

the Skeptic

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reports and reviews



UFO s
HYPNOSIS
CREATIONISM
INDIAN SKEPTIC'S VISIT

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From the President

This issue of the Skeptic completes eleven years of publication. It is by far the largest, and most diverse in its subject matter, edition we have ever produced. This is a tribute to our correspondents who are interested, doubting, knowledgable, literate, argumentative and unafraid to express their opinions - everything in fact that a sceptic should be.

It is encouraging that so many people write to us on so many topics and now is certainly not the time to rest on our laurels.

We live in a world where, in recent months, scientists have discovered the first strong evidence for an extrasolar planet; where scientists have produced a sustained thermonuclear fusion reaction, giving hope for a long-term clean and sustainable energy source; where the fortuitous discovery of a well preserved body in a

glacier has given us a remarkable window into our past. But we also live in a world where, based on no evidence at all, there live among us those who insist that the universe is 6,000 years old; that extraterrestrials are eating earthlings; that crystals, numbers, names or distant celestial objects have important influences on our lives, and in a time when some of the most dramatic changes of the century have occurred, entirely unheralded by the psychic prognosticators.

Your continued support will allow Australian Skeptics to pursue its promotion of the cause of reason and critical analysis. This is certainly not the time for us to become less sceptical.

Barry Williams

the Skeptic

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Subscription Renewal Time

This is the time of year when we have to explain the Byzantine complexities of our Subscription Renewal System to our ever sceptical readers, many of whom don't believe a word of it.

Last year's explanation was so exotically convoluted as to remind some readers of the more obscure theorems of quantum physics, so this year we have tried a new approach.

Here it is.

If your subscription is now due, your magazine will contain a Renewal Notice.

If your subscription has one or more years to run, there will be no Renewal Notice.

At least that is how we hope it will work. Accidents, however, have a distressing tendency of happening (Fate? The stars? Incorrect auspices? Who knows?).

There is a way to check, providing you have not discarded the envelope in which this magazine arrived.

If your subscription terminates with this issue, the number (91) will appear on the address label after your name. **Please renew.**

If you are still a current subscriber, some other number, (92), (93), (94), or letter (F), will appear in this space.

Please don't renew.

Now a plea from the secretary:

Please, please, please, please re-new your subscription as soon as is humanly possible, and certainly by not later than the end of January.

Renewals arriving after we have posted the first issue of the new year not only take up a lot of time, but cost more to mail.

If, for some reason, you do not intend to renew your subscription, we would appreciate it if you could let us know.

This will allow us to keep our mailing list current and will preclude us from sending you harassing follow-up letters, threatening all manner of dire consequences.

* * *

This issue of *the Skeptic* is the largest we have published to date and was produced on an Apple Macintosh Plus, using Aldus PageMaker 4 and printed on our new Apple Personal LaserWriter.

We are pleased with the results and hope that they meet with your approval. As always, we welcome your comments.

Photographs on pages 1 and 10, Manly Daily. Reprinted with permission.

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 Harry Edwards

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UFOLOGY

Aliens Among Us?

Barry Williams, Tim Mendham, Harry Edwards, Steve Walker

The weekend of September 7-8 saw Sydney hosting a public seminar entitled **The UFO Mystery**, said to be the first international convention devoted to UFOs in Australia. The seminar, which was well organised, attracted an estimated 200-300 visitors and was an eye-opening experience for those Skeptics who attended, courtesy of complementary tickets presented by Gary Wiseman the organiser. Entry fee to the seminar was \$80 per day or \$150 for two days.

While most of the audience was local, it included a number of overseas participants, mainly Japanese, and a selection of overseas and local speakers. Convention MC Barry Eaton confessed to being "sick to death of little green men" and said that the convention would be devoted to serious UFO investigation. A laudable aim, but one which was, regrettably, honoured more in the breach than in the observance.

Crop Circles

Jenny Randles, prominent British UFO investigator, set the ball rolling with a discussion of crop circles. She outlined the history of the phenomenon, beginning with recorded instances dating back to 1509, while admitting that earlier records were dubious and unreliable. Although most publicity has concentrated on English circles, they have been found in many countries, including Australia. The UK study of circles began in earnest in 1980 with the discovery of a simple circle near Warminster, Wiltshire, the area of

Britain where most of the widely publicised examples still occur. This area was also the centre of reported concerted UFO activity in the 1960s.

By 1987, circles had become increasingly complex, forming unusual patterns and even straight lines. In 1989, the British media began to widely publicise the circles, which led, Ms Randles said, to an increase in the number of hoax patterns. Circles appeared everywhere, although she said that the "really complex patterns" have only appeared since the (northern) summer of 1990. The first known hoax, which appeared in 1983, was a large circle surrounded at the cardinal points by four small circles and was the result of one newspaper perpetrating a hoax on another. Hoaxes have been attributed to students, sociologists, groups of sceptics (heaven forbid) and even farmers, who have been known to charge fees of as much as five pounds for entry to their fields and to have sold T-shirts and badges (and with the current state of the world's grain markets, who can blame them).

She said that the complex pictogram patterns could not be explained by natural phenomena and must be the result of intelligence. However, she cautioned the audience, humans are intelligent and cannot be ruled out as the cause. This statement brought outraged indrawings of breath among certain sections of the audience. Ms Randles was properly sceptical of the validity of these patterns, which are those most commonly seen in media

reports and photographs of which were prominently displayed in the foyer of the convention hotel. She instanced one pattern that most definitely owed its existence to human agencies, in that a message spelt out in the circle said "*We are not alone*". As Ms Randles observed, any UFO-naut worth his syntactical salt would have said "*You are not alone*".

However, she insisted that "hoaxing is not the total explanation for the entire phenomenon...there are real circles", estimating the genuine cases to be about 50-100 per annum. Separate studies by two researchers (Reynolds and Hewitt) assessed the distance of circles from hills, the sea and atmospheric conditions. Circle formations tend to be very near slopes and most circles are within 30km of the sea, in areas known for frequently changing pressure systems. With these conditions in mind, it is not surprising that crop circles are common in the UK. No existing atmospheric theory seemed to fit the phenomenon, she said.

She then nominated four protocols to be followed in investigating such phenomena - protocols which would find favour among sceptics but which were not paid even lip service by some of her co-speakers.

These protocols are:

1. Establish that there is a problem
2. Exhaust established scientific theories
3. Extend established scientific theories
4. Suggest new, perhaps paranormal, theories.

Following these protocols, she discussed work being carried out on "plasma vortex" theory - rotating forces of energised air which could create circles and/or rings. She stressed that these should not be confused with tornadoes or whirlwinds. She said that such vortices had been reproduced in the laboratory in tests at two Japanese and one American university. An "electrified plasma" had been created which showed similar features to events described by eye witnesses to the formation of crop circles. The "plasma vortex" theory, if correct, could go a long way to providing some explanation for some UFO cases. She postulated that such an "electrified" field could explain the UFO effect on electronic systems and the light effects witnessed in UFO encounters.

She then traversed some more speculative areas, such as a warning from nature (Gaia?) that changing atmospheric conditions may be caused by the upset of natural systems. Finally, she suggested that the circles could be the result of extraterrestrials trying to send us a message. Ms Randles appeared not to take this possibility too seriously, which did not please some members of the audience who obviously believed that this was the only reasonable explanation.

Question time demonstrated that this was not really the sort of stuff the majority of the audience wanted to hear. Ms Randles is clearly a serious and cautious researcher who is not prepared to jump from a contentious observation to an implausible conclusion and, in this, her position is much closer to that of the sceptics than it is to the hard core believers'. One of the latter asked her if it was possible that the complex crop patterns were a "message" from some other intelligence. She allowed that it was

possible, while showing by her method of responding that she did not rate it highly as a probability. Perhaps through a desire not to alienate her audience, she did not ask the obvious rhetorical question, "Why, if a hypothetical entity wants to communicate with us and the only method available is the flattening of grain crops, do they not write words in English rather than making incomprehensible patterns?"

Physical Evidence

Bill Chalker, an Australian investigator, then outlined a number of cases of physical evidence for UFO visitations: marks in the ground, damage to farm structures and to plant life etc. He did admit that the "photographic record of UFOs is very poor and littered with hoaxes and misrepresentations", which makes physical evidence so important. He noted that "Nature has an extraordinary range of phenomena which can be mistaken for UFO phenomena", including fairy (fungal) rings and slime moulds which could leave marks which could be mistaken for UFO landing marks.

Mr Chalker is the first civilian investigator to be given access to RAAF UFO files and found that, with some exceptions, the Air Force had tended to investigate most sightings in a cursory and dismissive manner. In common with many UFO investigators with a predisposition towards belief in extraterrestrial visitors, Bill seems to regard half-hearted investigations by the military as having a sinister connotation, when the most logical explanation is that, finding that the sightings pose no threat to national security or aircraft safety, the military find them unworthy of more serious investigation.

Although he placed more weight on eye witness accounts than would seem wise, given the notorious

fallibility of such accounts, Bill Chalker's exposition was interesting and reasonably balanced.

After the first two sessions, the Skeptics in the audience were heartened by the thought that this convention might really be a useful exercise in serious research. Any such thoughts were soon dispelled by the following speakers. From the relatively rational area of obscure natural phenomena and the, at least entertainable, hypothesis of extra-terrestrial visitors, we were now plunged into a morass of crypto-religious hype and New Age mysticism.

The onslaught began with a brief talk from media personality Keith Smith, which MC Barry Eaton described as an undisguised commercial for Mr Smith's new book "Supernatural Australia". Mr Smith started with a side-swipe at "the sceptics" who, he claimed, would not believe anything regardless of the evidence. He then regaled the audience with a barrage of anecdotes he had received from correspondents on all manner of "strange" phenomena. Of the UFO sightings reported to him, he claimed that a pattern emerged which convinced him of their accuracy. When respondents mentioned "orange lights" he suspected that they were genuine. This example of critical thinking really put the sceptics in their place.

New Frontiers

None of the speakers more aptly epitomised the gulf between the "nuts and bolts" school of UFO investigations and the mystical New Age (or plain "nuts") stream, than did the next speaker, Brian O'Leary. Billed as "NASA astronaut on Apollo team 1967-1968. Professor of space sciences and physics (faculties include Princeton). Served as adviser to presidential candidates", Dr

O'Leary utilised all the audience manipulation techniques described in Dov Midalia's article "*That Magic Moment*" in this issue. He began with a reasonable exposition, quickly changed to an *ad hominem* attack on Carl Sagan, (who presumably is to US UFOnuts what our own Ian Plimer is to local creationists) then hit his stride with the sort of fixed smile, arm waving, bouncing presentation which is more commonly associated with American televangelists called Jimmy. And as with the evangelists, the more outrageous the claims, the more the audience showed willingness to suspend rational thought.

Dr O'Leary traced the beginning of his conversion to "the new science" to a human potential workshop he attended and admitted that he became a "workshop junkie", maintaining the dual persona of a responsible physicist at work while entering the New Age when off duty. He used the common claim which so entrances lay audiences but which is treated with scant regard by other professionals, that modern physics supports mystical belief. He briefly mentioned both a near death experience and a healing experience.

He described western science as an ethnocentric view of the world and characterised it as being enclosed in a box, unable to react with that which lies outside the box, instancing "life before birth and after death", "eastern mysticism" and "outer space and inner space". He suggested that to properly understand our world, we needed to encompass all these separate boxes within the one box. He claimed that many subjects were "taboo" to western science and described those who worked in this field as being like a "bunch of balls on a billiard table" bouncing around from wall to wall

and not seeing the outside.

He instanced this by setting up a straw man with his exposition (accompanied by slides) of various megalithic monuments, to some of which he had led tours and experienced mysterious "energies". Showing slides of Stone-henge, Easter Island statues and Incan walls, he asked how mere primitive people could have lifted huge rocks into position. Dismissively, he said that "of course" scientists and archaeologists had postulated "levers, pulleys and inclined planes" but pointed out that this was Newtonian physics and that these monuments had been built centuries before Newton had been born. The crash that reverberated around the hall at this point was caused by the jaws of a couple of Skeptics hitting the floor. His suggestion that the real answer was "levitation" came as something of an anti-climax.

He continued his talk with slides of exotic crop circles (which had already been described as dubious by Jenny Randles), the "face on Mars" (which would be taken to absurd extremes by a following speaker) and the Gulf Breeze UFO photographs, which he described as among the best ever and which later speaker, Jerry Clark, would flatly label as a hoax. He also mentioned staying with Whitley Strieber, during which time he was not abducted by a UFO. We were left with the impression the distinct that this had been a disappointment for Dr O'Leary.

Needless to say, that section of the audience (almost certainly the majority), who had been restless during the earlier, more reasoned, talks lapped up this warm and fuzzy, feel-good, simplistic, palatable, no-worries philosophy (tripe?). The similarities between fundamentalist New Ageism and fundamentalist religion were too striking to go

unremarked. If O'Leary had decided to shout "*Jesus*", there is little doubt that the audience would have responded "*Hallelujah*". However, the best description of Dr O'Leary's talk which, if it included anything sensible between "Good morning" and "Thank you for your attention", it was missed by the Skeptics, came from his own mouth, "*A bunch of balls*".

On the second day, Dr O'Leary astonished the audience by bending a fork. Forewarned of this possibility, the Skeptics ensured that a professional magician was in attendance, primed to watch out for sleight of hand tricks. No such professional skill was needed, however, as O'Leary made no pretence of hiding the bending. He merely held it up and bent it, claiming that his "mind power" had caused the metal to soften. Anyone who cares to destroy a piece of cutlery will find that no power, other than that exerted by ordinary muscles, is required to perform this feat. We are only sorry that we did not ask him to bend a stainless steel kitchen knife, which is more likely to break rather than bend.

Grid Patterns

We awaited the next talk with mixed feelings, under the impression that it would be a discussion of a seriously proposed geological theory that some UFO sightings can be accounted for by piezo electric effects generated around fault lines in the earth's crust. This could have been informative, though certainly not as much fun as the previous talk.

The talk began along the expected lines but soon degenerated into farce. The speaker, Antony Drew, made some mention of fault lines then, for no discernible reason, began to talk about a geometrical figure, which may or may not have been a

icosahedron. On the overhead projector, he showed a standard Mercator projection of the earth, overlaid by a series of lines, which may or may not have been a plane representation of the aforementioned solid polygon. Suffice to say that there were lots of lines, crossing lots of other lines at all sorts of angles. Mr Drew now began to expound his "theory", which seemed to be that, wherever the lines crossed, you would find UFO sightings, sacred sites and other mysterious occurrences.

One such crossing point was somewhere in the north western part of the USA, close, Mr Drew reckoned, to where the first modern UFO sighting had been made (about as close as Sydney is to Canberra, the Skeptics judged). Another important point was located in the vicinity of the seriously debunked "Bermuda Triangle". But the really significant point was one located somewhere in the Amazon basin, important, Mr Drew alleged, because of that area's association with a race of women warriors. Skeptics' jaws were not the only ones to crash floorwards at this startling piece of intelligence.

Next he projected a map of the British Isles, with a "crossing point" somewhere to the north of the Outer Hebrides (famous, we suspect, for its association with male wives), and with one line crossing the south coast of England in the general direction of Normandy. This line, Mr Drew claimed, ran through, or near, many prominent British "sites". That the map on the screen showed that it passed nowhere near the majority of the highlighted "sites" nonplussed Mr Drew not a whit. What also seemed to have escaped his notice was that, in a country like Great Britain, with a long and well documented history of close settle-

ment and by using an elastic definition of what is significant, any line drawn at random is sure to pass through (or near) several "significant sites".

Then came a map of Australia, containing many crossing points and lines. Some of the "points" shown, each of which must have covered an area of several hundred square kilometres, came somewhere near places like Ayers Rock, Bass Strait and the Nullarbor, but most of them fell, as one would expect, in the midst of nowhere. A Skeptic suggested that within a few miles of each point, one could find a person named Smith, but this helpful suggestion was not followed up. Finally he showed a map of New Zealand, showing that two prominent NZ "sites" could be joined by a straight line, which was certainly a cartographic discovery of some moment.

He then spent some time discussing various European megalithic sites, concentrating on the use of granite in some of them. He said that granite gave off energy (quite correctly - granite is notorious for its higher than average level of radioactivity) and suggested that this was the reason that early humans used it in their monuments. He did not consider that it might have been because granite was fairly commonplace in those areas. He suggested that sites of high energy, such as those on his lines, crossing points and where granite was in abundance, caused strange effects such as "time dilations" and "openings into other dimensions", citing some pretty odd evidence to do with a black dog.

Question time brought a Skeptic to his feet with the question "What criterion, other than arbitrary whim, caused you to place the grid where you did?" Mr Drew responded that the starting point of the grid was

"where the Nile entered the Mediterranean", to which the Skeptic asked "Why?" Mr Drew suggested that the Nile Delta was a particularly important spiritual site, to which the Skeptic countered "No it isn't". Undeterred, Mr Drew then answered that "it was a place from which grid lines had been drawn for centuries", to which meaningless statement there was no answer.

Government Conspiracies

Jerry Clark, vice-president of the J. Allen Hynek Center for UFO Studies and editor of *International UFO Reporter* brought the discussion back to the vicinity of earth with a talk on "Extraterrestrial Bio-entities and the US Government". He prefaced his talk with the warning: "Simply by repeating what someone has said is true doesn't mean I endorse it as true". He then described a plethora of crashed saucer theories from the late 1940s and 1950s. Mr Clark summarised these stories, almost without exception, as dubious if not hoaxes, and described them as part of UFO folklore. Mr Clark continued his talk on the second day, describing theories that became ever more bizarre, including one that suggested that American citizens, with the full knowledge of their government, were being kept as food for aliens. He equated these claims with many popular, and usually anti-Semitic, conspiracies circulating among the American political far right. He proposed that these conspiracies were so absurd as to be beyond even consideration by any sane person, at which point a section of the audience demonstrated that sanity was not necessarily a highly regarded attribute in UFO circles and began interjecting with cries of outrage. Continuing with his exposition, he indicated that the

notorious MJ12 papers were certainly not reliable evidence of the conspiracy that was claimed for them, but suggested that they may be evidence of a con-spiracy of another kind. He used this and other claims to suggest that the US government might be indulging in a disinformation campaign, encouraging highly implausible stories which would be taken up by fringe groups, thus discrediting serious UFO researchers and their findings. At least, that is what we took to be his message, however, Mr Clark spoke so quickly and mentioned so many names and cases, it was difficult for someone not immersed in the UFO culture to keep up with the twists in the story. This is not intended as a criticism of Jerry Clark, who spoke reasonably and who came under frequent attack from those members of the audience who had apparently committed so much emotional capital to their conspiratorial faith that they regarded his talk as blasphemy. One such, sitting beside the Skeptics, caused further injury to their already sorely wounded mandibles by interjecting, "How can you doubt MJ12? They were the people who killed President Kennedy because he was going to reveal the alien presence to the American people."

Mr Clark's talk fell within the bounds of reasonable speculation, which certainly could not be said of the following speaker.

Extraterrestrial Evidence

Brian Crowley, whose book "Return to Mars" was reviewed in these pages (Vol 9, No 3), continued with his familiar theme that humans had arrived on Earth from Mars some time in the past. Among the evidence, he showed slides of paintings made by a Zulu 'shaman' friend. These allegedly illustrated

stories from Zulu mythology and were very much in the style of the covers of science fiction magazines of the 1950s. To Mr Crowley, they were proof positive of his thesis. However, as his talk progressed it became clear that everything was proof positive of his thesis. He followed the art exposition with several photographs of the "face on Mars" and, wonder of wonders, two other "faces" that had recently been identified on the Red Planet. One of these, Mr Crowley admitted, did not look much like a face to him. To the Skeptic, it was as face-like as either of the others. He then showed pictures of various other bodies in the solar system, pointing out further "evidence" of alien activity. Giant earth moving machine tracks on the moon, pyramids on Mars, a lake on the far side of the moon, straight lines on one of Jupiter's moons which "could not be natural", close ups of Phobos, taken by the recent ill-fated Soviet probe, which stopped transmitting shortly after arrival (sinister, what?) and an irrigation dam and some perfect circles on some celestial body, the identity of which the Skeptic did not catch as he was too busy holding his jaw in place. Mr Crowley claimed that all of the photos came from NASA but it would do no good for anyone else to ask for copies. Any requests to NASA are met with the response that the negative numbers asked for are blank (or so Mr Crowley asserts).

Possibly Mr Crowley's best slide showed the famous Martian "face" in a different light. In the familiar image, the left side is lighted, while the right side is in shadow. In this shot, the light and shade are reversed (exactly). Mr Crowley thought that this was a hitherto secret shot, while the Skeptic thought it was probably caused by reversing the negative.

Mr Crowley claimed that people from different cultures find the

Martian face strongly reminiscent of heroes of their cultures (Jesus, Buddha, Egyptian god etc). The Skeptic is fairly certain that the face depicts Prince Valiant and, not being aware of any Viking ancestry, he utterly rejects this hypothesis.

Keith Basterfield, whose jointly authored paper on fantasy prone personalities as relating to claimed abductions, was recently published in a US psychology magazine, discussed this hypothesis and we have asked Keith to submit an article for publication in a later issue of the Skeptic. Jenny Randles also gave a talk on abduction cases which, given the tenor of her earlier talk on crop circles, we suspect would have been reasonable. We do not know because none of the Skeptics attended these talks. After the preceding revelations, they had been forced to seek consultations with an orthopaedic surgeon regarding the continuous maltreatment of their mandibular joints.

