



# the Skeptic

Volume 14, No 4

Summer, 1994

## *blowing the whistle*



**Psychics whiteanted  
Creationists creamed**

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## From the President

This has been another successful year for Australian Skeptics, for *the Skeptic* magazine and for scepticism generally. Our subscribers again increased in number and we received a record number of mentions (overwhelmingly favourable) in the news media.

Two important stories emerged in the last few weeks of 1994 which attracted the attention of the wider world outside our own special interest group. Harry Edwards, our indefatigable Hon Sec and Investigator, succeeded in exposing the complete lack of credibility of the Australian Psychic's Association. It will come as no surprise to readers of this journal that self-proclaimed psychics are have no independent verification of their so-called abilities, but Harry's very well conducted investigation (see story in this issue) has attracted a good deal of media interest and that message is now more generally abroad among the public.

On another front, the world of the creation 'scientist' will never be the same with the publication of Professor Ian Plimer's book, *Telling Lies for God*. This important book, reviewed in this issue, sold out its first printing in only four days and is now into its second printing. It too received a good deal of favourable critical notice in the media.

On the organisational side, I am encouraged to see that several state branches have investigated and implemented the idea of incorporation. It may only reflect my personal prejudice and mistrust of centralised power, but I have always hoped that Australian Skeptics would evolve into a federation of largely independent bodies, making their own decisions based on local conditions, and that the National Secretariat would be responsible only for co-ordination and the production of the *Skeptic*. This fond hope now seems to be well on its way to fruition.

Finally, may I wish all our readers a very happy holiday season and a Skeptical 1995.

**Barry Williams**

# *the Skeptic*

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## **A Message from Skeptata Claus**

Every year, since our inception in 1980, Australian Skeptics has grown in numbers until we now have over 1300 subscribers throughout Australia and overseas. We have sought to maintain this growth by a variety of means, some of which have proven to be most successful. In particular, the Victorian Committee has contributed outstandingly with its *Liars' Club* radio programme on 3RRR FM, 10.00 am each Sunday. This, along with *the Skeptic*, which goes to more than 100 media representatives, many of whom use our material thus generating more enquiries, is our main method of recruiting new readers and supporters.

The most common comment we hear from new subscribers is "I have been meaning to join for some time, but didn't know how". Although we would like to advertise our existence, we are constrained by the availability of funds which come from you, our loyal subscribers, by way of your annual subscriptions.

We now ask you to help us get in touch with the thousands of other sceptics, who would like to become Skeptics by using the subscription form on page 66 to recruit new readers. You can help most by either purchasing a Gift Subscription for a friend who has everything except the facts, or by passing on the form to someone you think will be interested.

While it is important to us to continue attracting new subscribers at a steady rate, it is even more important that we

continue to satisfy our existing subscribers. In recent years, we have had a renewal rate of over 85%, which seems to indicate we are doing something right. However, after the renewal notice is sent out with the last issue of the year, we find that approximately 65% of subscribers renew before the first issue of the new year is mailed, while the remaining 20% require one or more reminder notices.

This has not caused many problems in the past, as postage of back issues to late renewers has not been significantly more expensive than the bulk mailing costs of the magazine. Under a new system instituted by Australia Post, this has changed and the cost of posting back issues has risen appreciably, to almost double the bulk rate. Which is a rather rambling way of pleading with you to renew your subscription as soon as possible. And if you have decided, for whatever reason, that you no longer wish to receive *the Skeptic*, we would appreciate it if you could let us know, including your reasons if you wish.

This plea only applies to those whose magazine contains a loose Subscription Notice. Our many readers who have continuing subscriptions which will not be due for a year or more, can ignore this plea. If you check the mailing label, it will tell you in which year your sub runs out (ie 94 means you should renew, other numbers mean you have some time to run.) If you have any doubts, please contact us by phone, fax or mail at the addresses shown at left.

**Editors: Barry Williams  
Harry Edwards**

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# News and Views

Edited by Barry Williams

## The following statement was released by Prometheus Books on October 24.

Self proclaimed "psychic" Uri Geller had to dismiss a multi-million dollar libel suit and has to pay over \$20,000 in sanctions in an action he brought against sceptical book publisher Prometheus Books of Amherst, New York.

