total lack of interest in any remotely skeptical appraisal of the (often interesting) material presented.

Clairvoyant Chinese children, Ted Serios and his wonderful psychic camera, D D Home, Eusapia Palladino, and Joseph of Copertino all receive favourable mention, whereas I could find no reference at all to standard skeptical works by authors such as Martin Gardner, James Randi, etc., or indeed CSICOP itself—C E M Hansel is mentioned once—and I was exasperated to read that old chestnut that 'of course skeptics are afraid to admit the existence of the paranormal, it threatens their dogmatic beliefs'—whereas in reality it is often (in my experience) the believers who feel threatened by genuinely skeptical enquiries.

—Marc Moran

Gardner's whys

Martin Gardner, *Gardner's Whys & Wherefores* (Oxford University Press, paperback, 261 pages, £5.95.)

This is a new collection of essays and reviews culled from a bizarre collection of sources: who but Gardner could find regular employment with such an eclectic list as *The New York Review of Books*, *Sports Illustrated*, *Semiotica*, *Baker Street Miscellanea*, *Psychology Today* and *Nature*?

Once again, an enormously diverse range of subjects come under Gardner's scrutiny, and his fans will not be disappointed. His favourite topics are all here: mathematical games, the mystery of numbers, word play, the puzzles of *Ulysses*, illusions, poetry, and his affection for G K Chesterton, H G Wells and Lord Dunsany. There is one oddity: as the pseudonymous George Groth, Gardner writes a scathing review of his own *Whys of a Philosophical Scrivener*. Is Gardner having the last laugh on those who painstakingly dissected this earlier work, stunned at his admission to being a theist?

Several pieces should appeal to skeptics: Gardner recounts the strange story of polywater, the enthusiasm with which psi-enthusiasts have attempted to appropriate the mysteries of quantum mechanics, and the weird implications of the various flavours of the 'Anthropic Principle'. In fact, there is something here for everyone: Gardner has an outstanding ability to transmit his enthusiasms to the reader. Much to my surprise, I still find myself pondering his speculations on whether Sherlock Holmes ever met Father Brown.

Every page is stamped with Gardner's strong opinions, and although they will not be to everyone's taste, it is hard to imagine a reader who will not find the ideas in this book fresh, stimulating, and a pleasure to read.

—John Yates

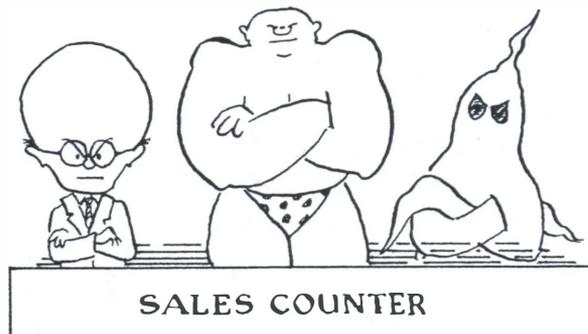
Events

The Charlatans' market

Festival of Mind-Body-Spirit, Royal Horticultural Halls New Hall, 24 to 28 May 1990.

It is ten years since I last visited this annual exhibition. In fact it is a retail market, but it cost £3.50 (senior citizens £2.50, children £1.50), just to get in and let people try to sell you things. There were lectures and workshops going on upstairs, but they charged extra for those—£3 per lecture and £10 or £12 per workshop. Ten years ago the lectures were free.

There are more stands now, but less to see. Until last year, I am told, *Mysteries of Monmouth Street* used to show all manner of delightful rubbish, but this year they have only hired a little box from which to distribute their catalogue. Dusty Miller, who sold magic wands with magnificent patter, has evidently retired. The fashionable therapy this year is crystal therapy. At least 24 of the 112 stalls were selling crystals. Several of the exhibitors are straightforward lapidary shops, who have been selling semi-precious stones for years, mainly as ornaments, and are delighted by the new craze for their wares.