Conclusion

None of the Skeptics who attended this conference had ever previously attended any similar gathering, nor had we hitherto had any experience of UFO believers *en masse*. The audience, like the speakers, appeared to fall into two distinct categories. In the first instance there were people who seemed to be genuinely curious about anomalous phenomena and wished to hear what the "experts" had to say. The second, and distinctly the majority category, included those who viewed the topic as a religious experience and who showed a preference for revealed **TRUTH** over understanding.

There were undoubtedly pearls among the dross at **The UFO Mystery** seminar, but it is moot whether they were worth the search. A sociologist, or anyone interested in the curious ways of their fellow humans, would certainly have found it to be a fascinating experience. ■

VISITOR

Skeptic Gives Gurus Curry

Tim Mendham and Harry Edwards

During September, a number of Skeptics groups throughout Australia played host to B Premanand, president of the Indian Skeptics.

Mr Premanand, a professional magician, has been exposing "miracles" performed by India's estimated 100,000 god-men, psychics, clairvoyants and astrologers for almost 50 years. In that time he has exposed between 10,000 and 20,000 miracles and has trained over a thousand people in his methods. He has put his life savings on the line in exposing cheats and charlatans and is not in the least disposed to tread warily - he has suffered a number of death threats and attempts on his life.

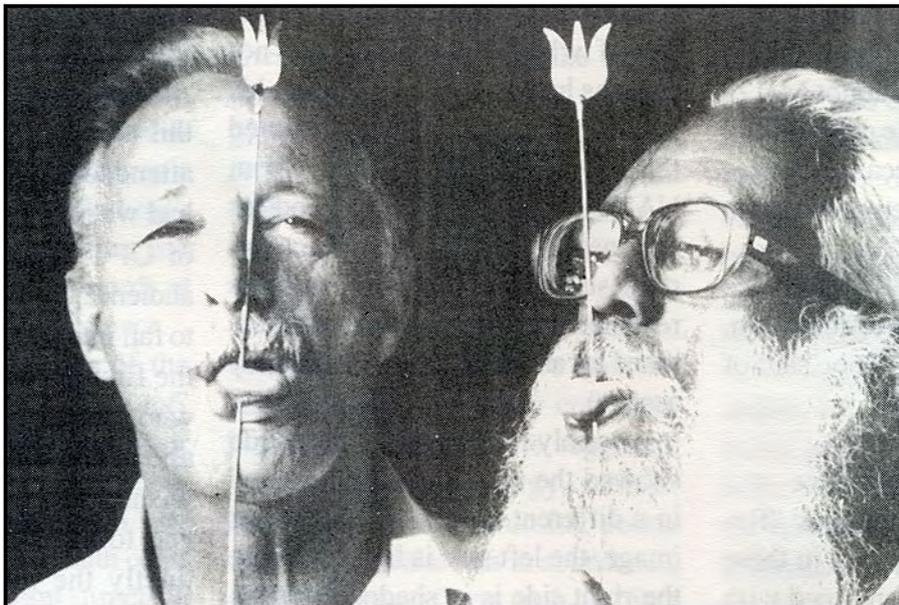
The Indian government has made a grant to Premanand to enable him to make video tapes of his performances and to explain his methods, so that they may be shown in villages throughout the country. He has offered a 100,000 rupee challenge, similar to that offered by Australian Skeptics, to anyone who can perform a miracle that he cannot emulate. However, he told a Sydney gathering, "I think I will die without seeing a genuine miracle". To demonstrate, he amazed the audience with a selection of

"miraculous" acts, popular in his country and used by many of the "god-men" to convince their devotees of their special powers.

He began by producing "holy ash" and depositing some in the hands of every member of the audience. God-men claimed that the ash could cure cancer, epilepsy and other conditions. The seemingly endless supply of ash came from a concentrated ball, secreted in his palm and was, he stated, composed largely of cow dung. He followed

recommended as an activity for the faint hearted, Skeptics president Barry Williams volunteered to bare his arm for the treatment and survived unscathed, apart from a few singed hairs.

Premanand then lit a small amount of camphor, which he extinguished by popping it into his mouth. He did not recommend this for people with beards, although his own is quite luxuriant. A volunteer from the audience also experienced this trick without harm.



Premanand (right) demonstrates how to silence Secretary Harry Edwards with a skewer through the tongue.

this with a demonstration of the body's ability to withstand flames for short periods. "It takes about three seconds for skin to absorb heat" he explained, waving a flaming wand under his arm. While this is not

He suspended a weight from a thread passed through the skin of his arm, explaining that this was a very popular trick in his country. He also astonished the audience by pushing a skewer through his tongue, or at least that is what he appeared to do. In fact, the skewer had a kink which passed around his tongue, but it certainly was

realistic enough to cause shivers up the spine of many in the audience (shades of the old 'arrow through the neck' trick, beloved of comedian Steve Martin).

Finally, he ate the glass from a light globe. This was not sleight of hand (or tongue), he actually ground the glass to powder between his teeth and swallowed it, followed by a glass of water. When this demonstration

was performed on the *Middy* and *Good Morning Australia* shows, close to a microphone, the effect was nerve shattering.

Overall, Premanand said, the "miracles" performed by the god-men of India were either tricks or feats which could be performed by anyone with a minimum of training. He suggested that some of the miraculous feats were straightforward frauds, instancing a temple where infertile couples can go to be blessed with a pregnancy, courtesy of one of the gods. That the "god" was in fact a very human assistant in a darkened room, only too pleased to impregnate any gullible women, was an exposure that Premanand was particularly pleased with. Premanand's female confederate went to the temple to be "blessed" and was shown into a windowless inner sanctum containing a life sized statue of a naked god with an erect penis. When the door was closed, and the room in darkness, she heard footsteps coming from the direction of the statue. She picked up a plank of wood used as a prayer platform and blindly hit out with it, rendering the priest senseless and unmaning the statue with one blow. The temple was subsequently closed, the "god" having been made infertile.

He also described how Indian holy men performed some of the tricks that have so impressed Western visitors. Sitting naked in the snow is made less distressing by a liberal application of yak fat; stopping the pulse by muscular contraction (simpler than the rubber ball in the armpit used by many Western gurus) and the seeming suspension of heart beats by compressing the lungs and stomach, thus making the heart beat difficult to detect.

Finally Premanand, in response to a question from a magician in the

audience, said that the famous Indian Rope Trick was a fake, not often performed now. In earlier times, when lighting was not as efficient as it is now, the supports of the rope could easily be concealed. It remains as a reminder of simpler, but not necessarily more superstitious times.

Premanand showed that "miraculous" feats are no more likely in "mysterious" India than they are in materialist Australia. The only substantial difference is that cultural differences in the two countries predispose people to believe in different irrational things. The public interest in what Premanand had to say was attested by the number of calls we received after his public appearances, from people who were attracted to gurus, particularly Sai Baba and who were planning trips to India to sit at his feet. Those we spoke to took a lot of convincing that he was only using magic tricks and not performing miracles.

After his successful Sydney appearance, Premanand visited Melbourne, Adelaide and Newcastle, meeting with Skeptics members in each location and achieving considerable media publicity.

Premanand's visit was a great success and Australian Skeptics is very grateful that he gave up so much of his time to entertain and instruct us. He has advised us that he is planning to visit Australia again next year and hopes to be a speaker at our annual convention. ■

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single issue of
*the Skeptic***

News in Brief

Skeptics face a dilemma concerning a curious story emanating from the northern NSW town of Bangalow. Locals had decided to hold a festival to promote local crafts and art, including, among other things, various New Age practices such as chanting to Gaia, 'goddess' worship, tai chi and no doubt dubious activities with dolphins and crystals. Just the sort of thing that we Skeptics regard as evidence that the world is rapidly going round the bend.

Into the fray steps a local fundamentalist Christian group, demanding that such pagan rituals be banned as an affront to their particular god. Just the sort of thing that we Skeptics regard as evidence that the world is further round the bend than we first supposed. In the event, the New Agers dropped their plans for the festival.

The Skeptics dilemma is, when two competing and equally irrational beliefs clash, which side should we cheer for?



New Scientist of August 17 reports the remarks of British Dr Peter May, a GP and a member of the General Synod of the Church of England, on the subject of "miracle" healing. Dr May, who has been examining such claims for 20 years, has repeatedly asked Christian healers to produce their best cases for verification. "Usually they offer nothing at all and cases are never what they first appear. Charismatic reports of miraculous healing are not supported by a single piece of medical evidence" said Dr May.

REVELATION

Will the Real Dr Snelling Please Stand Up?

Alex Ritchie

For several years, Australian creationists, representing the Creation Science Foundation Ltd, have been publishing articles and addressing school and public groups on the topic of the age of the Earth. The theme of these articles and talks is that there is scientific evidence that the geological features of Australia are explicable within the context of an Earth which is only some 6-10,000 years old and that most such features can be attributed to a world-wide flood which occurred more recently still.

The author of these claims made them with the authority of a BSc (Hons) in Geology and a PhD. However, in a recently published paper, this same author makes some very different claims about the age of geological features of the Australian landscape.

These remarkably contradictory, and unexplained, claims by one of the very few Australian creation 'scientists' who has genuine scientific qualifications, calls into question whether anything said by this group on the subject can be taken seriously.

Dr Alex Ritchie, palaeontologist at the Australian Museum, takes up the story.

There appear to be two geologists living, working and publishing in Australia under the name of Dr Andrew A Snelling. Both have impressive (and identical) scientific qualifications - a BSc (Hons), in Geology (University of NSW) and a PhD, for research in uranium mineralisation (University of Sydney).

Curiously, both Drs Snelling use the same address (PO Box 302, Sunnybank, Qld, 4109), which they share with an organisation called the Creation Science Foundation (CSF), the coordinating centre for fundamentalist creationism in Australia.

But the really strange thing about this is that the views of these two Drs Snelling, on matters such as the age of the earth and its geological strata, are diametrically opposed. This article, the result of my extensive searches through the literature, highlights this remarkable

coincidence and poses some serious questions of credibility for the Creation Science Foundation and for either or both of the Drs Andrew A Snelling.

For convenience I refer to them below as follows:

a) **Dr A A Snelling 1** - creationist geologist, a director of CSF and regular contributor to, and sometime editor of, the CSFs quarterly magazine, *Ex Nihilo* (now *Creation Ex Nihilo*).

b) **Dr A A Snelling 2** - consulting geologist who works on uranium mineralisation and publishes in refereed scientific journals.

Snelling 1 seldom, if ever, cites articles written by Snelling 2 and Snelling 2 never cites articles written by Snelling 1.

Snelling 1

For the past ten years Dr Andrew Snelling BSc, PhD, CSF's geological spokesman, has been the only prominent Australian creationist with geological qualifications. His credentials are not in question here, only his influence on science education in Australia.

Snelling 1 writes articles for creationist journals and lectures throughout the country in schools, public meetings and churches. Although his geological credentials are usually highlighted in creationist publications it would be more accurate to describe

Snelling 1 as a Protestant evangelist, not as a geologist. Some CSF literature openly refers to him as a 'missionary'.

Why should Snelling 1's activities concern the scientific and educational communities? To appreciate this, one needs to analyse his published articles to see how geological data and discoveries are misused and reinterpreted from a Biblical perspective.

CSF members subscribe to a lengthy, very specific *Statement of Faith*. Apart from purely religious clauses, not relevant here, several clauses carry serious implications for those in scientific and educational circles, especially for those in the Earth (and other historical) sciences. As the extracts below reveal, to a

dedicated creationist, *scientific evidence is always subservient to Biblical authority.*

(A) PRIORITIES

1. The scientific aspects of creation are important but are secondary in importance to the proclamation of the gospel of Jesus Christ as Sovereign, Creator and Redeemer.

(B) BASICS

3. The account of origins presented in Genesis is a simple but factual presentation of actual events and therefore provides a reliable framework for scientific research into the question of the origin and history of life.

5. The great flood of Genesis was an actual historical event, worldwide in its extent and effect.

(D) GENERAL

The following attitudes are held by members of the Board to be either consistent with Scripture or implied by Scripture

(i) The scripture teaches a recent origin for man and for the whole creation.

(ii) The days in Genesis do not correspond to Geological ages, but are six (6) consecutive twenty-four (24) hour days of creation.

(iii) The Noachian flood was a significant geological event and much (but not all) fossiliferous sediment originated at that time.

(vi) The chronology of secular world history must conform to that of Biblical world history."

These statements reveal 'creation science' to be an oxymoron, a contradiction in terms, based on religious dogma (and a simple minded dogma at that). Despite its name, 'creation science' has little to do with real science and, in fact, represents the antithesis of science.

Everything in his creationist writings and activities indicates that Snelling 1 subscribes fully to CSF's Statement of Faith. Where this clashes with scientific evidence, the latter is always secondary to the former and his message, although often cloaked in scientific jargon, is simple and unequivocal; indeed one of his favourite lecture topics is "*Why, as a Geologist, I Believe in Noah's Flood*".

From the Gospel according to Snelling 1, the Earth is geologically young, created *ex nihilo* ("from nothing") by a supernatural being, during a short, well defined construction period of only six days. This miraculous creation event, usually dated some 6000 years ago (around 4004 BC), is not the end of the story. The Earth we live on today is not the same as the original created model, which was almost totally destroyed and remodelled some 1,600 years later (around 2345 BC) by an irate Creator who conjured up an unique, world-

wide Flood to do the job.

This Flood, lasting just over one year, tore down *all* previous land surfaces, rearranged the continents and thrust up all existing mountain chains. It also destroyed all pre-existing life forms, plant and animal - except for a chosen few saved on Noah's Ark. Thus all of the remarkably complex geology of the present day Earth's crust formed during the one year of Noah's Flood and all the innumerable fossil remains of former animals and plants were all buried and preserved by the same Flood. Snelling 1 (1983a) presented his views on Flood chronology in an article, *Creationist Geology: The Precambrian*. After reviewing mainstream views on geology and evolution, he remarked:

"On the other hand, creationists interpret the majority of the fossiliferous sedimentary rocks of the Earth's crust as testimony to Noah's flood....Creationists do this because they regard the Genesis record as implying that there was no rain before Noah's flood, therefore no major erosion, and hence no significant sedimentation or fossilisation." "However the flood was global, erosional and its purpose was destruction. Therefore the first major fossilisation commenced at this time, and the majority of the fossils are regarded as having been formed rapidly during this event. Creationists therefore regard sedimentary strata as needing to be classified into those formed during the time of creation week, pre-flood, flood (early, middle and late), post-flood and recent" (p. 42)

Snelling 1 then quoted one J C Dillow, a creationist writing on the Earth's supposed pre-Flood "vapour canopy":

"It should be obvious that if the Earth is only 6000 years old, then all the geological designations are meaningless within that framework, and it is deceptive to continue to use them. If, as many creationist geologists believe, the majority of the geological column represents flood sediments and post-flood geophysical activity, then the mammoth, dinosaur and all humans existed simultaneously Some limited attempts have been made by creationist geologists to reclassify the entire geological column within this framework, but the task is immense." (Dillow 1981, "The Waters Above". Moody Press, 405-6)

Snelling 1 criticised Dillow and other creationists for restricting Flood strata to Phanerozoic rocks (Cambrian and younger) and claimed that most Precambrian rocks are also Flood deposits.

"It is my contention that those who do this have failed to study carefully the evidence for the flood deposition of many Precambrian strata and have

therefore unwittingly fallen into the trap of lumping together the Precambrian strata to the creation week. The usual reason for doing this is that the evolutionists regard Precambrian as so different, so devoid of life in comparison with other rocks, that creationists have simply borrowed their description." (1983, 42).

Snelling 1 thus pushes the earliest limits of Flood strata far back into the Early Precambrian (early Archaean) times, before even the first appearance of fossils resembling blue-green algae.

"What I am contending here is that fossils, whether they be microscopic or macroscopic, plant or animal and the fossil counterpart of organic matter, along with its metamorphosed equivalent graphite, are the primary evidence which should distinguish flood rocks from pre-flood rocks, regardless of the evolutionary 'age'." (1983, 45)

Lest there remain any doubt, Snelling 1 (1983, 42) stated:

"For creationists to be consistent the implications are clear; Precambrian sediments containing fossils and organic remains were laid down during Noah's flood. **Creationist geologists need to completely abandon the evolutionist's geological column and associated terminology.** It is necessary to start again, using the presence of fossils or organic matter as a classification criterion **in the task of rebuilding our understanding of geological history within the Biblical framework.**" (my emphases)

It is difficult to believe that the writer of the foregoing article has a BSc (Hons) and PhD in geology! However an examination of other articles by the same author in *Ex Nihilo* reveals that, to Snelling 1, everything geological (Ayers Rock, Mt Isa ore deposits, Bass Strait oil and gas, Queensland coal deposits, Great Barrier Reef etc) can be explained as the result of Noah's year-long Flood.

DOOLAN, ROBERT & ANDREW A SNELLING, 1987. Limestone caves ...a result of Noah's Flood? *Creation Ex Nihilo* 9 (4), 10-13.

READ, PETER & ANDREW A SNELLING, 1985. How Old is Australia's Great Barrier Reef? *Creation Ex Nihilo*. 8(1), 6-9.

SNELLING, ANDREW A 1982. The Recent Origin of Bass Strait Oil and Gas. *Ex Nihilo* 5 (2) 43-46.

SNELLING, ANDREW A 1983. Creationist Geology: The Precambrian. *Ex Nihilo* 6 (1), 42-46.

SNELLING, ANDREW A 1983. What about Continental Drift? Have the continents really moved apart? *Ex Nihilo* 6 (2), 14-16.

SNELLING, ANDREW A 1984. The recent, rapid formation of the Mt Isa orebodies during Noah's Flood.

Ex Nihilo 6 (3) 40-46 (cf. also abstract 17-18).

SNELLING, ANDREW A 1984. The Origin of Ayers Rock. *Creation Ex Nihilo* 7 (1).

SNELLING, ANDREW A 1986. Coal Beds and Noah's Flood. *Creation Ex Nihilo* 8 (3), 20-21.

SNELLING, ANDREW A 1989. Is the Sun Shrinking? *Creation Ex Nihilo* (pt. 1) 11 (1), 14-19. (pt. 2) 11 (2), 30-34. - The Debate Continues. (pt. 3) 11 (3), 40-43 - The Unresolved Question.

SNELLING, ANDREW A & John Mackay 1984. Coal, Volcanism and Noah's Flood. *Ex Nihilo Tech. J.* 1, 11-29.

SNELLING 2

If we now turn to the scientific articles published by the other Dr A A Snelling, consulting geologist (also from PO Box 302, Sunnybank QLD, 4109), we find a remarkable contrast, both in approach and content. None of them mention the Creation or Creation Week, Flood geology or the need to revamp the classic geological timescale.

The latest paper by Snelling 2 (1990, 807-812) is a detailed technical account of the "Koongarra Uranium Deposits" in the Northern Territory. It appears in an authoritative two volume work on "Geology of the Mineral Deposits of Australia and Papua New Guinea" (ed. F E Hughes), published by the Australasian Institute of Mining and Metallurgy, Melbourne. The references list eight earlier papers by Snelling 2 in refereed journals (or symposium volumes) on aspects of uranium mineralisation; three as sole author and five as junior co-author.

In discussing the regional geology (p. 807) and age (p. 811) of the Koongarra uranium deposits, Snelling 2 describes their geological history in fairly technical terms, however, to avoid the charge we lay against the creationists, of taking quotations out of context, I will quote Snelling 2 verbatim from the paper (p. 807).

"The **Archaean** basement consists of domes of granitoids and granitic gneisses (the Nanambu Complex), the nearest outcrop being 5 km to the north. Some of the lowermost overlying **Proterozoic** metasediments were accreted to these domes during amphibolite grade regional metamorphism (5 to 8 kb and 550 to 630 C) at **1870 to 1800 Myr**. Multiple isoclinal recumbent folding accompanied metamorphism." (My emphases.)

For the benefit of lay readers, this statement is summarised and simplified here:

The oldest rocks in the Koongarra area, domes of granitoids and granitic gneiss, are of **Archaean** age (ie to geologists this means they are older than 2500

million years). The *Archaean* rocks are mantled by *Lower Proterozoic* (younger than 2500 million years) metasediments: all were later buried deeply, heavily folded and, between *1870 and 1800 million years ago*, were subjected to regional metamorphism at considerable temperatures and pressures.

There is no question here of “abandoning the geological column and its associated terminology”, and the term *Myr* refers *unequivocally* to millions of years. One further quotation (p.807),

“A 150 *Myr* period of weathering and erosion followed metamorphism.”, is self explanatory.

There are several further references to ages of millions and thousands of millions of years, and to commonly accepted geological terminology, throughout the paper but, to spare the lay reader, I will only summarise them here:

1. During *Early Proterozoic* times (from 1688-1600 million years ago) the area was covered by thick, flat-lying sandstones.
2. At some later date (but after the reverse faulting) the Koongarra uranium mineral deposit forms, perhaps in several stages, first between *1650-1550 million years ago*, and later around *870 and 420 million years*.
3. The last stage, the weathering of the primary ore to produce the secondary dispersion fan above the No 1 orebody seems to have begun only in the last *1-3 million years*.

Nowhere in this, or in any other article by Snelling 2 is there any reference to the creation week, to Noah’s Flood or to a young age for the Earth. Nor is there any disclaimer, or the slightest hint, that *this* Dr Snelling has any reservations about using the standard geological column or time scale, accepted world-wide. The references above to hundreds and thousands of million of years are not interpolated by me. They appear in Dr Snelling 2’s paper.