In the suit, filed in April 1992 in Miami, Florida, Geller requested four million dollars in damages for statements about him appearing in the Prometheus Books Physics and Psychics, by author Victor Stenger, Professor of Physics and Astronomy at the University of Hawaii, and The Transcendental Temptation, by Paul Kurtz, author and chairman of Prometheus Books.

In a pre-suit settlement demand, Geller's lawyers had demanded as a "full and final" position that all references to him be deleted from both books, that full-page apologies be published in several metropolitan newspapers, and that he be paid one million dollars.

Prometheus's Miami attorney, Brenton Ver Ploeg, responded that the threatened lawsuit was frivolous and, if actually filed, would eventually cause sanctions to be imposed against Geller.

On February 4, 1994 the court issued an Order of Dismissal that instructed Geller to reimburse the Prometheus defendants for costs and reasonable attorney's fees in the amount of \$49,148.92 within 30 days, as a condition imposed upon Geller's voluntary dismissal of the action without prejudice (allowing similar lawsuits to be pursued elsewhere).

The fees and costs represent the expense incurred by Prometheus after the date Geller knew that the suit was barred because the statute of limitations had expired, but proceeded nonetheless.

Geller, however, failed to pay the \$49,148.92 in fees and costs, and, as the court had warned, the voluntary dismissal was judicially converted to one with prejudice (effectively barring Geller from prosecuting the suit in any other jurisdiction) and imposing a new sanctions award of \$20,272.89, the costs incurred by defendants after April 12, 1993.

On July 5 Geller noted an appeal from this decision. On August 17, however, he dismissed his appeal, terminated the litigation, and paid Prometheus and Stenger \$20,272.89, followed by another check for \$299.53 in interest.

When informed of Geller's payment and dismissal of the appeal, Prometheus Chairman Paul Kurtz stated, "Naturally we are relieved; it's been a long and difficult two years, but it also shows the importance of fighting for what you believe in. It seems Mr. Geller's alleged psychic powers weren't working correctly when he decided to file this suit."

Ver Ploeg said that the result "seems to suggest that Mr. Geller has little prospect of employment as a consultant in the prediction of legal results."

Prometheus Books is the leading publisher in the world of scientific books critical of paranormal claims, and both Kurtz and Stenger had questioned Geller's claim that he had special "psychic powers." "There had been a persistent effort to blunt scientific criticism of psychic claims and to chill freedom of the press," according to Kurtz. "This is a great victory for us, but it's still an ongoing battle. Who knows when it will end or how; I'm not a psychic."

Geller had also sued Professor Stenger in Hawaii (where he lost), and both Prometheus and Stenger in London, England. Given the dismissal

with prejudice in Miami, this suit is considered null and void by Prometheus attorneys. I guess the position you take depends on where you stand (to coin a mixed metaphor).

I read recently about how author Tim Winton had been encouraged to believe in ghosts by some strange experiences he had had in a house he had rented in Ireland. Among the happenings was finding taps running in the house when no-one had turned them on.

It just happens that I have had some experience in this area. Readers may remember my mentioning the recent renovations to my home, one part of which was the addition of an extra bathroom.

The taps I selected were quarter-turn type, which have no washers but ceramic discs to turn the thing on and off.

The bathroom had only been in use for two weeks before one of the taps started dripping, however the plumber was on site and he fixed it. A month later, just prior to retiring I heard running water, entered the bathroom and found hot water and clouds of steam everywhere.

Turning the tap either way made no difference. Out to the main, stop cock off, remove the tap core, fiddle, refit, stop cock on. Water stopped. Phew!

Two days later (Sunday), middle of the afternoon, painting the door and notice a groaning noise (typical of water running through a partially closed tap) entered bathroom, steam etc, stopcock off, remove tap, fiddle with core, replace, on stopcock, no water, but the tap now turns on in the opposite direction!

On Monday I rang the manufacturer who dispatched a plumber to fix the tap. It seems that some plumbers are not familiar with this type of tap and over-tighten it when fitting. This destroys a

small seal and when there is a surge of back pressure (caused by a washing machine or dishwasher turning on and off) in the line, it lifts the ceramic disc from its seat and Voila! Water everywhere and not a poltergeist in sight.

As I said, it depends where you stand. A sceptic, seeing a tap running assumes someone has left it on. When that is shown to be untrue, he suspects a fault in the mechanism and may, after a search, find a mundane explanation. And will keep searching until one is found.

A believer immediately looks for a mystical explanation and is always right (at least in his own mind).