Before the exhibition, there were reports in the local press that physicians were concerned about quacks defrauding the sick, but that was not happening at the fair. Punters were paying for Spiritual Healing (minimum donation £4 please), head massages, foot massages, aromatherapy, colour therapy, and various treatments involving charms; but they were paying with an air of joining in the fun, the same as they paid for fortune-telling (£12 for a 15 minute consultation). Had they been ill, they would no doubt have consulted an orthodox practitioner.

This year, the first Green Consumer Exhibition was in the Old Hall round the corner. One entrance fee let you into both exhibitions, which were organised by the same company and overlapped in content (there was a colour therapist in the Green Consumer hall and somebody selling ceramic fountains among the Mind-Body-Spirit crowd). It is a sad fact that, although the movement against ecological disaster was begun by scientists, much of it is now anti-scientific. This was apparent in the Green Consumer fair. The two events could have been sold as one, the Mind-Body-Spirit-Whole-Earth campaign for separating the gullible from their money.

—Donald Room

Psi and the sceptic

Society for Psychical Research Study Day, St Mary Abbots Church Hall, Kensington, 21 April 1990.

Skeptics will have particular views on the work of the Society for Psychical Research, and some, I suspect, might regard them as being Public Enemy Number One. Yes, it is true that at any meeting of the SPR, you will certainly run across people who seem to have a world-view that is a long way from that of the skeptic on the Clapham omnibus, but for all that, the Society is the oldest-established group in the world that has dedicated itself to the study of the paranormal, and its founders laid down that all its investigations should be carried out in a scientific spirit, without any prejudice one way or the other. To this day, the SPR makes it plain that it does not hold any corporate views on the reality (or otherwise) of psychical phenomena.

Any skeptics who are not convinced should remind themselves that the SPR has a fine record of skeptical investigation itself. The story of the ghosts of Versailles, recounted in *An Adventure*, was thoroughly discredited in a review of acidic politeness, and Harry Price's malarky at Borley Rectory was decisively exposed in a major investigation carried out under the Society's auspices, to give just two examples.

Holding a one-day conference on skepticism and the paranormal offered an opportunity to open up a dialogue on a subject that can so easily degenerate into a heated (and unprofitable) debate. Professor Archie Roy (Glasgow University) presented arguments in favour of the paranormal. He concentrated on sporadic and observational cases, playing down the importance of experimental laboratory work. He found the evidence from poltergeist cases, the cross-correspondences, and apparitions to be particularly compelling. Here, he suggested, was evidence that had 'matured with time', and could not lightly be set aside. Psychical research, as the investigation of human personality, was, said Professor Roy, 'one of the most important studies we can make'.

The next paper raised some doubts about our interpretation of paranormal events. Dr Steve Donnelly (Salford University) put forward a skeptical view of the paranormal, but he began by pointing out that skeptics had much more in common with psychical researchers than might at first appear: after all, both were interested in the same phenomena, and both aimed to cultivate a rigorous and critical approach to them. Skepticism was in part a consumerist movement, concerned to put an end to bogus claims and exploitation. He was able to show how people could readily deceive themselves into thinking that they had witnessed a paranormal event, when in fact there was nothing unusual going on. People are, in general, poor judges of probability, and are prone to make honest mistakes and misperceptions.

Because there were so many possibilities of misinterpretation arising, hearsay evidence and eye-witness testimony should be treated with caution. And if we are prepared to accept some anecdotes, why aren't we prepared to accept them all. If we admit poltergeists and apparitions,

then why not fairies? (There is a wealth of anecdotal evidence for the existence of fairies—but who now takes it seriously?)

After lunch, Dr Deborah Delanoy (Edinburgh University) suggested that extreme conviction among both paranormalists and skeptics had not contributed to understanding these things. What was needed was a dialogue, not a debate. Skeptics often received a bad press from the paranormalists, but not all skeptics were outright disbelievers, indeed, the dictionary gives a definition of 'sceptic' as one who raises doubts, one who questions. The skeptic is more an agnostic than an atheist when it comes to the paranormal.