The problem is obvious - the two Drs A A Snelling BSc (Hons), PhD (with the same address as the Creation Science Foundation) publish articles in separate journals and never cite each other’s papers. Their views on earth history are diametrically opposed and quite incompatible.

One Dr Snelling is a young-earth creationist missionary who follows the CSF’s Statement of Faith to the letter. The other Dr Snelling writes scientific articles on rocks at least hundreds or thousand of millions of years old and openly contradicting the Statement of Faith. The CSF clearly has a credibility problem. Are they aware they have an apostate in their

midst and have they informed their members?

Of course there may well be a simple explanation, eg that the two Drs Snelling are *one and the same*. Perhaps the Board of the CSF has given Andrew Snelling a special dispensation to break his Statement of Faith. Why would they do this? Well, every creation ‘scientist’ needs to gain scientific credibility by publishing papers in refereed scientific journals and books and the sort of nonsense Dr Snelling publishes in *Creation Ex Nihilo* is unlikely to be accepted in any credible scientific journal.

I think that both Dr Snelling and the CSF owe us all an explanation.

WILL THE REAL DR ANDREW SNELLING PLEASE STAND UP?

POSTSCRIPT

Several years ago, in the *Sydney Morning Herald*, as one geologist to another, I publicly challenged Dr Snelling (the young-earth creationist version) to a public debate, before our geological peers, on a subject close to his heart - *Noah’s Flood - The Geological Case For and Against*. I’ve repeated the challenge several times since then and it still stands. For reasons best known only to himself, Dr Snelling has declined to defend the creationist cause.

In the light of the above I suggest the reason is obvious. In his heart, and as a trained geologist, he knows that the young-earth model is a load of old codswallop and is totally indefensible. ■

Prediction?

Andrew Denton Live and Sweaty (ABCTV) September 21, was a sports program devoted to the 1991 Sydney Rugby League Grand Final of the following Sunday. During the program, a “Panel of Experts” was invited to predict the winner.

The panel consisted of four “psychic” experts and four other people, including a meteorologist and an economist, who also make predictions. Three of the “psychics” predicted a Canberra win and three of the non-psychics predicted a Penrith win.

Penrith won.

CLINICAL HYPNOSIS

Looking from the Laboratory

Kevin M. McConkey

The view put forward by many self-styled hypnotists and by many media reports about hypnosis is that it is an unquestionably authentic phenomenon in which a deeply entranced individual acts on the almost irresistible suggestions of the hypnotist in an automatic and zombie-like way. Clinically, hypnosis is too often presented as a magic cure for whatever ails you. This more or less credulous view of hypnosis has never had the support of the scientific community. Rather, the scientific community has adopted a questioning position that, wittingly or unwittingly, has sometimes conveyed that there is something phony or faked about hypnosis. Although I adopt a questioning position on the phenomenon, I do not consider that hypnosis is an unreal or insubstantial phenomena. Rather, it is a phenomenon that can be understood through an appeal to normal psychological processes. Thus, we neither need to dismiss the phenomenon, nor do we need to invoke "unusual" processes or events to explain it. Moreover, we need to understand that hypnosis is a clinically useful procedure for some people, some disorders, some times.

I would like to give a necessarily selective account of some of the issues surrounding the clinical use of hypnosis. If you go to the clinical literature, to the popular reports, or the advertising material of self-styled hypnotists, you will find an amazing range of uses of hypnosis and an amazing array of claimed successes. From stopping fingernail biting to curing brain damage; from stopping smoking to allowing major surgery without general anaesthesia; from helping to pass exams to helping remember past lives or experiences with aliens.

It would be an easy thing to engage in a debunking exercise, and to criticise the excessive views and inappropriate uses of hypnosis in the clinical setting. However, I think it would be more fruitful to take a positive stance and attempt to convey an appreciation of the phenomenon that will allow an appropriate view to be formed and the appropriate clinical uses of hypnosis to be understood.

Hypnosis has become an increasingly important technique in the clinical areas of psychology, medicine, and dentistry in the last 30 years or so. This increased interest in clinical hypnosis has been paralleled,

especially in the last 25 years, by the interest shown in the topic by researchers in the laboratory. As with other areas of psychology, however, it has sometimes been the case that clinical and experimental hypnosis are either ships that pass in the night or hostile ships that fire at each other in the day. This doesn't have to be so, however. There is a good deal of similarity in the way in which researchers and practitioners should approach hypnosis, and there is a substantial amount of data that speaks to the rapprochement that can exist between the theory tested in the laboratory and the practice of hypnosis in the clinic.

In looking at selected aspects of clinical hypnosis I want to pay close attention to the relevance to clinical practice of salient findings from basic research. I would like to comment on (a) theoretical models of hypnosis, (b) individual differences in hypnotic responsiveness, and (c) selected clinical applications of hypnosis: management of pain, recovery of memory, and management of burns.

Theoretical models of hypnosis

Let me first comment briefly on the major theoretical models of hypnosis, because this can be especially confusing when one is trying to develop an understanding of the clinical use of hypnosis. At this point, let me give a descriptive definition of hypnosis: Hypnosis occurs when one person (the subject) experiences alterations in perception, memory, or mood in response to suggestions given by another person (the hypnotist). Although most researchers in the field agree that these alterations in experience and accompanying behaviour occur, they do not agree on the most appropriate way to explain them.

The major models that have emerged from laboratory work in the last 25 years focus on explaining hypnosis in terms of either social processes or cognitive processes, or in terms of the interaction of social and cognitive processes. From the social perspective, some researchers argue for the importance of expectation and compliance (among other social processes) as ways of explaining hypnosis. These researchers can easily be misinterpreted as saying that hypnotised people are simply faking, and

for this reason (among others) the social perspective has not been embraced by those who use hypnosis clinically. From the cognitive perspective, other researchers argue for the importance of dissociation (among other cognitive processes). This perspective has been influential in shaping the ways in which clinicians view and use hypnosis.

The third major model adopts an interactionist perspective that attempts to recognise more so than the other major models that (a) hypnosis involves a social interaction between two people that is complex and multifaceted, (b) the hypnotised individual is a cognitively active being who is attempting to respond to the many communications that he/she is receiving, and (c) the hypnotised individual brings to bear particular cognitive skills to experience the events suggested by the hypnotist as best as he/she can. From this perspective, researchers such as myself argue the importance of the cognitive skills of the subject, the communications of the hypnotist, and the relationship between hypnotist and subject. From my perspective, the interactionist model is the one that we need to adopt if we are to understand what occurs in the laboratory and in the clinic when hypnosis is involved.

Besides these major approaches, which are tied closely to the laboratory, there is another approach to hypnosis that has gained substantial popularity among clinical colleagues in the last 10 years; this is an approach that typically rejects the relevance of experimental analyses of hypnosis. Various labels as "*Ericksonian hypnosis*" or "*the new hypnosis*", this approach is not one that I will deal with in this paper other than to say that advocates appear to see virtually every human interaction as involving hypnosis, and see hypnosis itself as involving some specific biological mechanism. For instance, some clinical colleagues argue that "hypnosis is a naturally occurring body defence mechanism"; "the critically ill are already in a state of hypnosis"; "a hypnotic trance can be induced by stroking the body"; and "people enter a hypnotic state when they are remembering any sequence of events". Within this un-bounded approach, it is not clear to me what hypnosis is; it is even less clear to me what hypnosis is not. Let me simply lay this approach to one side, while also being quietly concerned about its popularity among clinical colleagues.

Individual differences in hypnotic responsiveness

The most basic laboratory finding about clinical hypnosis is that of individual differences in responsiveness. Various labels hypnosis susceptibility, hypnosis responsiveness or hypnosis ability, the research

findings consistently indicate that the distribution of hypnosis ability pretty much follows the normal distribution. Researchers have gathered much psychometrically sound data on this issue in the past 25 years, but it is appropriate to note that the Abbe di Faria made this observation and gave a detailed description of individual differences around 170 years ago. Nevertheless, the development of formal measurement scales of hypnosis susceptibility around 30 years ago has allowed researchers to document the nature of individual differences in hypnosis ability.

In essence, around 10% of the population is totally unhypnotisable, around 10% can experience very profound alterations in experience, and the rest of us can experience some but not other hypnotically suggested effects. Because a person responds well to a suggestion for a simple experience such as arm levitation, for instance, does not mean that he/she will respond well to a suggestion for hypnosis analgesia or age regression. To make that assumption in the clinical setting may lead to frustration and a sense of failure by the client.

Hypnosis ability remains stable throughout adulthood and attempts to enhance or modify hypnosis responsiveness appear to have little impact on the experience of subjects although their behaviour can be changed somewhat. This is not to say that hypnosis responsiveness never changes or that there is nothing that the hypnotist can do to maximise a subject's response to hypnosis suggestions. In the laboratory, subjects' scores on formal measurement scales shift somewhat over the first few testing sessions before they stabilise at some level. In the clinical setting, the lesson from these laboratory observations is clear. Unless the hypnotist allays the client's anxieties and corrects his/her misconceptions about hypnosis, the initial attempts at hypnosis induction may not indicate the level of hypnosis responsiveness that the person is capable of. Once the person has reached what is known as plateau hypnosis ability, however, there seems little that the hypnotist can do to enhance the individual's hypnosis responsiveness. The ability to experience hypnosis lies with the individual, not with the hypnotist.

The distribution of individual differences, the relationships among particular hypnosis suggestions, and the relative stability of hypnosis ability all point to hypnosis responsiveness being a skill of the individual. Thus, what happens during hypnosis is essentially a function of the subject's hypnosis ability, rather than the hypnotist's skill in inducing trance or administering suggestions. For the clinician who wants to use hypnosis effectively, then, this finding indicates that the hypnosis ability of the individual client should be

assessed before hypnosis is used.

Of course, some degree of hypnotisability can be assumed to be present because only a small percentage of the population is entirely un hypnotisable, but many techniques of clinical hypnosis (such as hypnotic analgesia) are effective only with individuals of high hypnotisability. Given this, it seems a waste of time and a frustrating experience for all concerned for the clinician to try to develop and use these phenomena in individuals who simply do not have the ability to experience them. The best procedure for assessing hypnotisability in the clinical setting is through one of the formal scales of hypnotic susceptibility that have been developed specifically for use in the clinic, and that are suitable for adults and children.

Selected clinical applications of hypnosis

Let me comment in summary fashion on some selected applications of clinical hypnosis.

Management of pain

Following appropriate suggestions, many hypnotised individuals report that they experience a significant reduction in their experience of pain. In the clinical literature there are many case reports of hypnotic suggestion as the sole analgesic agent in appendectomies, caesarean sections, and other instances of major surgery. These cases can be quite dramatic, but it is likely that less than 5% of the population could tolerate such procedures with hypnosis alone. For most of the rest of the population, hypnotic analgesia is more effective when used with minor surgical procedures, postoperative pain, routine dental work, and discomforting medical procedures. Excellent clinical research, for example, has demonstrated that hypnotisable children who were undergoing chemotherapy for cancer showed significantly more pain reduction during bone-marrow aspirations than did their un hypnotisable counterparts when given suggestions for analgesia. In such situations, careful case series reports have indicated that as high as 50% of clients can profit from the use of hypnosis and self-hypnosis to relieve pain.

In the laboratory a substantial amount of work on hypnotic analgesia has been conducted in recent years. The big question, of course, is how does hypnosis lead to a reduction in experienced pain.

Various studies in the laboratory have told us that, for hypnotisable individuals, hypnotic analgesia has a greater impact than either morphine, diazepam, aspirin, placebo, or acupuncture. Other studies have told us that, for hypnotisable individuals, suggestions for a specific

analgesic effect have a greater impact than do suggestions for relaxation and reverie; this tells us that hypnotic analgesia acts more like an analgesic agent than like a general tranquilliser. Just what is the psychological mechanism responsible for this remains a question open to theoretical debate and empirical resolution. The fact, however, that hypnosis can be used to relieve pain in hypnotisable individuals has been established firmly in both the laboratory and the clinical setting.

Recovery of memory

A very different use of clinical hypnosis is as a tool for the uncovering of memories thought to be associated with particular symptoms. One common therapeutic technique, for instance, involves giving suggestions for enhanced recall or for regression to a prior age to recover forgotten memories of events or experiences. Hypnosis is a fine technique for this clinical purpose, as long as it is kept in mind that the reported memories are not necessarily valid.

The use of hypnotic age regression to recover memories of events that occurred in the past does not provide a reproduction of the original events, but involves an active reconstruction of a story about the individual's past. In essence, the events focused on during hypnotic age regression in the clinical setting are probably more narrative than historical truth, in the sense that they have subjective meaning for the individual but may not have occurred in an objective sense.

The work from the laboratory on hypnotic age regression clearly indicates that the recovered events are reconstructions of the original events. This is not to say that the information is necessarily inaccurate. Rather, it seems that hypnosis may lead to an increase in the amount of correct and incorrect information that is reported as memory. In the clinical setting, this probably does not matter all that much since the incorrect information probably has some degree of narrative truth, in the sense of its emotional importance to the client. This mixture of correct and incorrect information does matter, however, in situations in which there is a likelihood of treating the recovered material as either entirely accurate or entirely inaccurate; the forensic situation is one that comes to mind, but the complexities of that situation could be the topic of another article.

Management of burns

I would like to make a brief comment on what I consider to be one of the most clinically exciting and

theoretically challenging uses of clinical hypnosis. This use reflects the increasingly important application of hypnosis in behavioural medicine, where hypnotic suggestions are employed to alter physiological functioning indirectly.

In this respect, hypnosis is being used increasingly with burn victims not only to help in pain management but also to help in the healing process itself. Dramatic and provocative case studies have been reported of more rapid healing, less blistering, and less scarring when hypnosis is used with burn victims soon after they have received the burn. The exact nature of the impact of hypnosis and the precise mechanism responsible for that impact needs to be analysed in much more detail. Nevertheless, this is one application of hypnosis that I think we are going to see a lot more of. And it is one that raises intriguing questions for us to take into the laboratory.

There is more that I could say about the ways in which laboratory research on hypnosis can benefit those who are engaged in clinical practice. One major area that I haven't discussed in this article, for instance, is the relevance of basic hypnosis research to our understanding of normal and abnormal psychological functioning. During hypnosis we are able to produce anomalies and disruptions in perception and memory processes that lead to hallucinations and delusions, amnesias and paramnesias. By analysing these particular phenomena in the laboratory, we may come to a better understanding of them when they occur as clinical symptoms.

I hope that I've conveyed that laboratory research has helped to lay down a scientific basis for clinical practice by documenting the effectiveness of some hypnotic techniques commonly used in the clinical setting and questioning the impact of other techniques.

By far, however, the most important contribution of the laboratory has been to impress upon us the importance of individual differences in responsiveness to hypnosis. Hypnotic response is a matter of subject ability, not of hypnotist technique. By showing what hypnosis is good for and what it's not, by showing who can experience suggestions and who cannot, researchers hope that clinicians can be helped to use hypnosis more effectively, and more creatively, in their practices. Finally, looking from the laboratory, the prospects for the use of clinical hypnosis are very good indeed, as long as excessive credulity is kept at bay. ■

This article is based on a presentation at the 7th Annual Convention of the Australian Skeptics, June, 1991, Sydney.

ASTROLOGY A Challenge!

Steve Roberts

On a radio show, an astrologer offered to predict the major events in my life, given the date and time of birth. I took him up on this, and at a later occasion he tried out the first prediction on me (which was "that I had a bad year emotionally in 1989" - hardly an event). This happened to be completely incorrect, but when I told him that, he then said that I clearly wasn't born at the time I had given him and was thus excused from the other 5 predictions. Sorry - won't do!

Following on from this, I offer the following challenge, easily attempted by any astrologer. I give the exact place and time of my birth, and the exact place and times of 10 major events which have happened to me in my life.

All an astrologer has to do is cast the horoscope, get the planetary positions for these times, and tell me something about the events - were they nice, awful, lucky, unlucky, family, business, money, love, decision, blunder, accident, etc. They should all be predictable by astrological means.

Born: 1950 May 25, 4pm, Chelmsford, Essex, England. Certainly between 15:50 and 16:05, UK Summer Time (= GMT +1 hour).

Times and places of events: all accurate to within 60 minutes and 1500 metres.

1962	Jun 10	3 pm Brentwood, Essex, UK
1966	Nov 6	6 pm Chelmsford, Essex, UK
1968	Mar 20	8 am South Kensington, London, UK
1971	Jun 19	8 pm Clapham, London, UK
1975	Feb 7	7 pm Hounslow, London, UK
1977	Feb	2 noon Cheltenham, Glos, UK
1981	Mar 6	9 pm Naunton, Glos, UK
1982	Mar 20	3 pm Prestbury, Glos, UK
1987	Feb 24	3 pm South Oakleigh, Melbourne
1988	Nov 25	11am Civic, Canberra, ACT

Any takers who wish to achieve fame and the knowledge that they have convinced a sceptical astronomer may contact Steve at either the Australian Skeptics or the Victorian branch addresses.

BOOK REVIEW

Why We Believe

John Wren-Lewis

Wings of Illusion

John F Schumaker

Polity Press, 1990 (\$59.95)

Calling a book immoral is well-known to result in boosting its sales, but I'm very happy to do just that for "Wings of Illusion" by Dr Jack Schumaker, a psychologist currently teaching at the Hunter Institute in the University of Newcastle - because it's a very good book indeed. In fact I think it is required reading for anyone with religious or spiritual interests of any kind - and yet it's one of the very few books I've come across that I think could in a real sense be immoral.

It's not, I should hasten to say, about sex. It is about a human urge which, Dr Schumaker argues, is far more important than the sex-drive, and far more potentially evil, namely the impulse to believe in supernatural or paranormal realms, or beings, or forces, beyond natural experience. There are whole cultures, and a great many individuals in all cultures, who get along perfectly well with minimal *sexual* activity, thereby completely disproving what Schumaker calls the modern 'pressure-cooker' notion of seething sexual urge.

The *only* behavioural compulsion that is *really* universal in human society, found right across every known human culture, is that of auto-suggesting ourselves to believe in hidden meanings for life, and clinging on to such beliefs even in the face of glaring contrary evidence. And Schumaker argues that since many such beliefs are proven nonsense (like the belief that the world was due to end on a certain date that is now long gone), honesty compels us to consider seriously that the same urge-to-illusion may be the real operative force behind our own (supposedly) more respectable beliefs, whatever they may be.

If your first response to that idea is indignant dismissal, remember, says Schumaker, that this is precisely the defence mechanism that comes into action when any deeply ingrained mental conditioning is challenged. Moreover such defence mechanisms can be shown again and again to lead people to die or kill for their beliefs, a social fact which, in the nuclear age, could threaten us all with extinction. We're perhaps less

in danger than we were of holy wars against communist challenge to Christian beliefs, but militant defence of religion is still a very real threat in other quarters and paranormal beliefs allow many societies to pursue policies that could lead to ecological suicide.

But unlike most sceptics who criticise religious or paranormal belief as illusion, Schumaker *doesn't* claim that it is mere stupidity or pie-in-the-sky propaganda invented by wicked rulers to keep the peasants happy with their repressed lot. Schumaker's case is altogether more sophisticated than that, and he has little time either for Freud's simplistic notion that God is simply a fantasy based on early experience of parents.

Schumaker follows, and very clearly develops with much modern supporting evidence, the contention advanced by the noted American sociologist Ernest Becker in the 1970s, that our capacity for creating and living inside illusions was evolved as a *necessary protection* of our distinctly human form of consciousness, because our intelligence, which is the great evolutionary advantage of our species, brings with it a terrible hazard. It makes us consciously self-aware in a way that no earlier species has been, and thereby confronts our survival instincts with the ghastly realisation that no matter how cleverly we adapt to the environment, death is still inevitable. Without some counteractive development, this would automatically paralyse us in total panic, and perhaps did indeed wipe out whole generations of our precursors long ago. But we have survived precisely by evolving the power of suggestion to escape from reality into various kinds of imaginary "beyond", leaving our intelligence free to work in this world, while we ignore our mortality by believing we transcend it.

I can't begin to do justice here to the depth and breadth of Schumaker's argument, or to the massive array of evidence he musters to support it. I urge you to read it if you're at all serious in thinking that religion has any future, because it cuts at the roots of one of the most powerful lines of defence that modern religious apologists have developed against older kinds of criticism - namely, the discovery that in our modern Western culture, people who *have* religious or spiritual

beliefs are statistically happier, better adjusted and even more creative than those who don't. This was the key point of Jung's famous break with Freud, and since Jung's day his contention about the beneficent effects of spiritual belief have received a huge amount of support from many different investigations. But Schumaker is happy to quote all this evidence as actually *supporting* his case, by showing that belief performs precisely the function for which he claims we evolved it, namely to enable intelligence to work in practical ways without being paralysed by the fear of death.

And that brings me to the reason why I say his book might seriously be said to be immoral. When elderly bishops or judges - or our own Fred Nile - say that about a book, they are usually worried about it possibly inciting people to sexual behaviour of which they don't approve, an issue on which I think readers should be free to decide for themselves.

But if Schumaker really believes his own case, then he's running the risk of doing something far worse than that. If he's right, and readers are convinced by the logic of his argument to the point of being *dis*-illusioned, shouldn't they logically go crazy on the spot, overwhelmed by death-anxiety? However, I don't conclude that the book should be banned, because if the author himself hasn't gone crazy, and if there haven't been mass suicides amongst the Australian Skeptics, whose members have, I understand, lapped up the book, why should anyone else be driven to such a fate? And of course, that surely means there must be something not quite right about his basic argument, something which both he and his approving readers have somehow failed to notice.