\* \* \*

We are grateful to Life Member, **Peter Hogan**, for the following piece from the *Age* computer supplement, 30- 8-94.

**“Elvis Detector Available for Computer Users**

A piece of software is available for computer users which claims to detect the presence of Elvis Presley. It is available to Internet users from the Elvis Presley WWW Home Page at <http://128.194.15.32~ahb2188/elvishom.html> (note that there is a tilde before ahb2188).

Other Elvis related files include the text of a recent seance.”

\* \* \*

And to Patron, **Dick Smith**, for the ad from the *Sunday Telegraph TV Extra*, which offers:

**“Gopher”**

**The Amazing Golf Ball Finder**

According to the blurb, it uses “...advanced technology and is programmed to detect the elements used in all golf balls...” and its antenna “will swing of its own accord in the direction of a golf ball as soon as your shoulders line up with the ball”.

We would like to buy one, if only to get our hands on a piece of technology which relies for its efficacy on the position of one’s shoulders.

Trouble is it sells for \$99.50, plus \$5.50 P&P and, as no-one on the editorial team plays golf, we are not sure how to go about testing it.

\* \* \*

**John Postlethwaite**, of Forestville NSW, draws our attention to a flyer produced by a local real estate company to help promote the Forestville Public School Fete.

Among the attractions promised on the day were parachutists, various celebrities from the local Rugby League club, golf and soccer clinics. But topping the list of attractions was “Peninsula famous clairvoyant, Jody Hutchinson”.

It would seem that creationists are not the only group of anti-intellect mumbo-jumbo peddlers seeking to infect the minds of our children.

\* \* \*

Regular correspondent **Ben Bensley** of Normanhurst, NSW is one among many who has sent us clippings on the newly discovered efficacy of humble vinegar as a cure-all for what ails one.

Headed “308 Vinegar Home Remedies for Longer, Healthier, Happier Life”, the clipping promotes “The Vinegar Book”. The ad, apart from its promotion of vinegar as a health food and cure-all, is most distinguished for the fact that the authors seem to believe that the preposition “its” is deserving of the same apostrophe as the contraction of “it is” viz “it’s”. All we wish to add is, it’s not!

\* \* \*

**Peter Hogan** also sent this item of interest.

A recent episode of the TV series *LA Law* featured a case about a creationist biology teacher who was suing a school board for wrongful dismissal. Acting for the teacher was the newest addition to the firm of lawyers portrayed in the series - a woman who is a fundamentalist Christian.

The teacher was dismissed after continuing to teach the creationist version of origins after the school board had told him that creationism was not to be taught in science classes. The teacher claimed that he taught both the theory of evolution and creationism to

encourage his students to think critically. The jury found in favour of the board.

The tone of the episode was pro-evolution. The other lawyers in the firm were shocked to learn that the firm was acting for a creationist. An expert witness for the board testified that creationism was not science because the methods of the creationists (seek evidence to fit the theory) was the opposite of the methods of scientists (the evidence leads to the theory). Another witness testified that the State Board of Education did not allow creationism to be taught in science classes because it was a religion.

This was one of the few episodes of *LA Law* where the law firm lost a case. The pity is that *LA Law* is a work of fiction and, in reality, far too many school boards in the USA are being infiltrated by fundamentalists, to the detriment of the educational standards.

\* \* \*

We were tickled to read a definition coined (we think) by **Dr John Welch**, a medical officer with the RNZAF, who writes a regular column on medical matters in our Trans-Tasman counterpart, the *New Zealand Skeptic*.

In the September 1994 issue, Dr Welch discusses the introduction of a Bachelor of Applied Science in Naturopathy degree into a NZ polytechnic.

Among the “basic sciences” to be studied is homeopathy, which Dr Welch categorises as “dilutions of grandeur”. Wish we’d thought of that first.

\* \* \*

And on that point, we would like to compile a list of all the pseudoscientific courses that are being offered in Australia’s universities. We know about the naturopathy at Southern Cross and the acupuncture at UTS and would appreciate some information on what else is being offered in the name of science. Don’t bother telling us about economics courses, academics deserve to have some fun.

Creationists will no doubt be jumping with delight at the news from astronomers researching the latest findings from the Hubble telescope. This seems to indicate that the age of the Universe is between 8-12 thousand million years, considerably down on the 10-20 thousand million years that cosmologists had previously estimated. Of course they won't mention that neither of the estimated ages is dogmatically held, nor that the reduction of the estimated age by half gives them no comfort when they want to reduce the age a million-fold.