She warned of the dangers of indulging in rhetoric, and scoring debating points. This could bring about a hardening of attitudes, and the entrenchment of established positions. A genuine change of mind is rare in this field: a show of hands (or rather, a show of no hands) revealed the interesting fact that no one had altered their position as a result of hearing the papers read in the morning. Since psi (if it exists) seems to be so very subtle, there is everything to be said for pooling resources, and for paranormalists to work with skeptics.

The formal presentations concluded with a sociological perspective from Dr Trevor Pinch (York University), who outlined his radical relativist view of the scientific enterprise (far from science being a disinterested pursuit of real facts that were 'out there in the world', scientific knowledge was actually socially constructed—this idea is developed from Kuhn's *The Structure of Scientific Revolutions*).

Experimental science is inherently messy, and things are always tidied up around the edges. Parapsychology is no more culpable in this regard than physics. But in hard sciences such as physics, debates and controversies can be settled comparatively quickly: the 'cold fusion' episode was all over after just twelve months. In parapsychology, however, they just keep grumbling on. If we are to forward this debate at all, then we need some rules of engagement. Any criticism that is levelled should be specific to parapsychology—it should not apply to all branches of science, willy-nilly. And any paranormal claims that are put forward must also be shown to hold in mainstream science—parapsychology should not just deal in exceptions.

There was time for questions and discussion at the end (not enough, but then, is there ever?). A number of topics were raised. Just what would constitute proof of the paranormal? What kind of philosophy of science should we adopt? Were anecdotal cases really better than laboratory ones? At some point, there surfaced briefly the really important question: can we cooperate to agree on methodological principles for further investigation? Those who still await some well-grounded conclusions (one way or the other) in this notoriously intractable field will be only too happy to endorse this suggestion.

—John Lord

Letters



Uri Geller

In my talk at the University of Liverpool in November 1989, reported in your issue of January/February 1990 (page 21), I unwisely referred to James Randi as 'the man who made his reputation by showing that Uri Geller had been a fraud.' Your readers will, of course, appreciate that such an assertion is unsustainable; Randi's demonstration that he can replicate some of Uri Geller's phenomena by conjuring cannot amount to proof that any or all of Uri Geller's phenomena are conjuring tricks. I would therefore be grateful for your hospitality to apologise to Uri Geller for any distress my remark may have caused him.

John Maddox
London

Definitions

May I make two comments on the excellent article 'The Moses Barrier' by Lewis Jones (IV/2).

First, the terms 'atheist' and 'agnostic' are not alternatives one to the other; I am both of them. If I make a list of all my beliefs and opinions then that list would not include 'I believe in the real existence of god'. It is therefore an atheist list of beliefs and it does include 'I believe that god is an illusion to which people are, understandably, subject'.

The list would however be headed by item 1—'I believe that all that follows in this list is open to revision in the light of evidence and argument that might come to my notice in the future'. This must mean that I am agnostic. The one term is a still picture of my current beliefs and opinions; the other is a statement about the status I accord to belief and opinion.

Second, it is very dangerous to

argue, or tacitly assume, that 'this thing is impossible because if it were to happen I would not be able to understand it'. People trapped by this tacit assumption scoffed at the idea of iron ships—on the ground that iron sinks in water. Open mindedness does not necessarily mean being unprotected from any notion that may be presented to one's mind; it does mean that, in addition to what we know and what we don't know, there are things we don't know—things we simply don't suspect. Many fundamental discoveries have emerged from this last category.