In saying that, I'm *not* implying that anyone has a right merely to dismiss the arguments Dr Schumaker puts forward. On the contrary I believe we have to take very seriously indeed his evidence that there is a terrible downside to supernatural faith of any kind, precisely when it involves what Becker called "the denial of death". When we identify ourselves with what psychologists call symbolic reality, whether it be some divine cause or the symbols of modern consumerism, we lose touch with physical reality to the point of sacrificing both ourselves and others on the altar of God, knightly honour, family pride, the future proletarian paradise or keeping up with the Joneses.

The interesting thing about Becker and Schumaker, however, is that unlike most ordinary sceptical humanists they don't pin any hope on our somehow throwing all this over and becoming "merely human", because there would remain this terrifying contradiction between the

urge to survive and the inevitability of death. Becker on his deathbed seemed to break through this Catch 22 situation with some kind of mystical experience of natural human existence itself, but Schumaker doesn't understand what he was on about, and leaves us with the dilemma unresolved.

His book challenges both sceptics and believers to show their mettle in taking the Catch 22 situation seriously and attempting an honest answer. And my guess is that the answer might start from the fact that Schumaker can write such a book and *not* go crazy with death anxiety. Could it be that the fear of death is actually *not* natural, as everyone has tended to assume up to now, but some kind of malfunction? That would be the starting point for my own attempt to meet Schumaker's challenge. The very same technological advances which now threaten our species with extinction if we go on flying on the "wings of illusion" to deny death, have also made possible the medical techniques which, over the past decade, have brought back millions of us from the very brink - and about a third of us report that we've been completely cured of death anxiety - not because we believe we're immortal, but because *natural* life itself now seems quite different. Maybe we stand at the moment of birth of a new kind of religious consciousness, based on experience rather than belief. In the meantime, Dr Schumaker's "immoral" book does a magnificent job of setting out the most fundamental challenge of our time.

This review was first broadcast on the ABC Radio National religious radio program Insights in November 1991. ■

Prediction?

We thank readers Perry Gretton, Geoffrey Fairbank and Brian Miller for bringing to our notice advertisements for the services of Jean Rignac, billed as "Astrologer of the Year" by National Inquirer and also as "Europe's Most Accurate Astrologer".

Among the welter of "successful" predictions to Jean's credit is one that should give pause, even to the most ardent gullibite.

"...the stockmarket crash of '88 etc..."

We hate to say it but if, three years after the event, "Europe's Most Accurate Astrologer" can miss a post-diction by a whole year, then we cannot recommend his predictions.

FANATICISM

That Magic Moment

Dov Midalia

In my student days I was a part time cleaner for a fast-food store and thus both unusually awake and unusually bored on weekend mornings. One such Sunday I flicked on the staff-room TV and so first came to see Jimmy Swaggart, the televangelist superstar later laid tearfully low when a prostitute named him as her client.

From behind a lectern on the stage of his vast “church”, Swaggart introduced the day’s topic and outlined his position with a philosophical air. What, he asked, is truth? He then “argued” against his enemies, while still professing to tolerate them. But as his audience grew restless he began to abandon even this stance. First he broke the earnest mood with a few wisecracks about Secular Humanism, then, with his audience guffawing in relief and affection, he confessed his own predictable beliefs: This is the truth!

Now he described his path to knowledge, from humble origins through misspent youth to the seeing of the light, all masterfully told with trembling voice and shiny eye. The depth of his conviction now established, he invoked higher authority: did not the Good Book itself say this was the truth? Quotation followed quotation, the voice ceased trembling and rose in volume, he pounded the Bible on the lectern, pointed to the skies and suddenly he’d leapt to the stage front, hopping from foot to foot, prancing, jumping, flapping the *Bible* in the air. “Jayzuz!” he shouted. “*Hallelujah, Jayzuz!*”. And his audience began applauding, hooting, many of them (for some reason mostly middle-aged women) on their feet with their arms in the air, shouting “*Hallelujah*” as tears rolled down their cheeks. After stoking and basking in the pandemonium a while, Swaggart stepped back behind his lectern and told everybody how to live, now that they knew what was true.

I confess: I was hooked. This man, I thought, was on fire. On many following Sundays I deserted my sensible mop at the appointed hour. Eventually, however, it dawned on me that the man was not on fire after all. The tremble in the voice, the shine in the eye, the hopping and flapping, all appeared on cue every week, looking increasingly contrived. It came as no surprise to learn later that Swaggart is cousin to rock’n’roller

Jerry Lee Lewis (Great Balls of Fire!). But I remained impressed with one thing: the audience reaction too was repeated on cue every week.

One of my areas of study at the time was fascism and one night I went to see *Triumph of the Will*, a Nazi propaganda film featuring several of Hitler’s speeches. Here was another pudgy fellow behind a lectern. He calmly introduced his topics. He eased into confessing his beliefs. Then he began punching the air, thumping the lectern, shouting with seeming uncontrol and finally he said the magic word. “*Deutschland!*”, he screamed and his audience clapped and hooted, many of them (for some reason, mainly middle-aged women) on their feet with their arms in the air and tears rolling down their cheeks. After some stoking and basking, Hitler explained what had to be done.

Like many, I had wondered wherein lay Hitler’s infamous oratorical power. Now it seemed clear: in the same technique employed by Swaggart. Beginning with a semblance of the same calm, reason and tolerance their largely bourgeois audience would feel obliged to profess, they went on to introduce their irrational beliefs, unabashedly display their conviction, and finally to invoke a superior entity to whom none would deny obeisance. Lastly came instruction as to action.

A short guided tour, in other words, from tolerance and reason through emotion to passion, unreason and intolerance. A half-hour trip from mundane civil life to the magic irrationalist moment, after which life becomes very different: with reason safely jettisoned, emotion, instinct and intuition are given free rein. Prejudice, conditioning, conviction and impulse now override considerations of purpose, value and fairness as criteria for action. Individual analysis is replaced by herd instinct and individual responsibility by fealty.

Of course this is precisely what many people want. Why? Freud speaks of the urge to escape the restrictions imposed by civil life on the psyche. Erich Fromm, specifically addressing the Nazi phenomenon, notes the relentless analysing, deciding, self-justifying and responsibility-taking demanded by modern life. The Age of Reason, where emotion must be controlled and the

comforts of certainty largely foregone, makes for an obvious reaction - especially when it falters. Georg Lukacs sees irrationalism as a retreat from revolutionary failure. When an ideology fails to measure up intellectually, its adherents may resort to relativism, safeguarding their indefensible convictions by repudiating the taking of any positions at all: *"there is no objective truth, only subjective perception, so no argument is possible, so leave me alone!"* Inner argument, too, is abandoned, and reasoning forsaken for intuiting. When revolutions fail in practice, furthermore, mystical beliefs offer a way to sustain, indeed intensify, the pleasure of being a rebel, with inner, "cosmic-psychic" revolution replacing external, "superficial" effort.

All such preconditions came together in Europe in the second half of the 19th Century. After the failure of the pan-European liberal revolutions of 1848 and the coming of the second industrial revolution, life had never seemed so complicated, nor bourgeois values so dominant. Western irrationalism as represented by Heraclitus, Kant and Hegel had blossomed again in ideas like "intellectual intuition", advocated by Friedrich Schelling as the path to *"an absolutely free knowledge, not obtained through proofs, conclusions or the mediation of any concepts at all"*. By century's end there was widespread acceptance of such notions as the nonexistence of truth and the supremacy of will over reason (Nietzsche), intuition as the best faculty with which to grasp life (Henri Bergson) and passionate commitment to a myth as the best road to success (Georges Sorel).

But living by such philosophy only replaces the burden of reasoning with the problem of choosing which of one's conflicting feelings to act on and this renders irrationalists triply susceptible to demagoguery. They are committed to ignoring their intellectual qualms, they can't help responding to displays of certainty and when they naturally seek to translate their private beliefs into public commitment, they need someone to take the blame for their desertion of conventional society. Demagogues, meanwhile, need public evidence of mass support to legitimise their actions. Hence the **Magic Moment**, in which all such needs are ecstatically met. The demagogue provides a model of how to abandon restraint and a safe context in which to do so, and takes on the sin, as it were, of doing so. In return, he or she exacts, in effect, the whole self. For this reason, the **Magic Moment** serves as an indicator of authoritarianism, incipient or otherwise.

And here we are. The pan-Western revolution of the 1960s failed to deliver bliss, socialism seems to have run out of arguments, computers have ushered in a third industrial revolution, life faces us with more decisions and less certainty than ever, and again a supposedly rational system seems, to many, to be leading us, if not to world war, then to senseless disaster, whether military, economic or environmental. It ought not surprise us to find irrationalism once more raising its reptilian head.

The once sizable philosophy section of my local bookshop now takes up just four shelf-metres, compared with sixty metres of titles like *"Strategy of the Dolphin: Scoring in a Creative World"*, *"Intuition Workout"* and *"Creative Visualisation"*, which informs us that "when you come into a beingness space you open the channel for higher wisdom and guidance to come to you through your intuitive mind".

This is called the "New Age", of course, but Schelling's *"System of Transcendental Idealism"* (1800) and Bergson's *"Creative Evolution"* (1907) would look right at home here. And this bookshelf explosion merely reflects demand. Commercially influential numbers of people are apparently steeping themselves in classic irrationalist dogma: there is no "reality" or "truth", no "right", "good" or "beautiful"; never judge anyone; the world is part of your mind, not vice-versa; above all, heed not your intellect but your feelings, which are the voice of God. Already such attitudes are detectable in fiction, journalism, advertising (look out for Fido Dido!) and politics (remember the Gulf War?).

Does this new sowing of irrationalist seed herald a new fascist crop? If so, I expect the sprouts to take the form of **Magic Moments**. It was with such thoughts in mind that I attended a rally staged by one Morris Cerullo, a squat, hectoring, itinerant American evangelist. Although lacking any trace of charismatic fire, by proceeding in textbook fashion from simulated reason to simulated passion, he nevertheless created as genuine a **Magic Moment** as they get, bringing a couple of thousand ordinary looking Australians to their feet, arms waving in the air, shouting *"Hallelujah!"* as tears coursed down their cheeks. This was not Nuremburg in the 30s, not Baton Rouge, Louisiana, but modern, affluent, bourgeois, supposedly liberal-rational Perth. My darkest suspicions seemed confirmed by the stage backdrop, a huge red, white and black banner, featuring a stylised cross. Fortunately, Mr Cerullo's interests pretty obviously lay more in money than in power.

In any case, the fundamentalist form of demagoguery is unlikely to take off in Australia. I thought I had the

UNREASON

Stanic Versus

Salmon Rissole

We are indebted to South Australian committee member, Alan Lang for alerting us to a new form of occult practice happening in that state. Alan, editor of that fine publication *The Southern Skeptic*, when writing about the occult referred to followers of Stan. Naturally we thought he had fallen for that bane of editors, the dreaded typo but further investigation reveals that Stanism is indeed a dangerous form of pagan religion.

“*The evidence?*” you ask, being Skeptics. Well we admit that it is circumstantial but it is very powerful. Look first at the music industry, which is infamous for writing sub-liminal and backward lyrics into its songs, causing untold harm to our youth. Stanists are even more blatant than others in this respect. “*Stan by your Man*” and “*Stan and Deliver*” are but two of the so-called “pop” songs of recent decades and we do not need to tell you that our young people have been degenerating during that period. Then there is the hidden persuasion towards suicide, which is certainly not a new phenomenon. One needs only look to American history to see the classic example of this in “*Custer’s Last Stan*”, clearly the actions of a man driven to self immolation by dark forces he could no longer control. And even the dictionary is

not a haven from this insidious and corrupting belief - take the word “*stanchion*”, described as “*any vertical pole, rod or beam*”. The sexual imagery is obvious.

But these are merely side issues, supporting evidence at best and capable of other (though naive) interpretations. The real proof is given to us in another example of popular culture - the films of Laurel and Hardy. The eponymous “heroes” of these epics are Stan-ley (a reference to pagan energy lines) Laurel (a potent pagan symbol in ancient times) and Oliver Hardy. Hardy is clearly a symbol for Everyman, seeking to do the right thing but finding his best endeavours put at nought by the cleverly bungled (though seemingly innocent) actions of the Prince of Darkness, Stan. Hardy’s constantly reiterated phrase, “*That’s an-other fine mess you’ve got us into Stanley*” is in reality a *cri de couer* for the eternally damned soul of mankind.

What more evidence do you need? Stanism is on the rampage. Act now, before it is too late - run, don’t walk, to your neighbourhood fundamentalist church and beg to be saved from the evil influence of Stan. The soul you save may be your own. ■

...from previous page

real enemy in sight when I heard about a totally unknown American “channeller” visiting Australia, who within days of arrival managed to get himself interviewed by every major TV journalist, and who filled the Sydney Opera House drama theatre for an afternoon. I don’t know if a Magic Moment transpired there, and fortunately it doesn’t matter: he turned out to be a wonderful hoax staged by James Randi and *60 Minutes*.

The point of these examples, however, is that any megalomaniac worth his or her salt can see how fertile the soil is. All that’s missing is the right megalomaniac, and I for one, am keeping my eyes peeled for talent. By the time I spot it, however, it may be too late, for once masses of people judge it safe to go as public as **Magic Moments** must be, they may well be right.

Prevention, of course, is better than cure. But preventing fascism means preventing the **Magic Moment**, which means preventing irrationalism, which means preventing disillusionment with reason. And that means

improving the understanding of reason. To conclude from the fact of relativity that there is no objective truth, for example, is just bad reasoning. To be disappointed that reason cannot answer all of life’s questions is to have expected the wrong things from it in the first place. Properly understood, reason is a distinctly human tool and to abandon it is to surrender humanity. To refuse to abandon it, on the other hand, is the essence of scepticism. The best preventative of authoritarianism then, is inoculation with scepticism, for at that **Magic Moment** when individuality, responsibility, independence and humanity are about to be lost, a little scepticism goes a very long way. ■

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BOOK REVIEW

Arkaeology

Alan Towsey

The Discovery of Noah's Ark

David Fasold

Sidgwick & Jackson, London, 1990; (\$35.00)

David Fasold is a former merchant marine officer and marine salvage expert, and in his own words "*a renegade ex-fundamentalist from the Plymouth Brethren*", who nevertheless retains a firm belief in the literal truth of the early chapters of *Genesis*. Perhaps the best way to sum up his book is to quote the summary from the Introduction by Charles Berlitz (that name alone should be enough to set the alarm bells ringing!):

The true Ark, he claims, was photographed from the air in 1959 after a mud slide uncovered a stone formation closely resembling a ship. The stone shape of a ship is not on Ararat but twelve miles away on a lower range.

The dimensions of the ship are almost identical to the biblical description of the Ark: approximately 450 feet long, 75 feet wide and 45 feet high - except for the height - but the stone ship is still rising from the enveloping solidified mud. Fasold claims the ship is a real ship, not fossilised but made of reeds covered with cement. As we now know, cement was used thousands of years before Rome in different parts of the Middle East.

During his years of on-the-spot research, Fasold has been assisted by scientists who include a Los Alamos specialist and a radar field technician. They have used the most sensitive radar devices that can detect formations and mineral content, not only under water but under land, up to a depth of forty feet, as well. Starting with frequency generators to determine metal concentration of spikes inside wooden beams, he traced thirteen bow-to-stern interior divisions and nine interior bulkhead-to-bulkhead supports. A more detailed search with sub-surface interface radar revealed clear outlines of closed sections, beams and cross-beams, collapsed decks, iron and other metals used in clamps and pins at approximately eighteen to twenty inch intervals. The discovery of the inner plan of the stone shape of a gigantic ship could not have been ascertained without digging into the shape, except by using the sub-surface

radar. Here we have an example of modern technology revealing history that has not been generally accepted as such, obscured up till now by the mists of legend and time.

The huge drag stones used on ancient ships have been found on a plateau several miles away, possibly dropped there when the ship started to go aground. The Ark survived because of its cement covering and lay under layers of frozen mud until it surfaced in 1948.

The discovery of this stone ship and ongoing tests over, and soon inside, the vessel have created a world sensation, not only in archaeology but also in Middle East politics and the study of the world's lost history.

His researches on the spot were carried out, in the main, in 1985 (though the Ark was first discovered in 1948 by a Turkish farmer named Reshit - "*I know a ship when I see one.*") and are supported in the book by a mass of impressive and learned-sounding discussion and argument on pre-history, ages, identities, ancient texts in various languages, their correct interpretation, chemistry, maths and so on, even to linking Genesis with the Chinese, and quoting Velikovsky! The book is illustrated by photo-graphs of the site etc. (personally, I could not see the slightest resemblance to a ship!) and many sketches and detailed plans, bulkheads, beams and all, of a large vessel shaped like the Mesopotamian reed boats made famous by Thor Heyerdahl.

Unfortunately, he does not seem to have been very successful in convincing the scientific world, for on his own admission in the Preface:

"In the attempt to retrace our ancestors' footsteps to the door of the Ark itself, however attractive such a mission might appear, I have failed to interest the academic community at large in participating. Understandably, such a proposal raises serious doubts. But when an invitation is extended to view the remains of the antediluvian vessel high upon the mountains of Urartu, the response of science should be investigation pure and simple, not ridicule and scorn".

This is scarcely surprising, in view of a number of extraordinary claims he makes. I deal with just a few

below.

To begin with, of course, he accepts the Flood as an historical event, one that literally covered the whole world, and Noah and his Ark likewise. I will not go into all the scientific objections to this - they have been well set out many times before; there is an excellent summary in the Skeptics' own publication, *Creationism: an Australian Perspective*. Fasold, of course, rejects these objections with the usual Creationist arguments - catastrophic changes to the contours of the Earth and so on. But I noticed one point that I have never seen challenged: Fasold says that, when God created "the firmament in the midst of the waters" which "divided the waters which were under the firmament from the waters which were above the firmament" (Gen 1:6-7), the "waters above the firmament" refer to the water in the atmosphere (even though Gen 1:8 says "God called the firmament Heaven" (or: sky), and that "when the windows of Heaven were opened" (Gen 7:11), this refers to heavy rain falling from the sky.

Now, according to the (now defunct) science digest Omega, May-June 1982, p 32, if all the water in the atmosphere condensed simultaneously, this would cover the Earth to an average depth of 1" (2.5cm) - a calculation confirmed by Dr Macey in the Skeptic (Autumn 1991) on p 28.

Further, what all these people overlook is that the Hebrews conceived of the sky as a huge transparent dome holding up a great mass of water (after all, you can actually see it!). "Chambers English Dictionary" defines "firmament" as "the solid sphere in which the stars were thought to be fixed: the sky". The Hebrew word used here is RaQia', which is defined in Brown, Driver and Briggs' "Hebrew Lexicon" as "The vault of Heaven or 'firmament', regarded by the Hebrews as solid and supporting 'waters' above it." Now you can see that the reference to "the windows of Heaven (being) opened" makes good sense against this belief - some of the water "above the firmament" was allowed to pour through openings in the dome down on the Earth beneath.

The Egyptians held a similar belief - that the world was surrounded by a primordial ocean, which they called Nun (or Nu), sometimes personified as a self-begotten male and female god able to produce progeny, and which gave birth to their other gods. Wallis Budge ("The Book of the Dead": Bell Publishing, NY, 1960, p133) writes "Later still, the Egyptians came to the conclusion that the sky was nothing but a vast layer of water, and then their difficulties in explaining how the sun, moon and stars travelled across it disappeared, for they were quite

certain in their minds that the celestial bodies traversed the sky in boats."

In this connection, Fasold identifies Noah with Nu - even though Nu appears in Egyptian mythology ages before the time of Noah by Fasold's or Biblical chronology - and Noah's son Shem with the Egyptian Imhotep!

One of Fasold's "proofs" that he had discovered the original Ark is that the measurements of the rock formation he found - which is how the geologists see it (even John Morris, geologist son of Henry Morris and now (according to Fasold) vice-president of the Institute for Creation Research - see p 33) - match exactly the measurements in cubits given in the Bible.

The problem here is that no-one knows for sure the exact length in modern units of a cubit. Basically, it was the distance from a man's elbow to the tip of the middle finger, and varied from country to country. Peake's "Commentary on the Bible" (1982, rev ed, p 37) says: "Biblical metrology cannot pretend to an exactness which is denied it at many points by the ambiguity of the evidence." "Corswant's Dictionary of Life in Bible Times" (1956) says that an ordinary (Hebrew) cubit was about 18", a great cubit about 21"; the Egyptian cubit was the same, and the Babylonian 19.8" and 22" respectively. "Harper's Bible Dictionary" (1985) puts the Hebrew cubit between 17.5" and 20".

None of this deters Fasold. He has worked out, by a process of abstruse reasoning, that the Ark was built to measurements determined by the measuring reed in Ezekiel 40:5, which he calculates as giving a cubit of 20.6" (p 25). Now, of course, if you work out your own cubit length, obviously you can make it fit whatever you want it to.

Furthermore, Fasold relates the measuring reed mentioned above to the numerical value of pi (π). The problem here is this: if the angel concerned knew the exact value of pi (3.1416..), why didn't he correct the Hebrews, who took it to be simply 3, as you can check for yourself in 2 Chron 4:2!