The difference between creationist fantasy and science is that science is always modifying its conclusions in the light of new evidence, while the creationists will not modify their beliefs whatever happens.

\* \* \*

On a similar topic, it seems that creationists have a new version of why the Universe appears to be so old when it is really only 6,000 years of age. They tried the "speed of light is slowing down" stunt until that became so much of a joke that even the creationists couldn't entertain it any more.

**Dr Andrew Parle** reported that at a recent CSF conference (see report Vol 14, No 3) the idea was put around that the seeming differences in age between the Universe and the 6,000 year old earth was all because of General Relativity (ie time passes more slowly in a gravitational field). As Andrew pointed out, that is true, but by such a minute amount as to make no discernible difference to folk on Earth.

But suppose it was true, by enough to support the creation 'science' claims. The Universe as a whole is 8-15 billion years old, but the Earth is 6,000, because of its gravity. Where does that put Jupiter, with its much more powerful gravitational field? Presumably only a few hundred years old (some mathematician can work it out). But wait a bit, wasn't Jupiter known about in the ancient world? And then of course, there is the Sun, which, using

the CSF logic, must have come into being last Tuesday. And again there are the stellar giants with huge gravity fields. Presumably they won't be created until next September.

The problem with using science to support your primitive religious beliefs is that it keeps showing you how silly you are. Surely even creation 'scientists' do not believe that God only gave them brains to prevent their ears colliding.

\* \* \*

### **Melbourne Cup results**

Melbourne's Sunday Age did the rounds of the psychic fraternity to pass on a winner in the 1994 Melbourne Cup to starry-eyed readers. The following are the results with placings.

**Arthur Bowman** astrologer of Wentworth Falls NSW. - (4) Our Pompeii - 15th.

**Peter Button**, Melbourne astrologist went for four chances - (14) Alcove - 5th, (4) Our Pompeii - 15th, (5) Air Seattle - 19th, (7) Hear That Bell - 6th.

**Ray Webb**, Editor of The Astrological Monthly Review in Sydney - (4) Our Pompeii - 15th, (5) Air Seattle - 19th, (8) Quick Ransom - 23rd.

**Suzane Myles**, Melbourne psychic - (2) River Verdon - 20th, (4) Our Pompeii - 15th, (24) Sweet Glory - 17th.

**Yvette Black**, spiritual consultant declined and openly admitted she got it wrong with past Melbourne Cup predictions, "I was so disheartened, I lost face". Such candour, such honesty.

**Marion Occleshaw**, clairvoyant also declined, saying she preferred to work on a high vibratory level. "It's purely commercial. It's mundane and it's ordinary".

And the winners were No.'s (3) Jeune, (6) Paris Lane, (9) Oompala.

Of eleven choices, not one came in for a placing. Favourite No 4 Our Pompeii, picked by all the psychics, came in at 15. We ran a similar piece on last year's Melbourne Cup which showed 'psychics' Kris Fontaine, Simon Turnbull (Australian Psychic's Assoc. President), and Shabnam Ramzan (Psychics Assoc Vice-president) get it all wrong as well. Who can we add to the list of losers next year?

Victorian Skeptics president Adam Joseph closed his eyes and waved a finger in the air and landed it on the form guide to pick his selection (9) Oompala which straggled in 3rd to pay a handsome \$66 for a \$5 outlay. A psychic finger ? But of course.

\* \* \*

Readers who are intrigued by the phenomenon of UFO abductions will be advised to read an article "Alien Abductions The Inside Story", in *New Scientist* (Nov 19, 1994).

Author of the article is Dr Susan Blackmore, senior lecturer in psychology at the University of the West of England, Bristol, and a member of CSICOP.

In it she described research being carried out in a Canadian university into temporal lobe activity in the brain, using magnetic fields to stimulate electrical activity.

It is a fascinating article and the research may well point to a physical reason why many people believe they have undergone a 'psychic' experience, not just abductions, but OBEs, NDEs and may go towards resolving the question of false/suppressed memories, among many other conundrums of the human condition.

Dr Blackmore has provisionally agreed to be our guest of honour at the next National Convention, which will be held in Melbourne in June, 1995. She promises to be a fascinating guest. Further details will be carried in later issues.