Eric Stockton
Orkney

Stanton Friedman

I have just read Steve Donnelly's hilarious review of my 'Flying Saucers *Are* Real' lecture in Manchester. Thank you for once again demonstrating the intellectual bankruptcy of the anti-ufo cultists, and their skill at propaganda. Nothing like selective choice of data, massive misrepresentation, false reasoning, to attack ideas they can't stomach. SD must have slept through most of my lecture. He neglects to mention the 5 large scale scientific studies I discussed, (3 done for the US government) the 4200 landing trace cases, the 4 reasons the big shots of science and journalism haven't jumped on the pro-UFO bandwagon, the Gallup Poll results showing that a majority do believe that *some* UFOs are alien spacecraft and that the greater the education the more likely to so believe.

He ignores the Roswell Incident investigation which includes more than 100 witnesses, the fact that the pictures have passed muster be professional scientists as opposed to noisy negativists. He falsely accuses me of establishing the coverup on

the basis of the MJ-12 documents which I clearly said have not been established to be genuine, yet, and ignores the National Security Agency Document which clearly establishes that the US government is withholding more than 150 UFO documents as well as 75% of the affidavit justifying that withholding. Naturally he doesn't mention that I am a nuclear physicist who spent more than 14 years working on a variety of advanced classified nuclear and space systems for major corporations, or that, unlike him, I did an in-depth investigation of the Hill case and the supporting star map work.

Donnelly's words remind me of the fact that 5% of the US population doesn't believe man has been to the moon. The theme for noisy negativists is certainly reaffirmed: 'Don't bother me with the facts, my mind is made up. If the public doesn't know, I will certainly not tell them'.

Chalk up another 'victory' for pseudoscientific anti-ufology.

Stanton T. Friedman
New Brunswick

Hypnosis in the dock

In his article 'Hypnosis and the Occult' (January/February IV.1) H B Gibson cites me as one of the contenders for the mantle of 'Ultra-Skeptic No. 1'. In this article Gibson claims that in a book I wrote (a book entitled *Hypnosis, Compliance and Belief*; published in 1981, not 1982 as Gibson states) I argue like a barrister (but a 'very good one', I am pleased to say!), and that in this book I try to demonstrate that *all* the phenomena of hypnosis can be explained in terms of compliance. Unfortunately, he seems to have spent more time counting

my references to Barber than reading the content of the book; if he had read it he would have noted that my position *throughout the book* does not change from that stated on page 54. That is, 'The quite fundamental idea that hypnotic behaviours and experiences are multi-determined makes questions such as "Is hypnotic behaviour faked", fairly meaningless. The possibility exists that some hypnotic phenomena may be purely manifestations of compliance, some partly and some impossible to simulate. Similarly, some subjects may never fake, some may fake all of the time'. This is still my position, no matter how Gibson may want to present it.

Also, apparently himself donning a barrister's wig, Gibson attempts presumably to imply 'guilt by association' by calling me an *ex-collaborator* of Keith Hearne, who wrote (according to Gibson) an 'old hat' article in 1982. In fact I have never collaborated with Keith Hearne other than to supervise his Ph.D. thesis in 1978 on the subject of *dreaming*.

Any person who attempts to argue that hypnosis is *all* compliance, or *all* anything, will find no support for such a view in my writings. Academic debate is difficult enough without the introduction of strawmen in barrister's robes.

Dr G F Wagstaff
University of Liverpool

Crop circles

In reply to Anthony Garrett's criticisms (May/June) of my crop-circle review (March/April), I did not refer to the 'hill effect' because there was simply not enough room to mention everything. In fact, back in the days when I was a fervent 'vorticist' myself, Von Karman vortex shedding from hills was my first 'knee-jerk' explanation (as personal letters to fellow skeptics at that time will attest).

Pay your money and take your choice: Meaden says that the hills shed vortices, Andrews & Co. say that the hills mark ley-line confluences, and I say that a hill is a useful vantage point from which a hoaxer can admire his handiwork. Or even photograph it—I believe that I have identified a well-defined sub-set of the population which has a clear vested interest in producing circles. I shall present the (circumstantial) evidence sometime in the future.