In trying to reconcile some of the problems concerning the ages and other times given in Genesis, Fasold suggests (following Velikovsky!) that the year was shorter in Noah's day, consisting of ten lunar months of 30 days, 300 days to a year. Unfortunately for this idea, as far back as calendar records go, the year has been (approximately) 365.25 days in length (see Bickerman: "Chronology of the Ancient World", Thames & Hudson, 1980), and Whitrow in "What is Time?" (Thames & Hudson, 1972) points out (p 83) that study of fossil corals

indicates that 600 million years ago, around Cambrian times, the day was less than 21 hours long and has been slowly lengthening since then. This has been confirmed by further work on fossilised bacteria in stromatolites in Northern Australia, which revealed that 850 million years ago the bacteria had deposited 435 layers of limestone sediment in a year (researchers studying living stromatolites in Australia and America in recent years have discovered that the bacteria add 365 new layers of limestone in one year). (See the *Sydney Morning Herald*, 15 Dec, 1990.) We now know that the Earth's rotation is being constantly slowed by the pull of the lunar tides, so that the day is presently lengthening by about 13 seconds every 100 years. Shorter days would, as indicated above, mean more, not fewer days in a year in the past. The only way in which we could have the significantly shorter years required for Fasold's hypothesis would be for the Earth to be much closer to the sun. Needless to say, there is no evidence for this and the consensus among astronomers is that the length of the year has not altered significantly during the life of the Earth. Certainly any changes in the dynamics of the solar system in the time scale proposed by Fasold (4680 years) should still be obvious.

Unfortunately for we Skeptics, the site of the discovery has now been "officially declared the landing place of Noah's Ark by the Turkish government", and is no longer accessible for further investigation by foreign scientists. What a pity! ■

More on Noah

Barry Williams

Noah's Ark, referred to in Alan Towsey's book review above, has been the subject of considerable media comment of late, based largely on two news items. The first was the untimely death in August of moon-walking Apollo 15 astronaut, James Irwin. Irwin, who achieved fame in 1971 as the first extraterrestrial motorist (in the "Moon Buggy"), resigned from NASA soon after his flight and spent his declining years involved in futile expeditions seeking the mythical vessel.

Of possibly more interest to Australians was the kidnapping, by a radical Kurdish group, of Australian "archaeologist" Allen Roberts while he was part of a

similar expedition. While the news media took a properly concerned line about an Australian being in peril in an exotic foreign clime, their verbatim and unquestioning reporting of Roberts' reasons for being there was odd to say the least.

It is interesting to conjecture how a report of a polar explorer going missing while on an expedition to find Santa's workshop would have been treated. This unquestioning approach to the story lasted for at least two weeks until some experts with genuine qualifications in archaeological and Biblical studies began to be heard from, calling into question the whole premise of the validity of the Biblical Noah myth.

It is generally acknowledged that the Biblical story of the "Great Flood" was adopted by the Hebrews during their Babylonian captivity and is a version of earlier Mesopotamian flood stories. These legends may have had some basis in truth, coming as they did from the Tigris-Euphrates basin, where flooding in ancient times would have been commonplace. The evidence for a worldwide flood, covering the highest mountains and for all animal species regenerating from a single pair, sometime in the past 5,000 years is, of course, non-existent. Expeditions to the Mt Ararat region to find the remains of the "Ark" have been conducted for the best part of a century, and claims that "incontrovertible proof" is imminent have been current for all of that time. So far, none of this "imminent evidence" has produced any fruit.

Fortunately, Roberts was released by his captors and returned to Australia, where he released "first photos" to the respected archaeological journal *People*, which sand-wiched the story among other, more anatomical, formations. The published photograph is of a geological formation located in a bowl of mountain peaks and showing a superficial resemblance to the outline of a ship. In fact it is more in the style of the rusted hulk of one of the later US Navy battleships (sharply raked bow, rounded stern and very broad midships), than that of a large livestock carrier.

While it is conceivable that anyone with a predisposition to believe in such an implausible fable could discern a ship in this formation, the fact that many similar formations, non-shipshaped, were evident in the vicinity, should have sounded a note of caution to any professional archaeologist.

It would seem that the search for Noah's Ark will remain a matter of concern for some fundamentalists, regardless of their total lack of success. It may well be futile, but at least it keeps them off the streets. ■

LINGUISTICS

Pseudoscience in Language

Tony Wallace

Everyone knows that there is a right way and a wrong way to say things, that some pronunciations are correct and others incorrect, that there are such things as good and bad grammar. The purpose of this brief article is to point out that there are really no such things, and that the study of language attracts as much pseudoscience as health and nutrition. Things which ‘everybody knows’ about language, turn out to be absurd pseudoscience on closer examination. Let me begin by giving two examples from two well known rules of English grammar taken from Crystal (1984).

1. Double negatives shouldn’t be used. Sentences like “He never said nothing” are said to be bad grammar because they contain two negatives; in this case never and nothing.
2. Sentences shouldn’t end with a preposition. Instead of “*The age I live in*” we should say “*The age in which I live*”.

Why are these pseudoscientific?

Firstly, because they are false. Taking the case of double negatives first, people use them every day and have for centuries. All English speakers say things like:

“She sent us a personal invitation months ago, we couldn’t simply not go”.

Shakespeare used such constructions often (in modern spelling):

“Nor do not saw the air too much with your hand, thus” (Hamlet).

So how did this rule come about? It is at this point that the link between language and pseudoscience becomes obvious: it was simply invented. It was one of many rules laid down by one Bishop Lowth in *Rudiments of English Grammar* published in 1762.

Linguistic pseudoscience imitates other forms of pseudoscience more familiar to sceptics, in that its practitioners often pay lip-service to legitimate science. In this case the rule was justified by appeal to mathematical principles. It was argued that since two negatives in mathematics make a positive: $5 - -3 = 8$, then surely two negatives in language would make a positive. For example, “*He isn’t unhappy*” is bad

grammar because the sentence means the same as “*He is happy*”. A moment’s thought reveals that this is ridiculous, because the two sentences do not mean the same thing. The “rule” is therefore without foundation. You can no more base rules of language on mathematical principles than you can on those of geology.

The second “rule” concerning ending sentences with prepositions is also a straight invention, as are all so-called “rules” of grammar. (They didn’t come from God on a clay tablet with the other Commandments, so someone must have made them up.) In this case it was invented by the English poet John Dryden.

Violations of this “rule” are sometimes unavoidable:

I’m trying to lose weight

What are you cutting down on?

The second sentence is supposed to be ‘bad grammar’ because it ends with the preposition on. Instead, we’re supposed to say: - *Down on what are you cutting?*

BUT THIS IS JUST NOT ENGLISH!

This rule was justified, like many others, by analogy with Latin. Literary Latin did not permit sentences to end with prepositions, but English is not Latin, nor did it evolve from Latin. English is a Germanic language, and you can no more base rules for English on those of Latin than you can on Chinese. Yet those who break these “rules” are often considered lazy or stupid. The bishops, and their numerous supporters today, who proclaim such rules have a number of characteristics in common with other practitioners in pseudoscience:

1. They are all self-appointed authorities. Nobody gave Bishop Lowth, John Dryden or anybody else a mandate to tell us all how to speak our native language.
2. The edicts are based on false, or more usually non-existent principles. Dictates such as You should say take it from her rather than off her, were based solely on the fact that that was the way the “better people” spoke in southern England at the end of the eighteenth century. In other words, they are based on antique social factors, rather than on linguistic criteria.

...continued p.40

FORUM

On Gaia and Other Things

Paul Kaufmann

Quite some years ago I wrote about a book by Sir John Eccles, the Australian neurophysiologist. (My article is *Anti-Eccles*, the book is *Facing Reality*, Springer Verlag 1970.) Steven Rose, in his book *The Conscious Brain*, says - but Sir John took exception to this - that Eccles attempts articulately to reconcile his religious faith with his science. Rose says that, for Eccles, god, mind and free will occur in the synaptic clefts. Eccles does move smoothly from his scientific exposition of the brain, etc. to philosophical speculations about reality - the 'three worlds' (with acknowledgment to Popper: the physical world, the world of our conscious experiences, and the world of objective knowledge) - to what comes down in the end to a glorification of Man, personified by philosophical biologists and their friends, as carrier and builder of cultures and civilisations; and scathing criticisms of the barbarism of our age. Although science, philosophy, metaphysics and much else are interwoven with great skill, one can separate the strands and, in fairness, would presumably judge them on scientific, philosophical and common sense bases, respectively. But I doubt if Sir John sees things in that light. He wants to persuade us that the scientific findings are integral with the rest, and that they together lead an unbiased mind inevitably to such things as his condemnation of fascism, communism, hippies, egalitarianism in universities, and modern music.

Next I wrote a short piece on the extra y chromosome and the notion of the 'psychopath'. Although a number of investigative committees claimed that the work establishing the link between the chromosome abnormality and criminality was somewhat flawed, the validity of the inclusion of these theories and investigations in the domain of valid scientific enquiries was not and is not questioned. But, as happens also elsewhere, the data and tests on which the hypothesis depends support only a part of the field in which the theory appears to offer explanations and predictive possibilities. The originators of the theory and other professionals such as psychologists and lawyers and criminologists in this case, were little concerned that the theory was dicey in the testable fields and untestable

elsewhere. Though now no longer fashionable, the ideas then put forward had some lasting effects on attitudes towards crime, criminals and society. I submitted this little piece for publication in *the Skeptic*. It was rejected because then you limited yourselves to the paranormal. Later I wrote some-thing about morphic resonance etc. in Sheldrake's *A New Science of Life: The Hypothesis of Formative Causation*. If one accepts that scientists are free to put up any hypotheses to explain puzzling phenomena provided that the hypotheses are expressed in a form which allows analysis and testing, Sheldrake is a bit of a bother. He separates the metaphysical speculations from the rest of the book. Even if the experiments - which are not easy to set up so as to lead to definitive conclusions - can be shown to be indecisive, this would not destroy the theory, only require Sheldrake to re-define its parameters and limit its scope. (There are rat experiments intended to show that learning takes place across time and space. But since the theory does not say how many rats it takes for it to become operative or claim that all subsequent rats become fast learners, experiments would not necessarily refute the theory, only make it less plausible. It is not enough that some or all the problems for which the theory is supposed to offer an explanation can be explained more simply by existing and accepted theories - which, in any case, is not that easy to do.) So the theory still hangs around for people to play with, though most scientists hope it will go away through lack of use.

Then came sociobiology. I wrote a piece, *The Uses of Sociobiology*, which goes beyond the usual critiques of Wilson's and Lumsden's books to show how these notions have affected the opinions of, or have been deliberately used and misused by, people with an axe to grind. Wilson himself, particularly in *On Human Nature*, takes the theories well beyond their testable limits. He sees nothing wrong in extending the scientific theories into speculations which the theories cannot support. When somebody else does the same thing with their work, scientists tend to claim that the use of the theories is not their responsibility, but the excuse does not hold if they do the thing themselves. (This kind of speculative

extension is rampant in psychology. But Maslow goes even further and wants the methods of the sciences themselves extended to take in inspired guesses.) Another recent beat up of this kind was chaos theory. And now Gaia. I think Phil Shannon is wrong when he says that Gaia will live and die by the scientific sword (*the Skeptic, Vol 11 No 3*). As long as the 'need' for such a theory is felt, scientists will oblige by fiddling with it to make it, temporarily at least, escape the 'scientific' refutations brought against it. In any case, while these debates, experiments, revisions, etc. take place - and this takes many years - the theories are being used and misused - and who is to say where use finishes and misuse starts. Can we agree that there is not one science but many, most of them with their own methodological peculiarities, so that very little that is useful can be said about 'science' or 'scientific method' as such.

All scientific enterprises and scientists entering the public domain are flawed in the sense that extraneous matters are allowed to affect the form and import of the theories. It is impossible for most scientists these days to refrain from publication of speculative material before it is adequately examined and tested. But it is easy for scientists to foresee how their theories would be used, and if they fail to ensure that undue reliance or inappropriate applications are being warned against, the moral responsibility is theirs, not of the publicists or others who innocently or deliberately or mischievously oversell the ideas.

The matter of the sciences varies tremendously. It is only natural that the most unlikely theories - cancer cures, origin of the universe, gravity, archetypes, intelligence (particularly 'out there') - will get the greatest exposure, provided they fulfil a cultural need of some kind. There are no clear boundaries between the sciences and bogus theories, nor can good and poor scientific work readily be distinguished before it has found its way into the public domain. There is a huge amount of patently useful scientific work done all over the world - we could not do without it. Most of the scientific work, all the classifying, examining, describing, sorting and so on, is unremarkable and unremarked. The universally accepted scientific knowledge serves very well to refute the more outrageous speculations that infiltrate our minds like the microscopic world of bacteria, viruses, etc. invade our bodies. On the other hand, there is also a vast range of unscientific ideas and theories we cannot do without

or would not want to do without. I wish to suggest that once scientific theories enter the public domain they lose their pristine scientific nature and cannot be dealt with like contending theories in purely scientific debates.

The people likely to be convinced by an attempt to analyse non-scientific notions in the public domain by scientific methods would be mainly scientists - and even they are likely to squabble over the science. More promising may be ridicule, drawing attention to the underlying motives, common sense and an appeal to utility. Trying to get creationism out of science teaching in schools may actually help fundamentalist sects; it is unlikely to attract more pupils to science teaching. Scientific debunking may also do little to enhance the reputation of a scientific approach to matters as long as scientists themselves tend to emphasise the sensational aspects of their work in their public pronouncements. As long as scientists glory in the amazing discoveries of what happened in the first micro-seconds of existence of the universe, they cannot be surprised when people listen with equal attention to others telling them what happened in the infinity before and after that. ■

Prediction?

In yet another astonishing display of prescience by the combined resources of the world's astro/numero/psycho/biblio or whatever prophetic community, no-one managed to predict the sudden and almost total disintegration of the Soviet Union.

Or, for that matter, Australia's triumph in the Rugby Union World Cup.

This is added to the catalogue of non-predictions mentioned in the previous issue, which included the reunification of Germany and the re-entry of South Africa into world sporting competition.

One does not need to be a card carrying Skeptic to wonder why momentous events such as these are not discernable in planetary positions, lines on hands, numerical vibrations, Nostradamian couplets, tea leaf distribution, chicken entrail patterns, Biblical revelation or tarot layouts, when arts are so good at predicting the advent of wealth or tall dark strangers into our mundane lives.

Of course, one Italian Nostradaman was reported in the Sydney press as claiming that the "hard liners" coup in the USSR had been predicted by the wily old sage. This was published on the day that the coup collapsed. ■

HUMOUR

Armageddon's Getting Me Down

Raymond Watson

I found out that I could learn the precise date of the end of the world by reading one of those magazines, you know the ones, they all begin with 'P' and feature glossy cover pictures of huge-breasted women in various stages of undress.

Once upon a time they were discreetly tucked away in the 'Men's Interests' section at the back of the newsagent's. Now they are starkly displayed in front of the cash register at the local supermarket or 7-11 store. You simply can't avoid them. That's my excuse, anyway.

The goods and services advertised in these magazines are, like the size of the featured mammaries, a constant source of amazement. Besides the standard cures for baldness and sexual potency preparations there are always plenty of ads for products and publications that claim to tap into mystical and occult forces to help you with life's daily, run-of-the-mill chores, such as predicting the future, reading people's minds and making a million dollars overnight simply by sending a stamped, self-addressed envelope and cheque for \$19.95.

The ad that caught my eye recently was a full page one offering *The Secret Lost Books of Nostradamus*. To be fair, it carried a large headline - 'Warning: This Material is of a Traumatic Nature!'. If, by 'traumatic', they meant mind-boggling, I'll go along with that.

Bold letters inform us that Nostradamus, 'the greatest prophet of modern, non-biblical times', foretold of the Second Coming, flying saucers, the Third World War, the Anti-Christ and Armageddon'. *Future Light Publications*' then go on to state that his predictions 'were 100% accurate'.

See what happens if you sleep in? The Second Coming has come and gone, as has World War Three, flying saucers have already landed and departed and I missed out on my seat! And you mean to say I missed out on the small matter of the end of the world?

World-weary sceptics might simply believe that Nostradamus, or Michel de Nostredame, was a French astrologer who got into strife with Vatican lawyers for breaching Papal copyright on the marketing of Second Comings, Anti-Christ and Armageddon. They might also note that the only real legacy of Nostradamus is the

old putdown, 'he's as good a prophet as Nostradamus' - that is, this bloke's statements are so obscure they could mean anything.

The ad asks us, though, "Was he a wizard? A servant of God? A Satan worshipper? Or was he a being from another planet? "... and what is this? A multiple choice quiz?

Under the heading, '*The Most Mysterious Man Who Ever Lived*' - move over Moses, Jesus and Patrick White - we are informed that Nostradamus' birth was 'rather remarkable because his mother, Blanche, presented her husband with a perfect baby'. Perfect babies, you see, were 'almost unheard of, the mortality rate was very high'.

Far be it from me to denigrate Blanche's efforts at motherhood, but if the only criterion for a 'perfect baby' was that it lived, she must have shared the prize with a few other mums.

Nostradamus was able to read the stars because he 'used a special device. The device was basically a magic wand'. You know, nothing fancy, just your basic, standard issue magic wand.

Some of Nostradamus' traumatic prophecies are **REVEALED!** in the advertisement itself:

* '*He predicted the reappearance of Jesus Christ to the world*'. Luckily, the copyright laws were fairly slack in the 16th century, because a tiny, insignificant little sect known as the Christian Church had been predicting much the same thing for about 1500 years before 'Nostro' started waving his basic magic wand around. But why quibble?

* '*He predicted new inventions*' - the best kind, really - 'superior to anything in current use'. Quite a novel approach to new inventions, what?

* '*He predicted the time when night will become day*'. I seem to recall mention of dawn a little earlier in the piece before Nostradamus. Since the dawn of time, in fact, if you'll pardon the pun.

* *'He predicted riots in the streets of great cities'* - and I suppose he predicted English soccer fans, too. I hate to appear uncharitable but predicting unspecified riots in unnamed cities is a pretty safe bet, much like predicting earthquakes 'sometime'.

* *'He predicted a great earthquake'* - see, what did I tell you? - 'in which many people will die' - as they usually do unless the earthquake happens in the middle of the Gobi Desert. 'But perhaps the most astonishing thing of all', gushes the advertisement, 'is the fact that Nostradamus predicted his own death in time to help with the funeral arrangements'.

What a guy! Prepaid funerals even then. Whereas most of we foolish mortals don't realise that we will cark it sooner or later, our brilliant prophet foretold of his eventual need of a pine box!

And how did he ascertain this amazing revelation? *'Some believe that Nostradamus was a time traveller from the future'*. Best kind really. Not much kudos in predicting the past...

Okay, you cynics, laugh if you will, but here's the clincher:

'With the world's current state of affairs, mountains (sic), international tension' - you know, with the Soviet Union tightening its oppressive grip on Eastern Europe and threatening world war - 'and the realisation that these are the Last Days The Bible speaks of' - you DO realise this, don't you? - 'you cannot afford to miss reading *Nostradamus' Untold Story: His Unpublished Predictions*.' I hate to be pedantic but they've obviously been published enough for you to send \$21.95 (including postage & handling) to get your nervous, sweaty hands on them....and I still don't know what these guys at *Future Light Publications* have got against mountains.

It's all very well to snigger. The world **HAS** got a '*current state of affairs*', and, for the first time in history, of course, we **HAVE** got '*international tension*'...and mountains. So get wise! Surely \$19.95 (plus \$2.00 postage & handling) is not too much to part with to find out when you're going to see Jesus II, the Anti-Christ, some flying saucers and then die?

Ah! But there's more! No wizz-bang marketing exercise would be complete without an **ADDED BONUS!**:

'If you act now and order this book, you will receive absolutely **FREE** **'Nostradamus' Black Prophecies**'. These appear to be the occult equivalent of the nasty

sealed section in a sex magazine.

'Dare you read Nostradamus' Black Prophecies, so devastating they were supposed to be sealed for all time? - until these latter day Pandoras came along, that is. Business is business, after all...and why old Nostro would bother making a special set of prophecies only to seal them up so no one could see them is another question.

'Because of the traumatic nature of certain of Nostradamus' predictions' - much, much more traumatic than a simple World War Three or Armageddon - 'we are sealing them in a special envelope'. Pictured in the advertisement is a diagram of an envelope, in case the reader has never seen one. We don't want any nasty accidents now, do we?

'If you feel you cannot take these startling revelations, we suggest you put it aside and leave it **UNOPENED!**' -What? Where the kids could get at it? - 'These Black Prophecies deal with the actual date that the world will come to an end!'

What you are supposed to do about all the **OTHER** nosy buggers who **WILL** open it is not explained...Put down that envelope (refer diagram), you crazy fool!!!

Well, if the world is coming to an end any day now, and if the virtues of the free market economy rule supreme, and if anybody is allowed to make a buck, even out of Armageddon, I don't see why we can't all get in on the act. Here's my sales pitch:

ARMAGEDDON GETTING YOU DOWN?

Tired of Anti-Christ's spoiling your fun? Unfit for World War Three? Call **'Second Coming Plague & Pestilence Removal Service'**! Dial 999 999 with your credit card number and date of expiry - **YOUR** date of expiry **AND** your card's.

Hurry and order your 'Handy Guide to Resurrection'. Will you be 'together' when Jesus II calls your name? Get it right on the **Day of Reckoning!**

First fifty callers will receive **ABSOLUTELY FREE**, with **NO OBLIGATION**, this beautiful set of six steak knives, valued at over \$29.95! Just the thing for your very own **LAST SUPPER!**

For Christ's sake, call us now!

This offer cannot last!



FPRUM

Humanism and Christianity - A Reply

Paul Jewell

The authors of *Christianity and Humanism (the Skeptic, Spring 91)* decry the fact that “Christians and their adversaries tend to expend tremendous energy hurling brickbats at each other” and suggest instead that humanists and skeptics put some effort into finding common ground with the Christian.

I confess I am disinclined to take up the suggestion.

Even if I were to discover some Christians with whom I held some common beliefs and values, what would be the significance of such a coincidence?

A while ago, I looked at the economic situation and concluded that there would be a rise in unemployment, which I consider to be a bad thing. If an astrologer had approached me with the claim that, having consulted the stars, he/she had concluded that there would be a rise in unemployment, and that this would be a bad thing, am I to embrace astrology?

So while such coincidences would not persuade me to seek common ground with either the Christian or the astrologer, I have, on the other hand, some pretty powerful reasons against making such an effort.

To start with, I assume that Christians do believe that Christ actually existed. Despite having lived most of my life in a Christian culture, I know of no evidence to support this claim. Provenance of the Gospels is non-existent, as are contemporary historical records.

If Christians reply to this charge, I suggest fellow sceptics compare the evidence they produce with, say, the legend of King Arthur, or the claims of von Daniken. As a skeptic, I am struck by the fact that people do not believe in Christ because of the evidence, but because of an accident of birth. Born somewhere else on this planet, and a Christian would be a Muslim.

The authors complain that contributors to *the Skeptic* “have called for the virtual eradication of Christianity from the face of the earth”. This, they say, is “intolerant and irrational” and that “to be so fearsomely hostile to all forms of religion betrays a lack of understanding of what religion is truly about...”

Alas, on the contrary, it shows an understanding of what religion is truly about. By their deeds ye shall know them. The occasional Francis of Assisi is a drop in the ocean compared to the long and terrible history of religion, its adherents and its chiefs. Religion is, in truth, about power, conquest and oppression. Considering its history, is it irrational and intolerant to consider that the world would be better off without it?

I might go on to ask Christians how much they are prepared to embrace Communism, on the grounds that I can introduce them to a couple of nice communists? Finally, the authors refer to Materialism, maintaining that “A discussion of that philosophy’s epistemological, metaphysical, and moral weaknesses is very much in order.”

I am very much aware of Materialism’s problems. Its alternative, however, is an explanation based on the existence of a whole parallel universe containing non-material entities such as souls and god. This turns out, on examination, to be no explanation at all, and furthermore, raises massive problems of its own. As a sceptic and philosopher, I do examine my own assumptions, and I recommend the Christian do likewise, before damning the mote in Materialism.

My response may seem uncharitable. The authors have offered the hand of intellectual friendship and I have spurned it. Is this not unduly harsh?

It must be acknowledged, regrettably, that a winning smile is the stock in trade of many an ideologist, be they crackpot or serious, harmless or dangerous. Protestations of friendship are not sufficient to persuade me to respond indiscriminately to every “truth” pedlar clamouring for my attention.

But here I am faced with a recognition of differences, an admission of fault, and, I guess, a sincere expression of hope for peace and tolerance. Is it not my moral duty to respond positively?

Well, warm fuzzies are no substitute for morality. Morality must be based on a lot more than being nice to people. It must be based on more than what the authors call “a balance of love and law”. Morality is about how people ought to be treated. What distinguishes people from other things is that they are rational, autonomous beings with interests. Christians want to substitute a god’s interests for humans, god’s law for human law, and faith for reason. These substitutions are in theory inappropriate for the treatment of human beings, in practice conducive to the oppression for which religion is famous, and are, ultimately, an abdication of moral responsibility.

Ironically, then, there remains but one common ground that I can share with the authors, their belief “that Christianity and the various Atheistic Humanisms are ultimately irreconcilable”.



POESY

Om Sweet Om

John Wren-Lewis

In the trees by the river an old guru sat
 Chanting "Om, Aum, Aum."
 And I asked him, "Sir, is it true I am that -
 Just
 Om, Aum, Aum?"
 "Then why do I feel such a limited I,
 Still waiting for pie in the sky when I die?"
 But to all my enquiries he'd only reply,
 "Aum, Aum, Aum."

"Well Swami," I said, "I can make you a star,
 With your Om, Aum, Aum.
 With me as your manager, you could go far,
 Chanting Om, Aum, Aum.
 Your mere presence, we'd say is a gift from Beyond!
 I can see the girls flocking, just like to James Bond,
 And to sceptical questions you'll simply respond,
 Aum, Aum, Aum."

He soon became famous, with me by his side,
 Chanting Om, Aum, Aum.
 He was rated five star in the Good Guru Guide*
 For his Om, Aum, Aum.
 We were even approved in the pages of Choice:
 They said we entirely deserved our Rolls Royce;
 And when quizzed about tax we'd proclaim with one
 voice,
 "I owe 'em, I owe 'em, I owe 'em."

Then one day with a wink, and a chuckle of mirth,
 "Ha-om, Ha-om, Ha-om!"
 My swami decided to check out from earth,
 And go Home, a-home, a-home.
 He looked so contented, my heart didn't ache,
 I simply decided, his place I would take,
 And if anyone asks, am I real or a fake
 I say "Om, I am, I am."

My punch line is this - my new life is such fun,
 Singing Om, Aum, Aum,
 That my feeling of limited I is undone,
 With an Om, Aum, Aum.
 In my Rolls I don't bother with pie in the sky.
 "Can this be enlightenment, Swami?" I cry,
 And I fancy I hear a faint laugh from on high,
 Saying "Om, Aum, Aum."

Author's Note:

The above is not actually my own composition. It was channelled through me while I was in a state of deep meditation and was in fact one of a number of such communications from an entity claiming the name Gilbert Sullivan.

This verse contains a number of hidden spiritual references which may not be immediately apparent to the uninitiated reader: for example, the first line clearly refers to the Sat Guru tradition of Hindu mysticism (as contrasted with the Stood-up Guru and the Got-up-and-went Guru traditions), the fourth line refers to the identity of the sacred sound Om or Aum with the Transcendent Self or Brahman, the references to stars no doubt invoke the ancient occult belief that stars are actually astral consciousnesses and line 14 refers to the bond between guru and disciple. ■

* *Good Guru Guide*, 1993, Purusha Publications, Clovelly NSW

INVESTIGATION

What's in a Name?

Harry Edwards

If you were given an unknown person's signature on a piece of paper and asked to assess that person's character, I submit that your chances of comprehensively and accurately doing so would be less than those of persuading a New Ager that crystal power will not solve the world's energy crisis.

You may perhaps, in some instances, surmise about the most likely origin of the family name and drawing on generalisations associated with a particular ethnic group, form a stereotyped impression. The style, legibility, neat-ness and other aspects of the handwriting may also influence your conclusion. These clues, however, cannot be taken at face value or relied upon for a variety of reasons and beyond that lies speculation and guesswork.

While sceptics are justifiably unimpressed when astrologers, numerologists, tarot readers and their ilk claim to be able to determine a person's character by using their arcane arts, when a new and unusual method of divination is touted, "that words and names give off vibrations which can be interpreted", it begs to be investigated.

Early in April we received a circular letter, addressed to the "*Social Secretary of Australian Skeptics*", signed by Ms Merrill Sana, in which certain claims were made that were not consistent with known natural laws, among them:

"Music, words, names, sounds ... they all have their vibrations. They create images and colours and form a visual experience. The picture of individual name symbols will remain and give guidance and understanding. My symbolised drawings and paintings of people's names have helped many a person to understand themselves better. At the same time they receive a piece of artwork which they can cherish as their own personal creative message."

The letter concluded with an offer to attend our club, talk briefly on the idea and draw the name symbols of all persons present ... for a fee, of course.

It's not very often that an opportunity to test an extraordinary claim is handed to Australian Skeptics on a platter and it is particularly welcome when the claim can be tested by correspondence and without the

necessity of imposing stringent protocols. It was an offer too good to refuse. Given the obvious implausibility of Ms Sana's claim, my initial reaction was to dismiss it as yet another weird and wacky example of New Age hyperbole, however, rather than confirm the view held in some circles, that sceptics have closed minds, I decided to pursue the matter to see where it led.

Responding to Ms Sana, I asked for an example of her work, warning her that one of our members, Professor Ricardo Kopf, was sceptical of her claims and required further information before committing the organisation. I signed the letter Henrietta Edwards, Social Secretary. I excuse myself for this little deception on the grounds that: (a) I am the secretary; (b) I have organised some social functions for the Skeptics; and (c) I frequently have to remove the president's hand from my knee at committee meetings (**That's throat Harry, not knee. BW**).

Ms Sana responded, the following being relevant:

"If the persons are present, I ask them to say their names as many times as it takes me to receive their vibrations. I take the sound vibration through my body and at the same time, draw the person's symbols. To me, when I hear sounds, my body vibrates internally. I don't always see the symbols, they only happen to me when they appear on the page. Sometimes people write to me and ask for their drawings, with each one I give a written message. I ask people to write their name three times as though they were speaking. I pick up a sound vibration through their writing and work out the drawing from that. No matter how carefully we write, we still don't hide what is inside us." (my emphasis)

This posed some interesting questions. We are all aware that sounds are indeed "vibrations", but paper seemed to me to be a particularly inappropriate medium on which to store them. And the letter, after it left me, would experience all manner of vibrations in the postal system, which fact, if there was anything at all in Ms Sana's hypothesis, should certainly scramble the signals. However, in the interests of open minded research, I carried on.

I wrote to Ms Sana using the name Ricardo Kopf and signed the letter three times while speaking the name aloud. During this process my wife gave me a strange

look (**you can't blame your wife for your strange look. Ed**). I also enclosed two sheets of paper, containing two other signatures, "Sally Williams", our alleged president and "John Thomas". All signatures were written by me, in a disguised hand and using three different ballpoint pens.

The names were deliberately selected to arouse suspicion in a person who was hypersensitive to name vibrations, as Ms Sana claimed to be. Ricardo Kopf sounds like an Italo-German dickhead and although John Thomas is a common euphemism for penis, there are no fewer than 64 J Thomas' in the Sydney phone directory, some of whom may well be Johns. Ms Sana seemed to twig to the Thomas name and responded, "that this name comes across as not being written by this person. The message from the drawing is he does not know of his name being given for this purpose and it would be wrong for me to give a personal assessment". It should be noted that she does not say that "*John Thomas does not exist*" and assumes the name is being used without his consent. As I had no particular person in mind when writing the name and as there must be thousands of John Thomas' in the world, she should have divined either that it was me or that it was a fictitious person. To give her due credit, she did say "To give an assessment of the sound through the writing is the sound energy is deception, the feeling is hurried, the vibration is deliberate". This is not necessarily evidence of "sensitivity", however, as the deception was fairly blatant.

Before looking at the assessments she made of these three fictitious personae, let us consider what Ms Sana knew, or should have known about her putative clients. My letters were written on Australian Skeptics letterhead, which clearly states our *raison d'être*, "*Scientific Investigation of Pseudoscience and the Paranormal*" and we are not an entirely unknown organisation. Nevertheless, Ms Sana seemed to labour under the delusion that we were a social club. Professor Kopf was described as a sceptic and was referred to as such, in a rather disparaging tone, by the "social secretary".

Now to the assessments.

John Thomas

Ms Sana's insight into this character has been discussed above and might be classed as a partial hit. Using her own words, "*No matter how carefully we write, we still can't hide what is inside us*" and "*I can feel some changes in each person as the drawing proceeds*", one wonders why she did not detect deception in two other equally fictitious people. The accompanying crayon drawing (included despite her

suspicion that JT did not write his name) could best be described as a mutated penis emerging from a cube.

Sally Williams

Ms Sana's assessment of "Sally Williams" was simply a variation on the generalisations beloved of all paranormalists. In my letters, I gave the impression that Sally was a bit of a weak reed, pushed around by the egregious Prof Kopf. The assessment reflects this:

"You have a lot of confusion about your intuitive area. Have faith in yourself. Be stronger with others. Others have been known to deceive you. People respect you for saying what you think. Your sunny disposition is very healing. Sit under an imaginary pyramid and gather lost energy and you won't get so tired."

The last piece of advice would undoubtedly impress Barry Williams, author of *Pyramids, Pyramyths and Pyramidiots (the Skeptic, Vol 8, No 3)*, who was uppermost in my mind when I penned the pseudonym. The drawing could, by stretching the imagination, be seen as an ill proportioned, one dimensional pyramid, being circled by an out of control UFO.

Ricardo Kopf

Here we have a classic example of flattery in an attempt to win over an opponent, clearly an assessment based on prior knowledge and preconceptions of a sceptic's psyche.

"You are a very talented man. Your whole aim in life is to accept the truth in things. You are very upset about the amount of people who deceive others for personal gain. Keep up your outer appearance of scepticism but remember not to get lost. Sometimes your questioning has lost you opportunities. You are an extremely private person and keep your spiritual beliefs to yourself. Do not bottle up or create angry situations. A marvellous sense of humour."

For some unknown reason, believers seem to think that sceptics are angry and disturbed, possibly because they secretly want to believe. Unfortunately, the dark back-ground of the drawing precludes reproduction but it re-minds me of Picasso with DTs, devoid of recognisable objects of anything and making equal sense regardless of from which angle they are viewed.

Conclusion

Ms Sana failed to detect deception in two out of three signatures, increased to three out of four if the spurious social secretary's signature is included. It seems to me to be completely logical that as all the signatures were penned by the same person and in accordance with Ms Sana's instructions, the drawings and assessments should have been identical, instead of which, they are all

continued p.38 ...

INVESTIGATION

The Luck of the Chinese

Ron Evans

Whether Chinese people are any more or any less superstitious than any others is not a question addressed here, but that they are a pretty superstitious lot is something one comes to suspect after close and prolonged association with them.

I first became aware of this some years ago when my Chinese friend and neighbour explained the extreme mystical importance that Chinese people attach to certain numerals. He was speaking at the time of car number plates, but the belief covers pretty well everything; hotel rooms, house numbers, the lot. The superstition is that certain numerals, for reasons unknown and from places long forgotten, exert a force over everything they are associated with. One numeral is linked with death, another with prosperity, yet another with longevity. Some combinations of numerals give different nuances but, in the main, these three numerals are especially significant.

Having been made aware of this, I noticed that the dreaded numeral for death never appeared in the number plate of my neighbour's numerous cars, nor in those of members of his family or many Chinese visitors. Being aware of the fact, it became impossible not to continue noticing number plates on cars in my neighbour's drive. In many years, the death digit never appeared, while the prosperity and longevity numerals were embraced assiduously. My neighbour had not been pulling my leg. Real estate and car salesmen (impeccable sources both) confirmed it. Trying to sell inappropriately numbered goods to a Chinese could be the very essence of futility. Here was a superstition, and that's how the Chinese themselves refer to it, that people really, seriously believe in. They actually make quite important decisions based upon it. It simply couldn't be allowed to rest there.

And so, in that spirit of enquiry much advocated by the Skeptics, I decided to put the matter to a test. If certain numerals were indeed associated with good and bad fortune, that should be capable of verification. And since the whole question had arisen because of car registration numbers, it was around them that the test was conducted.

Now it should be said at the outset that the exact influence numerals are supposed to have on cars was never stated. The influence could be mechanical, financial or relate to safety. The influence might attach itself exclusively to the vehicle, or it could extend to the owner, driver, passengers or anyone else connected with the car. It's all very vague and mysterious, you see.

Anyway, the test was as follows:

If the registration numbers of a sufficiently large number of cars which had been involved in fatalities could be obtained, it would be a simple task to determine if any particular numerals appeared any more frequently than would be expected by chance.

A letter, detailing the reasons for the request was therefore sent to the South Australian Department of Road Transport, asking for access to the relevant files. The Department replied that it was not policy to allow access to the files themselves but that the required information would be extracted and supplied. One has to say that this was a very generous offer indeed. The Office of Road Safety is not, by any sensible standard of public service, required to attend to requests so far removed from its statutory responsibility. It is greatly to its credit that it did so and we thank them for it. That the information was to be extracted by the Office of Road Safety and not by me, removed any possibility of bias and was welcome. Unintentional selectivity of data by researchers is a cause of constant concern. There is no such possibility in this experiment as can be seen in the following quotes from the letter which accompanied the data.

"The list will be restricted to cars and station wagons (excluding taxis). The criterion is fatal crash involvement - whether or not the fatality (or fatalities) were the occupants of the involved car. (If, e.g., three cars were involved in a fatal crash all three registration numbers will be included in the list.)"

It was immediately apparent that personalised number plates could have some small bearing on the outcome of the experiment. If, for example, a certain numeral

was being shunned then it could be expected to be under represented in the list. Conversely, "lucky" numbers could, paradoxically be over represented. This problem was avoided, as is apparent from this quote from the letter.

"...post 1968 car registrations were allocated (without numeric omissions...) from the series RAA-000 to RZZ-999; SAA-000 to SZZ-999 and UAA-000 to UZZ-999. The list will be restricted to registration numbers from these sequences, thus ensuring that non-random customised and personalised numbers are omitted. These numbers are not re-issued when the cars are deregistered, so there is no differential survival of desirable or 'lucky' numbers."

The list supplied included all cars involved in fatalities in South Australia during the period 1981 - 1990. To preserve confidentiality, only the numerals and not the letters of the registrations were supplied. There were 2,105 such registrations, giving a total of 6,045 individual numerals. It was then simply a matter of feeding these numerals into a suitable programme (Excel Spreadsheet) and having them sorted in order.

And what came out? Well, the result was not surprising (though it was a bit of a relief all the same).

All the numerals appeared with a remarkably consistent frequency, as can be seen in table 1.

What more needs to be said. It does not require advanced statistical analysis to see, as a matter of common sense, that all numerals appear about as frequently as we would expect in such a sample.

No.	Freq.	%
0	632	10.45
1	605	10.01
2	570	9.43
3	586	9.69
4	604	9.99
5	616	10.19
6	588	9.73
7	574	9.50
8	627	10.37
9	643	10.64
Total	6,045	100

Table 1

Of course, this little exercise doesn't prove that all numerals are equally lucky or unlucky. It is a limited look at a very large question but it provides one more reason why we are entitled to ask for proof of beliefs, even those shared by millions of people over centuries. If the proponents of irrational beliefs were prepared to do even this simple level of research into their prejudices, perhaps we would make a little headway towards being a clever country.

Oh! By the way, those special numerals are:

Death - 4; Prosperity - 8; Longevity - 9.

Just thought you would like to know. ■

...from p.36

different and appear to be tailored to suit the purpose. In fact, the vibrations which Ms Sana claims she can detect from a written signature were incapable of telling her something as fundamental as the sex of the signatory. As to the drawings which, it was alleged, "help people to understand themselves better", it would not be stretching credibility to say that people would get a more accurate insight into their personality from studying the labels on jam jars.

A copy of this article, sent to Ms Sana for comment elicited the following response:

"I am astounded and delighted that you spent so much time on a fool fooling a fool."

Understandably, given the circumstances, she made no attempt to excuse her failure but in an effort to save face sought to dismiss the whole matter as a joke. Perhaps a more appropriate alliteration would have been a con conning a con. ■

Challenge Now \$30,000

Australian Skeptics has, throughout its existence, made a standing offer to all proponents of the paranormal. If they can substantiate any paranormal claim, during a mutually agreed upon test under controlled conditions, we will award them \$20,000, a sum guaranteed by two of our patrons, Phillip Adams and Dick Smith.

In the eleven years of our existence, we have tested a number of individuals, without troubling the bank. And although we have had a number of claimants who thought we should award them the money based purely on their unsubstantiated word, we denied ourselves the pleasure of acceding to this temptation.

We can now announce that, thanks to the generosity of Ronald Evans, Secretary of the South Australian Skeptics, who has offered a further \$10,000, we have now raised our Challenge Offer to \$30,000. We invite interested people to contact us (address p. 4) with details of their claims. ■

REVIEW

Creationism or Creativity?

Sir Jim R Wallaby

All right, I'll confess it. I, along I suspect with most other Skeptics, have been sucked in by a remarkable hoax. From time to time, I have perused items from a magazine entitled *Creation Ex Nihilo*, which purports to present the case for the scientific truth of the biblical creation myth, and I have been astonished that such patently dubious drivel could possibly command an audience among people capable of tying their own shoe laces. Recently, however, I came into possession of a copy (June-August, 1991) and, reading it in from cover to cover, I now have cause to believe that its real purpose is something entirely different. Far from presenting a case for creation "science", the magazine now appears to me to be a very subtle and clever satire on such childish beliefs.

The clue that alerted me to this underlying purpose came from the *Letters to the Editor* page, wherein an American correspondent stated *inter alia* "I detect that you have a lot of fun, as your sense of humour is reflected in your delightful articles". This set me to thinking. While I have often laughed at the magazine, this hilarity was due to my amazement that anyone could take it at all seriously. To me the humour appeared to be inadvertent and certainly not intentional. But now that I comprehend the satirical purpose of the journal, I have re-read it in this new light with results that are salutary. Let me just quote a few examples.