I would still like to know why circles are confined to the past decade and to a small region of the UK, but are increasing in frequency. To say that Ockham's razor favours vortices is to be highly cavalier with that useful principle: hoaxers are a known possibility (ask Dave Langford), vortices which behave in an unprecedented manner are still an unnecessary parameter. *Essentia non sunt multiplicanda...*

The farmer with the barbed wire sounds like an interesting experiment. How high was the wire? How did the farmer get in? My experience of farms is that they are *always* dripping with barbed wire—but never enough. Is Garrett's farmer a media invention, a 'circle-book' invention, or a FOAF? Could we have more details please?

Anthony Garrett's point about eye-witnesses is just semantic dissembling. The eye-witness observation of (say) a cloud-chamber photograph can hardly be compared with eye-witness report of (say) ghosts. I wonder why I never felt the need (even when I lived near-by and had contacts there) to visit CERN and question some of its peculiar observations. Incidentally, I have *not* ignored vortex eye-witness accounts out of hand. It is difficult to check such things, but I am told that one of the eye-witnesses in the Meaden book was an employee of Meaden at the time. Make of this what you will.

I have also been shown a photograph of Meaden in the process

of dowsing a field. What sort of hypothesis would encourage a scientist to use an unproven technique to search for an unproven phenomenon?

As I said in my review, I will be happy to embrace the vortex theory again if, for example, the circles can be reproduced in a wind-tunnel.

David Fisher
Cardiff

Heavy evidence

I read with interest Dave Love's article 'The Weight of Evidence' in *The Skeptic* Volume IV No 3. The intriguing tendency for a gyroscope to apparently produce 'linear movement' has occasionally been noted by those who have routinely handled such devices. The effect appears to originate from movement of the whole device in such a manner as to produce considerable precessional forces.

The result is that a gyro of (say) a couple of pounds weight and rotating at some 20,000 rpm is able to 'move the operator' or 'leap from the operator's grasp'. Observations suggest that such an effect is primarily a product of precessional forces (perhaps restrained precession).

Attempts to prove or disprove this effect by merely comparing the weight of a 'static' rotor with that of a rotor at speed are inadequate. The device must be precessed for any effect to be noted. Within the realm of a sci-fi gyro drive, a toroidal 'liquid' gyro may provide some answers to a mechanical gyro's weight and volume penalties.

Of course, the whole tantalising question may still prove to be just another of those 'heavier-than-air-machine' impossibilities!

Ron Drabble
Ruthin

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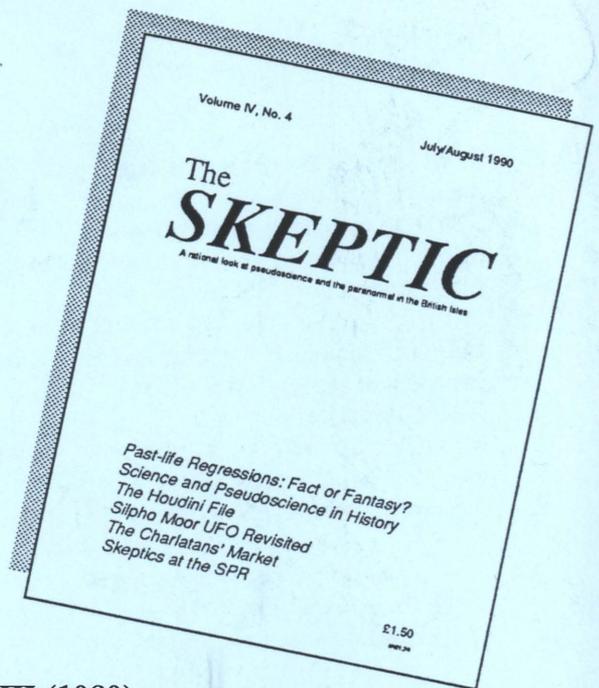
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