In an article entitled "*Creationism and the U.S. Supreme Court*", the author John Heining with, I suspect, his tongue firmly lodged in his cheek, makes the pretence of portraying the members of that august judicial body as a gang of black robed terrorists, bent on destroying the religious freedoms guaranteed by the U.S. Constitution. Baldly stated, it is of course an absurd notion, but Mr Heining's clever use of selective and out of context quotations is sufficiently acute as to make it almost plausible. Bearing in mind that the art of successful satire is to keep as close to the original as possible, his use of these standard creationist techniques make his article all the more pungent. And his targets are not confined to the puerile fantasies of creationists, rather they encompass the incongruities inherent in all dogmas based on received **TRUTH**. In one of his

footnotes, while ostensibly explaining the different perceptions afforded to the word "liberal" in the Australian and American contexts, Mr Heining clearly has his sights set the linguistic inconsistencies inherent in the assignation of political labels more recently displayed in reports of activities in the former Soviet Union. In that context, the portrayal of the proponents of centralised state ownership and control as "right wing" and of those who sought the introduction of private property rights and a market economy as "left wing" has doubtless bemused many readers apart from me. Mr Heining's exposition drew from me admiring gasps at his encapsulation of these linguistic acrobatics.

A somewhat unsatisfactory article by D Russell Humphries, uses a quite startling sequence of *non sequiturs* to show that the earth is young. Its thesis is that selected natural phenomena, allegedly requiring an upper age limit of tens or hundreds of millions of years, are evidence that the age of the earth is only 6-10,000 years old. This author tries hard but he does not have the deftness of touch exhibited by Mr Heining and is unlikely to convince even the most fundamentalist of creationists that he is serious. This is unfortunate, as the underlying idea is an excellent vehicle for the satirical approach and a little more thought would have made it just that.

The *piece de resistance* of this hilarious collection is saved for the last page. In a brief item entitled "*Is there life on other planets*" the unnamed author comes down firmly on the side of the negative. Indeed, not only does he eschew any possibility of other life in the universe, he sees no scientific reason for assuming the existence of any planets outside our solar system. (**Presumably this was written before the recent discovery of very strong evidence for the existence of a planet orbiting a pulsar in our galaxy. Ed**) His reasons? Because the "*heavens, the earth and everything therein were created in six days*"; because "*Man is the crowning glory of creation and all creation is to be subservient to him*" and because "*For man's sake, because of Adam's fall, all creation is cursed and subject to futility and 'bondage to despair'*",(then) "*Other civilisations, presumably sinless, would then have to share in the effects of this*

cursed cosmos".

This, the author implies with clever understatement, would be a very unfair action on the part of God, thus inviting us to differentiate between this example of unfairness and the actions of a deity who, having invented sapient entities and who omnisciently having prior knowledge that the first specimen would eat an apple, would then condemn every other member of the species to be part of the "*final catastrophic judgment.... in which the very elements will burn with fervent heat, and in which the heavens and earth will be rolled away, passing away with a great noise, and no place will be found for them*". He does not seek to gild the lily with explanations, leaving us to contemplate for ourselves the masochistic futility of worshipping such a deity.

The story so far is a fairly accurate pastiche of the ideas promulgated by creationists, but then the author oversteps the bounds between satire and plain absurdity. This descent from the sublime to the ridiculous occurs in a throwaway line, which baldly states "*The earth was made first, and the other heavenly bodies made on the fourth day were for signs and seasons for the earth*".

Now it is possible, indeed history shows that it is commonplace, for religious sects to postulate capricious and viciously cruel deities. But to seriously suggest that anyone (even a creationist), living in this modern technological age, could create a deity who would construct a Universe at least 13 billion light years in diameter, consisting of hundreds of billions of galaxies, each containing hundreds of billions of stars and most of which is invisible, just so we humans would know when to plant our spuds is stretching credulity far beyond the bounds of reason. Surely a simple calendar would have sufficed.

Still, these are mere quibbles. Creation ex Nihilo, if read as a satirical magazine, cleverly succeeds in puncturing the preposterous anti-intellectual pretensions of the creationist sects, and is well worth the read. ■

... from p. 28

3. As is the case with tarot cards, astrology and creationism, their doctrines constitute an unchanging truth. Every language on earth is in a constant state of change, yet the linguistic astrologers ignore this. When language change is rarely mentioned, it is invariably condemned as all corruption and decay.

4. And now I get to the whole point of the article! The very laying down of "rules" concerning good and bad grammar is absurd. In no other field of academic endeavour would such prescriptions be tolerated. Could you imagine an astronomer regarding the solar system as lazy and stupid because it ought to have more planets in it; or a naturalist specifying the way a certain species *ought* to mate? Ridiculous as these notions are, people blindly accept these and many other such edicts when it comes to language.

Don't take me wrongly, English does have a grammar, and native speakers adhere to it without knowing it. And please don't confuse your long-established prejudices concerning grammar with what constitutes effective writing. Modern linguistics is scientific, and as has been previously pointed out in these pages, science is not a body of knowledge but a means of obtaining it. Real linguists do not invent rules, but rather observe, experiment, duplicate and describe observable facts about language use. The next time you see another divine proclamation in the *Letters to the Editor* column such as "You should say different from rather than different to, or "you shouldn't say 'aggravated' when you mean 'annoyed'," please ask the question which comes most naturally to sceptics: Why?

Reference:

Crystal, D. *Who Cares About English Usage?* 1984 London. Penguin.

Further Reading:

Bolinger, D. *Language : The Loaded Weapon* 1980 London. Longman.

Hudson, R. *Invitation to Linguistics* 1984 London. Blackwell

1992 Convention for Newcastle

The Hunter Region Branch of Australian Skeptics has agreed to host the 1992 National Convention. This event was originally scheduled to be held in Canberra, however, the ACT Branch has notified the National Committee that they would prefer to hold the event in 1993 to coincide with a major Science Festival.

The National Committee will be offering all possible assistance to Colin Keay and his committee to ensure that this, our first regional Convention, will be an outstanding success. The event is planned for the weekend of June 20-21, which just happens to be Mid-Winter. Further details will be carded in later issues. ■

REVIEW

S J Gould on Evolution

Ian Bryce

The Unpredictable Pathways of Life's History

Lecture by Steven Jay Gould

Super Science Series

The Australian Museum Society, 15 June 1991

This outstanding lecture, subtitled "*What the fossil record tells us about ourselves and our possible future*", was one of the Australian Museum Society's Super Science Series. The interest was so great that hundreds were unable to get tickets.

S J Gould is Professor of Geology, Biology and History of Science at Harvard, and perhaps the world's best known paleontologist. As a superb communicator and a Fellow of CSICOP, he is almost a legend in Skeptical circles.

His many books include "Ever Since Darwin", "Hens Teeth and Horses Toes", "Bully for Brontosaurus", and "Wonderful Life: the Burgess Shale and the Nature of History" which recently won the Science Book Prize. Not only has he a gift for presenting science in an entertaining and concise way, but he can follow through to reach sometimes profound implications for the meaning of life. His lecture was so stimulating and his conclusions even more confronting that wide media attention resulted.

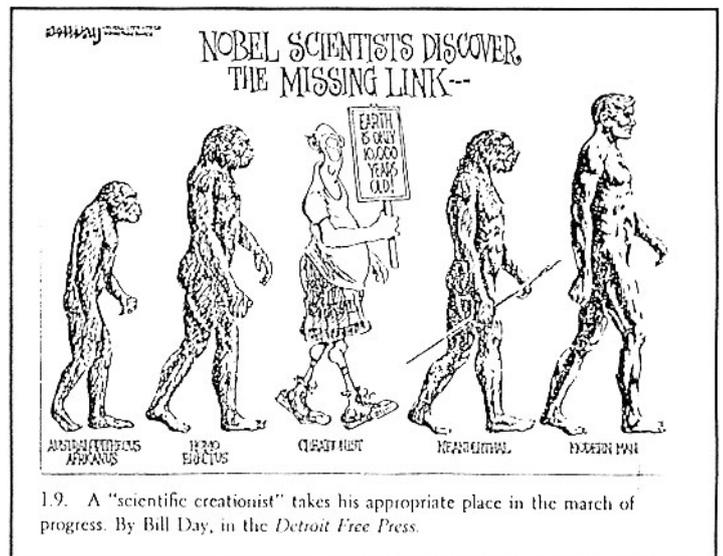
Gould began by examining the Special Creation myth, and the major scientific discoveries which challenged it.

Most religions are based on the belief that an all-powerful deity created the universe for the sole benefit of mankind. The first major blow to this myth was struck when Kepler pointed out that the Earth is not the centre of the universe. Religions responded by saying that at least mankind is the pinnacle of God's work. Then geology and paleontology gave us a time scale showing that our present species, including all of human history, is but the blink of an eye in the 3,500,000,000 year story of life on earth. The faithful said, "*Well God set it up so that there would be a Garden of Eden ready for when he finally created Man*".

And then Darwin showed that humans are the result of natural selection, and not Special Creation. The believers responded, that at least God set up the universe so that Man would inevitably ascend through evolution to reach his rightful status.

As we shall see, the Burgess Shales dramatically put paid to even that.

Gould criticised the popular depiction of evolution as a sequence of creatures starting with a small, stooped, hairy monkey, gradually becoming erect, hairless, white and human. He showed several variations on this theme, which brought the house down.



1.9. A "scientific creationist" takes his appropriate place in the march of progress. By Bill Day, in the *Detroit Free Press*.

However, this "ladder of progress" concept is unrealistic. Evolution really means "adapting to changing local environments". This can lead to changes either way between complex, simple, diverse or specialised.

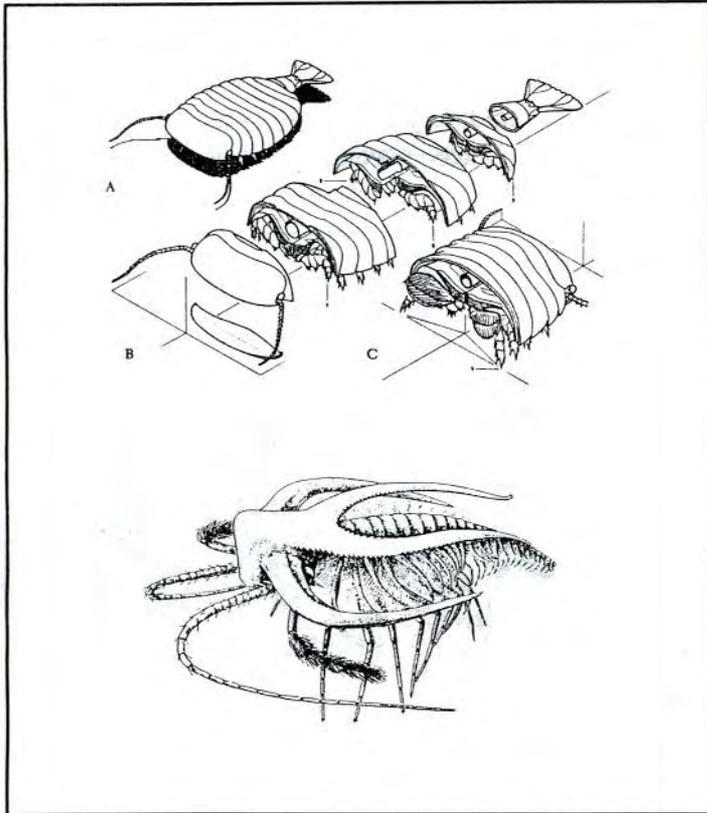
If God were to grant one wish to an evolutionist, what would he ask for? For the first five-sixths of life's history, only single-celled organisms lived. Then in the early Cambrian period there was an explosion of life in the sea, with members of the currently existing phyla and many others appearing.

Being invertebrate, these animals are not present in the common fossil deposits in which only bones are preserved. Thus our evolutionist might ask God for a record of the soft-bodied fauna after the Cambrian explosion.

This is precisely what the Burgess Shale has provided. Although the Shale was first explored in 1909 by the eminent scientist Charles Walcott, its true value was not then realised. Walcott believed in the "cone of increasing diversity" concept, whereby the "worms" found must

be merely primitive versions of what is alive now. Thus he placed them in modern phyla, and declared “*they don’t teach us anything new*”.

Then in 1973, Harry Whitting directed his student Simon Morris initially to re-examine some Burgess museum specimens. Expecting them to fall within the three existing groups of arthropods, they eventually found 20 entirely new phyla (basic biological designs) in one quarry alone! Thus the history of life is being

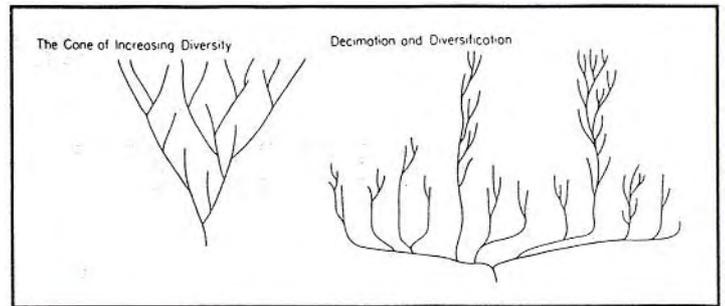


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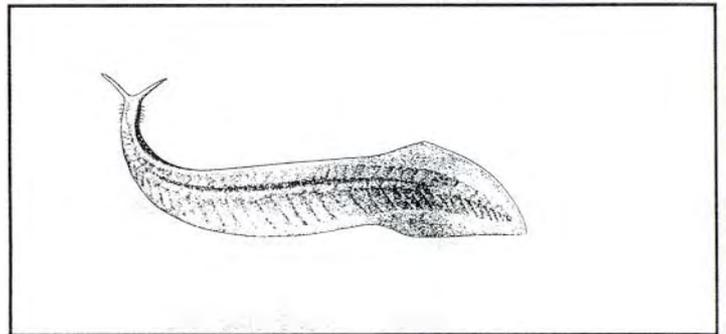
Gould went on to show drawings of many of the fossils, and reconstructions of the amazing animals. Some have recognisable features, and resemble present creatures such as prawns, while others have intricate organs and limbs not now seen. Names such as *Hallucigenia* reflect the bizarre and weird forms.

But the startling message lies in the discovery that for each creature in a currently existing phylum, there are many more with no living or fossil descendants. The vast majority of streams of diversification just died out as environments changed. Life is a lottery with few winners and many losers. These findings suggest replacing the “cone of increasing diversity” model of evolution with one of “decimation and diversification”. An entire potential genus could be wiped out, simply because a pond dried up.

The most chilling revelation surrounds a small, rather plain creature called *Pikaia*. There are many more complex and “advanced” groups, so if one had to pick



which few would live on, *Pikaia* would be an unlikely favourite. This would have been a pity, because *Pikaia* has a stiffened rod along its back. This makes it the first known chordate, the phylum which includes all backboned animals including man.



Thus if the tape of life was rewound and allowed to play again, an entirely different set of creatures would probably survive each decimation. If the modest *Pikaia* is not a winner, we are all wiped out of history.

It can be further argued that God or nature can have no plan. In the “contingency” view of history, humans, like any other event, just “happened”.

I was reminded of the conclusion of my talk on “*Chaos and Predictability*” at the Skeptics convention a week earlier. Chaos places a strict limit on predictability, such that any creator or observer cannot know the outcome of the universe.

During questions, I remarked that the Creationists have their own version of the Burgess Shale, with equally profound implications for life on earth. At their 1985 Summer Institute in Melbourne, they were selling plaster casts of dinosaur footprints overlapped with human foot-prints from their own fossil Mecca - the Paluxy River in Texas. They have now admitted that this was all a mistake - I wonder if they are offering refunds?

Gould’s excellent lecture was well appreciated by the audience. And the following Monday, the *Sydney Morning Herald* ran a report titled “*Only luck made mankind masters rather than the sea monsters*”.

Illustrations from “Wonderful Life”, Steven Jay Gould. ■

Lateral Thinking

I reply to J. Snowden's letter requesting information about the effectiveness of de Bono's ideas about lateral thinking. I am a lecturer in Philosophy at the Flinders University of South Australia, where I am in charge of Critical Thinking.

There have been attempts to measure scientifically the effects of the CoRT program. (CoRT is "Cognitive Research Trust", directed by de Bono.) I refer J. Snowden to the book "The Teaching of Thinking" by R.S. Nickerson, et al. (Published by Lawrence Erlbaum, USA 1985) Apparently, the Venezuelan government wanted to know if there was any way to teach its citizenry to think better, and Nickerson and others were commissioned to make some recommendations. As part of the project, studies of the effectiveness of various programs were reviewed, including de Bono's. The results, as one might expect, were inconclusive. Nickerson reports...

"On balance, the findings are favorable for the CoRT program, as far as they go. They demonstrate transfer of the performances explicitly trained in CoRT to tasks similar to those used during the training. Moreover, the numbers indicate that the CoRT students generate substantially more ideas, not just a few more with some progress on such matters as level of abstraction and a balanced view of problems. However, the data fall far short of making a complete case for the general effectiveness of CoRT. Whether the CoRT training would help students solve problems that are different in character from those on

LETTERS

Letters to the editor on any topic of interest to other Skeptics are welcomed. Letters should generally be restricted to no more than two pages of typed script.

which they trained is unclear. Whether CoRT has enhanced the thinking of the students in other subject areas or in out-of-school situations also remains to be studied, although anecdotal reports to this effect have been made."

I think J. Snowden is right to be sceptical of de Bono's claims. Mostly they are vague assertions, sometimes contradictory. Nor does inventing the term "lateral thinking" constitute actually inventing a new way of thinking. For many people, lateral thinking is just an ordinary part of thinking. De Bono's assertions also are lacking in underlying theory. Most of his work can be boiled down to the advice "*Change your perspective!*" Fine. How? To what?

Nonetheless, J. Snowden may like to ask de Bono himself when he comes to Queensland in 1992. He will be at the Fifth International Conference on Thinking - Exploring Human Potential, July 6th to 10th, 1992, James Cook University of North Queensland, Townsville. Incidentally, de Bono has no time at all for Critical Thinking, making several savage (but inaccurate) attacks on it in his recent book "I am Right, You are Wrong".

Paul Jewell



Logical Thinking

Readers may be interested to know that *the Skeptic's* new *What if ...* series, in which the consequences of taking up a paranormal hypothesis are compared with observation, with discrepancies serving to discredit the hypothesis, is an example of a logical technique known as inverse reasoning. The idea derives from probability theory and inductive inference and the precise principle is called Bayes' Theorem. This has recently undergone a renaissance and I am delighted to see it used here to discredit paranormal nonsense. The theorem underlies a good deal of correct human reasoning.

(Dr) A J M Garrett
University of Glasgow, Scotland

Bed-time Story

Readers might be interested in the following true episode which is sure to baffle scientists the world over.

The other night I was searching for my pyjama top prior to going to bed and although I searched thoroughly, in all the usual places - under the pillows, under the blankets, under the wife - it just could not be found. However, on awakening the next morning, I was rather choked to find the recalcitrant pyjamas wrapped tightly round my neck.

Was this an example of the pyjama-normal?

Martin Curtis
Dianella WA

Scottish Mystery

Some time ago you mislaid a letter of mine giving the calculation of the depth of water in the "Flood" and said that you thought your dog must have eaten it. I replied that the word you wanted was **fiunary**, meaning a safe place you put something and forget where it was (I do this regularly). Some time later, I received a letter from the Eastern States saying that, in spite of extensive research in all available books, the word "fiunary" could not be found. I had to reply that I had done the same and it must be in my fiunary.

Others may have wondered about this odd word. It was in my bookcase in a humorous book called "The Deeper Meaning of LIFF" by Douglas Adams and John Lloyd, which claims to take actions, feelings or things for which there exists no common word and give them a name. The names given are those of places all over the world. Thus one steals a car or money, but to steal something which is not really worth stealing, such as a half-used book of matches or one of those little plastic pots of jam met in hotels or airlines is to "Freemantle" it.

Fiunary is not in my atlas, nor in my "AA Guide to England and Wales", but from the names of other places in the vague map of "F's" in the book in question, it is in the south east of England, just to the north of Harwich.

(Dr) H H Macey
Floreat Park WA

PS. LIFF is LIFF, not a mistake for LIFE.

Editor's Note: Sorry Dr Macey, but

it is not in England at all. I checked my "Times Atlas of the World", without luck. Then I checked my "AA Big Road Atlas of Britain" and discovered it on the eastern shores of the Sound of Mull, at approximately 5 ° 45' W, 56 ° 35' N. It lies on a road which the Legend describes as "Scotland: narrow road with passing places". It is approximately 95 km south west of Loch Ness, and I would not be at all surprised if it lies on a ley line, or one of the grid lines mentioned in the UFO article in this issue. I will be even less surprised, given the coincidences that Skeptics keep coming up with, if one of our readers was born there. Perhaps Dr A J M Garrett of Glasgow University might care to take a well deserved sabbatical there and send us a photograph.

P S. Does anyone know what a Mull sounds like?

Lateral Doubts

I was interested to read J Snowden's letter in the Skeptic (Vol 11, No 1) on Edward de Bono's "lateral thinking".

I recently bought a copy of his "I Am Right You Are Wrong". I find much of it difficult (if not in places impossible) to follow, and when I had finished it, I didn't feel as if I had learnt anything I didn't already know - and practice, I hope. Like (apparently) the original book, there is no bibliography, no reference to any verifiable research, and it all seems like just an involved statement of de Bono's opinions. But since de Bono is now so widely known and respected, I put this down to my own intellectual failings. Surely such a

widely admired person cannot be wrong.

Now I find someone else who feels much the same way. Could we perhaps have here another case of the Emperor's new clothes?

Alan Towsey
Tahmoor NSW

Books

The books listed hereunder may be of interest to your readers.

History of Life, Richard Cowen, Blackwell Scientific Publications, 1990. Life from the first living cells to the world today. A beautiful book, illustrated throughout.

Against Therapy, Jeffrey Masson, Fontana/Collins, 1988. Contains challenging ideas about psychotherapy.

The Secret World of Opus Dei, Michael Walsh, Grafton Books, 1990. Revealing the truth about a secret society within the Roman Catholic Church.

John Fitzgerald
Frankston North VIC

UFO Story

A belated entry for your Skeptic Competition:

The old adage that Two Heads are Better than One proves beyond any doubt that:

(1) Authentic ETs have two heads, and

(2) Have abducted Earthlings, brought them home for testing, and

(3) Transmitted the results of their tests to Earth via ESP.

(4) Numerous contemporary reports of UFO-abductions by single headed ETs are spurious.

Philip J Klass
Washington DC

Vitamins

I was flicking through your august journal recently, when lo-and-behold, a debate about chemistry! Even better, it was about my favourite topic: the synthesis of biologically active molecules (Vol 11, No 3, p 37).

Stephen D'Aprano is not a chemist and has made some comments based on working with models (rather than real chemicals) that are incorrect and obscure the point Anthony Wheeler (Vol 11, No 2) was trying to make: vitamin C is vitamin C whether from a test-tube or an orange.

Here's why. Stephen has correctly identified a major concern in the synthesis of biologically active molecules that can exist as mirror-images (not all of them do - aspirin doesn't): which mirror-image is the active one? Your enzymes and the like will only interact correctly with one mirror-image. The other may do nothing at all or, at the other extreme, be highly toxic.

To illustrate the problem, try shaking hands with yourself. Your hands are mirror-images of each other and you will find that you need to "inter-act" with another right (or left) hand. A hand shake will only

work if you select the correct mirror-image.

Glucose is a good chemical example of this. Naturally occurring glucose consists only of D-glucose (to adopt Stephen's terminology). L-glucose, whilst remaining sweet in taste, cannot interact with your enzymes as a source of energy (yes, no calories). But, as L-glucose must be manufactured using an involved chemical process, rather than being harvested, it costs about \$US 25 a gram, so will never be used as a sweetener.

Most vitamins are produced by bio-chemical means (eg fermentation) and only consist of one mirror-image, having been made by interactions with biological systems which consist of enzymes also of only one mirror-image.

When chemical means are used to produce a substance, for economical reasons, the cheapest feed-stock is used. If the feed-stock does not consist of just one mirror-image, then the end product will also consist of a mixture (where they can exist). Thalidomide is a case where no attempt was made to produce just one version, as the cheapest means of production gave a 50/50 mix. This is OK, provided that one mirror-image isn't dangerous.

The company that made

Thalidomide found out about the ill effects of one mirror-image just before the drug was due for release....and chose to go ahead anyway (no comment necessary).

However, if the cheapest feed-stock consists of only one mirror-image (like amino-acids or sugars), only one mirror-image exists in the final product.

In fact, sugars come in so many different varieties (glucose, fructose, lactose, maltose, just to name a few) that they make superb starting materials for the synthesis of biologically active molecules. Vitamin C was first synthesised in 1933 from a sugar called galactose.

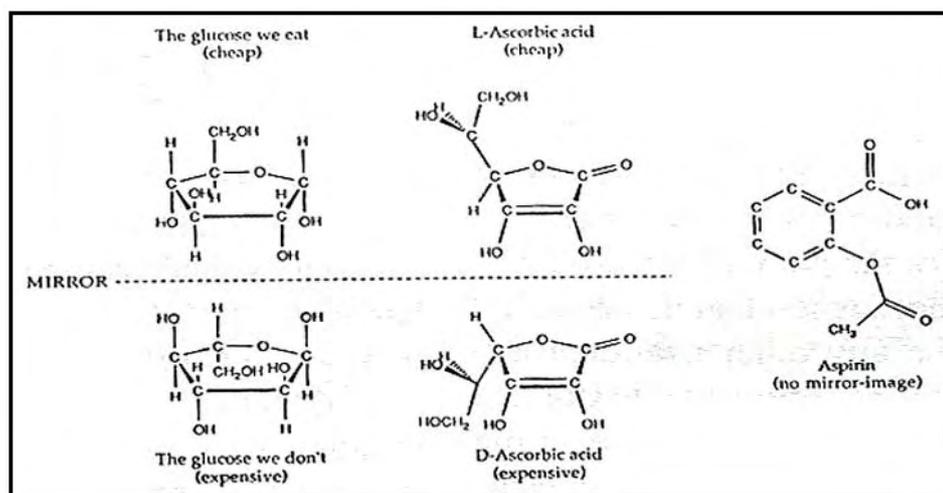
And here's the point Stephen missed. The cheapest source of galactose is from plants and consists of only one mirror-image, so only one mirror-image of vitamin C is produced. The other mirror-image of galactose has to be manufactured and costs about \$US 400 a gram (one troy ounce is about 31.1g, making gold substantially cheaper). This makes synthesising mirror-image vitamin C very, very expensive indeed ("economically unviable" in finance speak).

A quick look through the catalogues of the world's major chemical suppliers (random sample from the US, Japan, Switzerland and Germany) failed to find a supplier of mirror-image vitamin C, or even a 50/50 mix. It's just too expensive to make. The same goes for nicotine. I could only find one source of mirror-image nicotine and even then it was "call us and we'll see what we can do".

The accountants rule, Stephen. Vitamin C is always vitamin C, regardless of how many theoretical versions you can make with a model.

Simon Saubern
Chemistry

University of Melbourne



What if ...

I hope you do not mind a few remarks on your article *What if...* (Vol 11, No 3). Any homeopath who reads your article would dismiss it out of hand. In your discussion you are missing some of the basic principles of homeopathy.

Your argument about diluting the active ingredients have been discussed and dismissed more than a hundred years ago. The basic principle of homeopathy is that you dynamize, or potentize, the solution in a **closed** space. In a lecture I described how, in the last century, the great German pathologist Virchow said of homeopathy, "If I pour a pint of beer into the river Spree right here in Berlin, what will remain from this beer in the estuary at Spandau? No one who believes in homeopathy is worthy of sitting in my lecture room."

Whether it is your "water on our planet" or Virchow's "beer in the Spree", homeopaths will dismiss it as a wrong argument because you (and Virchow as well) forgot the **closed** space, in which the dynamization or potentization, ie shaking or grinding the active ingredient in a glass or tube, can only take place. Your, and Virchow's arguments are by now more than a century old and show that not only you, but Virchow and other brilliant, excellent and famous people, lack the understanding of one of the basic laws of homeopathy - the necessity of a **closed** space.

Therefore, as you say "the ultimately dilute samples existing in our water, or every substance..." and also, your second presumption that "every substance that can make us ill, should have rendered us immune" are, from the homeopathic

point of view, incorrect because they have not been potentized in a **closed** space to make them active.

For these reasons dear Barry, your arguments are, to a homeopath, a nonsense. All you do, in his eyes, is to show that you do not understand the basics of the homeopathic creed.

You know, as I do, that homeopathy is an unscientific pseudoscience, however, I believe it is not possible to put forward our arguments in the way you did. Any homeopath, after his five (lost) years of study at a homeopathic college (where he has paid up to ten thousand dollars) would not be impressed.

It demonstrates that we have to have a detailed knowledge of homeopathic principles, if we want to enter into discussions with trained and schooled homeopaths.

The only answer to the problem is to press homeopaths to show, demonstrate, document and present the *vis vitalis* and the healing substance in the dynamized medicine. And that is what they are not able to present to the medical and scientific community.

William E Thomas, MD
Elsternwick VIC

Barry Williams responds:

You are quite right Bill, there is a lot I don't understand about homeopathy, just as there is a lot I don't understand about astrology, quantum mechanics, religious faith or, for that matter, conventional medicine. In fact, there is a lot I don't understand about everything. But that is not the point of my article.

I do not suggest that homeopathy, or indeed any other irrational art, should not be seriously investigated by those who have expertise in the areas that these pseudosciences challenge. It is essential that they are.

But not all the claims made are in the scientific area. Most of them are made in the 'consumer' or 'market-place' or 'public relations' areas and should be challenged at that level as well.

My point is that those of us who do not have the necessary knowledge should still be able to ask the important questions "Why?" and "How?". We can still try to determine which parts of a claim are testable and which are articles of faith. And these articles of faith are what we should be challenging, be they the creationist's insistence that Genesis is literally true, or the homeopath's insistence that 'dynamizing' only works in a closed space.

In the latter case, we are entitled to ask, "Why is the closed space essential?" and then to request the parameters for the closed space. Does the size of the container or its material matter? Must it be glass, or can it be stainless steel and whatever the answer, why must it or mustn't it be that?

These answers should be defensible and not "Because that is the way it is". After all, if I want to make water boil at a temperature higher than 100C, I can put it in an enclosed space before applying heat and I can defend this claim both by theory and by demonstration.

As to the 'closed space' the homeopaths demand (and I am not denying your argument here - until I received your letter I was unaware of the point), the water we drink is subjected to lots of closed spaces, in water treatment plants, in the pipelines etc, so unless the closed space has some sort of 'faith' dimension, I don't see the difference.

I still think that the *What if...* style of article is worth pursuing and hope that some of our readers will take up

Random

In response to Mr Edwards' request for examples of coincidences, I must say mine are too numerous to relate and that I would instead prefer to explain why they occur, or, more to the point, why so many people think it is remarkable that they occur. It all boils down to the fact that hardly anyone understands the difference between "random" and "homogeneous" and without this distinction, one cannot understand "chance". Chaos theory has recently enjoyed much publicity, but still most get it wrong.

It is an old practice in psychology etc to machine print random number sheets by an automatic process, without human bias. However such machines, by pure chance will produce lots of sheets with say, all 7s, or some other clear order. These are thrown out as they do not look random, but it is still amusing to see the distrustful looks of the students when given a sheet full of obvious sequences. They expect that in a true random list, no number will occur more often than any other and that no numbers will fall into any known sequence like the 1 to 10 sequence, the value of π , etc.

In fact, what they expect is really a highly ordered even distribution, which is about as non-random as you can get. That is what is in fact homogeneous. The beautiful patterns that flow from fractals (Chaos theory), which look so like living things are a true example of the image of random.

The fact is that order is purely a human illusion. The stars in the sky have a purely random distribution, yet we can see patterns in them and can navigate by those patterns. Thomas Kuhn explained this quite well and popularised the word

COINCIDENTALLY

In our last issue, Harry Edwards made a plea for our readers to send us their coincidences. This is a selection from the replies.

paradigm to define the seeing of patterns in the purely random nature of chaos, but most of his devotees, to his total disgust, misunderstand him, so if no-one understands this I will be in good company.

A world in which coincidences did not occur would be one totally manipulated by an obsessively tidy God. We, in every instant, experience countless coincidences. Those we notice tell others more about our personality than they do about the nature of reality.

**Keith Rex
Paddington NSW**

Luck

One Friday night in 1950 I attended the local cinema in Armidale NSW. It was a full house (800 people). Part of the admission proceeds were to be given to some charity and the tickets were numbered for the award of a door prize. I won the prize and collected it from the manager of the cinema at intermission. The choice was between an electric jug and an electric iron. I chose the iron.

On the following day I rode my motorbike to Tamworth where my parents were living. I gave mum the iron. She said that she would have preferred the jug but "thanks very much". That night I attended the cinema in Tamworth. To my surprise the same charity scheme was operating there too, again it was a

full house and again I won the door prize.

Again to my surprise, the manager who presented me with the prize at intermission was the same man - he managed both cinemas.

"Oh no!" he exclaimed when he saw me coming, "not you again!". This time I chose the electric jug for mother.

Footnotes:

The probability was about $1/800$ X $1/800$ or $1/640,000$ in a million (and all I got was an iron and a jug).

The name of the cinema manager was Mr Bartlett. I remember this because at the school where I was teaching in Armidale, the boys called him "Pear-shape" - which he was, both in shape and name.

**Blair Aldis
Tinana QLD**

Numbers

Recently, when organising a social function, I asked a friend for the name of a caterer. He told me of a company and said I should talk to a Mr Williams. Nothing surprising there as I bear the fourth or fifth most popular (NOT common) family name in the English speaking world. It was the phone number that caused me to consider the possibility of synchronicity or morphic resonance or ghosts or something. The caterers direct line and my own contained the same last five digits and in the same order. Even curiouser (as Alice would say) was a message on the Skeptics answering machine two days later, which asked me to ring a number of a potential new subscriber. The last four digits of this number were the same and in the same order as one I had had in a previous house.

**Barry Williams
Roseville NSW**

Travel I

Some years ago my wife and I were lunching in a small cafe on the Left Bank in Paris. It was a quiet place and my wife whispered "those ladies behind me are Australian". The one facing me was a stranger but eventually got the better of me and I asked, "Where do you ladies come from?" Whereupon the one with her back to me turned and declared, "The same place as you Bruce." She was a friend of more than 30 years and I had no idea she was out of Australia.

Back in the 70s my wife and I struck up a conversation with an English couple in a Venetian restaurant. After sundry drinks we parted excellent friends and maintained contact by letter. Several years later they were on a bus touring the New England area of the USA. Among the passengers were a couple from Canada and another from Bundaberg, Queensland.

At various times they exchanged pleasantries and the woman from Canada referred to her cousin in Melbourne to the Queenslanders, while the English couple referred to the couple they met in Venice, also from Melbourne. Eventually the Queensland husband had an inspiration. He said to the Canadian woman, "You said your cousin is a Melbourne journalist. What is his name?" "Bruce Hamilton," she replied. He then asked the English couple, "What is the name of your Australian friends?" Of course, it had to be "Bruce and Phyl Hamilton".

Close friends of ours were travelling by bus to Cape York. Among the other passengers were a New Zealand farmer and his wife. The New Zealander, learning that our friends were from Melbourne,

said "My mother in England has an old friend in Melbourne. He is a journalist." The Melbourne woman responded, "His name wouldn't be Bruce Hamilton would it?"

The English woman I have known since before the WWII, when we became pen friends. I have never met the New Zealander who migrated to NZ shortly after the war.

Back in the 70s we knew only four people - two couples - in the United States. We had met one couple in Australia some years before. They were walking in a national park in Montana when they caught up with an Australian couple who, they discovered, also knew us. At the time, the two couples in Montana were not aware of an even more remarkable fact. We had originally been introduced to the Australian couple by another couple who had happened to be in New York at the same time we were, several years before. We had then introduced this couple to our American friends.

To my mind, the most unusual feature of these meetings was that complete strangers, far from Melbourne, should have learned, without any good reason, that they all knew my wife and myself.

With best wishes for the continued success of the Skeptic.

Bruce P Hamilton
Warrandyte VIC

Travel II

You've heard about the Little Shop of Horrors? How about the Little Hostel of Coincidences? This was a place in London that I ended up in quite randomly. The first coincidence was that an unknown relative I'd promised to seek out turned out to live across the road. The second was

that my room mate turned out to be from Perth, like me. Furthermore, his Perth girlfriend had the same name as my Perth girlfriend. In fact, his girlfriend turned out to be my girlfriend, which may say more about the nature of Perth and my girlfriend than about the nature of coincidence.

But here's the good one. I became great friends with a Sudanese lady staying there, but after a month we had to go our separate ways and we lost contact. Weeks later, living elsewhere and rambling aimlessly around London, I found myself near the L H of C and decided to see if anyone there knew where my friend had gone. The front door, always locked, stood ajar. The lobby telephone hung off the hook, with no one in sight. I picked it up and said "Hello". Of course it was my friend on the line. She was leaving England the next day and had rung to see if anyone knew where I had gone. So we got to have one more dinner together before she went back to Sudan and, in the later turmoil there, simply disappeared. Weird, huh?

Dov Midalia
Subiaco WA

Travel III

Alyson and her husband have been friends of mine for many years. Time went by and a daughter married, as daughters are apt to do. More time went by and a grandchild arrived, as they are also apt to do.

The son-in law was an engineer and was sent to Canada by his company. After a while came the news that a second grandchild was on the way, so Alyson, as Grandma, went to Canada to do what Grandmas do in such circumstances. All being well and settled after the event,

Alyson flew back to WA, a trip involving a change of airline and a six hour wait in San Francisco. Sitting in the lounge she got into conversation with a woman S (for Stranger), making the same trip.

Says S, "Are you going to Australia?"

Says A, "Yes".

Says S, "To what part, I am going to Western Australia?"

Says A, "So am I".

Says S, "I am going to Perth. Is it a big place?"

Says A, "I live there and it depends on one's point of view as it is bigger than some others but smaller, say, than Sydney."

Says S, "Does it have many suburbs?"

Says A, "Quite a few".

S asks, "Do you know City Beach?"

A replies, "Yes, I live there". "Then," says S, "Do you know Launceston Avenue? I am going to stay with my brother at No 19".

This was Alyson's next door neighbour.

The story, names and places are all true, told with Alyson's permission.

(Dr) H H Macey
Floreat Park WA

Light

As you seem to be desperate for coincidences, here is mine.

It happened when I was a teenager. Our family had just come home from church (we did things like that once). As my dad (Alan Towsey by the way) opened the door and turned on the hall light, I said, "Wouldn't it be funny if the light went off" - and it did! But nobody else thought it was funny.

PS I had thought of becoming a clairvoyant after that - but nothing came of it.

(Mrs) Bunny Camps
Belrose NSW

Marriage

I think that my marriage date must have some deep numerological significance.

In a previous job, I worked with a woman who had married the day before I did. Not only that, but we both honeymooned in Fiji, staying at hotels about 1 km apart. To cap it all, she and my wife had both suffered food poisoning after eating at the same local Chinese restaurant. Would you believe it?

And then last week, as my wife and I were giving one of her fellow workers a lift home, he mentioned his wedding date - the same date as ours but a year earlier! Further discussions revealed that his house number (3) was related to ours (51). It can easily be seen that $5+1=6$, divided by two (as 51 is a two digit number) equals 3! Other coincidences, after the application of similar mathematical operations (using equally valid multipliers, divisors, additions and subtractions), were found involving our children's birthdays, car registration numbers, in fact anything we thought about. Unbelievable isn't it?

Robert Dean
Seven Hills NSW

Music

Not being one to place a burden on anyone, let alone poor, hard working editors like yourselves, I thought you

might be interested in my sharing a coincidence that I experienced a few weeks ago.

I was lying in bed, listening to the radio while religiously waiting for Philip Adams' Late Night Live programme to come on. At the start of his segment a quite distinctive musical theme is played. Now, as this theme was playing, I thought to myself how aggressive it sounded.

When it concluded, to my amazement, Phillip muttered, "My God ... that's an awfully aggressive theme."

Now why did he say that on exactly the same night that I thought it? Strange but true dear Editor.

Rick Lovel
Melton VIC

There are two reasons I can think of:

(a) It may have been an aggressive piece;

(b) Phillip may be psychic - after all he does claim to be a descendant of that historical typographic error, Nostra-adams. **Ed.**

Note from the Editors

From time to time we receive letters from readers in which they take issue with some article or comment that we have published. We do not object to these letters and we do not wish to censor the views of our readers.

But we do have a problem with some letters which are too long, in some cases many times longer than the article to which they take exception. We could edit these letters down to an acceptable length, but do not feel confident that we could always keep the sense of the original, thereby attracting further complaints from the aggrieved parties.

The Skeptic does not have an 'official line' to promote but we do have a guideline that says that letters should be no more than two pages in length and preferably much shorter. That should be ample space in which to put across a point.

About our Authors

Ian Bryce is an aerospace engineer and the Challenge Co-ordinator for the National Committee, despite which he retains some sanity.

Harry Edwards is the National Sec-retary and Chief Investigator for Australian Skeptics. He is better looking than he appears.

Dr Paul Jewell is a lecturer in Philosophy at Flinders University, who has an inexplicable interest in Bulgarian folk music.

Paul Kaufmann is a retired public servant who specialised in statistics. In retirement, he has tried his hand at writing fiction and articles on Bentham, human rights, the law etc.

Kevin M McConkey is an Associate Professor of Psychology at Macquarie University.

Dov Midalia lives in Perth and is interested in philosophy.

Tim Mendham wit, raconteur, bon vivant and undefeated quoll mimicing champion of the South Pacific, is a member of the National Committee.

Ron Evans is the Secretary of South Australian Skeptics which, he claims, entitles him to do all the work.

Dr Alex Ritchie is a palaeontologist at the Australian Museum.

Salmon Rissole told us who he is but we think his story is a red herring.

Dr Steve Roberts is a member of the Victorian Committee of

Australian Skeptics and Secretary of the Victorian Astronomical Society.

Alan Towsey is a retired headmaster and linguist and has a daughter who writes letters to editors.

Steve Walker is a professional magician who hails from Yorkshire. He is a member of 't National Committee.

Tony Wallace told us nothing about himself (unless it disappeared into our fiunary).

Raymond Watson is a longtime skeptic who subscribes to Fritz Zwicky's view: "Look for theories and systems of thought that pretend to absolute truth and deny them. You

are almost certain to be correct because it is extremely unlikely that anyone knows the absolute truth about anything...!"

Sir Jim R Wallaby, though born in a log-splitters hut, is unlikely to become President of the USA.

Barry Williams, President of Australian Skeptics, and Editor-in-Chief of the Skeptic, is a man of whom it has often been said.

Professor John Wren-Lewis, is a scientist and theologian, a frequent broadcaster on ABC religious programmes and is also former President of the Australian Institute for Parapsychological Research.

Season's Greetings to our Readers



Bah, Humbug!