## INVESTIGATION

## Operation “Termite”

The Australian Psychic’s\* Association exposed  
Harry Edwards

*Psychic:* A person sensitive to mental or extrasensory phenomena. Able to exercise psychical or occult powers. Sensitive to non-physical or supernatural forces. Clairvoyant, telepathic.

It has always been my contention, that to set up shop as a “Psychic Consultant” or clairvoyant, **no qualifications** are required other than perhaps a sympathetic ear, an elementary feeling for amateur psychology and a penchant for conversation. To give themselves a veneer of authority, many psychics and clairvoyants advertise themselves as “renowned”, “internationally known”, “acclaimed” and “well-known”. Letters after one’s name of course are impressive, and add a little prestige, so Mr A Charlie Tan, MAPA (Member of the Australian Psychic’s Association) would no doubt be perceived by the non-sceptical as a qualified and respected member of a reputable association.

The opportunity to determine whether or not this is the case afforded itself following an interview on Channel 7’s *11 AM* show, briefly reported in *the Skeptic* Vol 14, No 1, p 11.

On Tuesday February the 8th, I was contacted by the producer and asked to watch a segment in which several psychics and other exponents of the paranormal were plying their trade. Among those interviewed was Simon Turnbull, the President of the Australian Psychic’s Association, who claimed for that association a membership of 800.

The following morning I was interviewed on the programme as a representative of Australian Skeptics and asked to comment on what I had seen. Among other things, I opined that no qualifications were necessary to call oneself a psychic, there were no examinations, no tests; you just set up shop and advertise as such. I drew attention to Simon Turnbull’s lamentable record when it came to predicting the future, giving as examples his failure in an ESP test (none out of four), (*the Skeptic* Vol 12, No 3.) and on the racetrack where he failed to pick a winner. When asked about the Australian Psychic’s Association, I again expressed the opinion that no qualifications were necessary and that one need only pay a joining fee of say \$100 to become a member.

Immediately after leaving the studio I realised that I had innocently and unintentionally committed a faux pas - my reference to Simon Turnbull and the racetrack was mistaken, it should have been to Gary Wiseman, an astrologer. It was too late to retract - I was stuck with it.

Relating later to Barry Williams what had been said, he too was under the impression that the racetrack farce involved Simon Turnbull, so it appears that I was not the only one to have had a lapse of memory. Psychics all look the same to us Skeptics!

Repercussions soon followed in the form of a phone call from a person identifying himself as Simon Turnbull, asking whether I was familiar with the laws of libel, and threatening defamation proceedings. Conceding my gaffe, I tendered an apology, adding that we would welcome an opportunity to have him on the witness stand as it could then be determined whether or not he possessed his claimed psychic powers. His ardour dampened somewhat, he said that he would have to consult his partner, but that I should get my facts right, the fee for joining the Australian Psychic’s Association was not \$100 it was \$195, (800 alleged members @ \$195 = \$156,000 pa Wow!), and furthermore, “it is not an RSL club, **we don’t take anyone**” (my emphasis), prospective members, in addition to the fee, must produce three letters from clients testifying to the applicant’s psychic ability. (How’s that for evidence of one’s psychic powers? The mind boggles!)

The conversation ended on an almost convivial note when I accepted his challenge to debate the issues rather than personalities at the Australian Skeptics National Convention in June.

Mulling over Simon’s contention that the Australian Psychic’s Association “don’t take anyone” - and that evidence is required of their “psychic ability”, I decided that this could easily be put to the test with some subterfuge to produce facts that he would be hard pressed to refute - hence the initiation of **OPERATION TERMITE**.

## The Objectives

- (1) To determine whether the possession of “psychic powers” (in the context of the accepted definition) is a prerequisite for acceptance by the Australian Psychic’s Association as a member;
- (2) whether any checks are run on applicants by the APA to verify an applicant’s credentials or putative powers;
- (3) whether anecdotal evidence (true or false) and the payment of a joining fee are the APA’s sole criteria for determining an applicant’s “psychic powers”; and
- (4) if those criteria are the only prerequisites, can credibility be accorded that association.

### The Sting

A friend whom we shall call “Joe”, who makes no claim to be psychic, was co-opted as a potential applicant, briefed on a phony psychic background with a practice in Queensland, and given four testimonials to submit with his application for membership of the Australian Psychic’s Association.

All the letters (written by various members of my family) were couched in glowing terms favourable to our “psychic”. On three of them the surnames, addresses and phone numbers had been deleted, the fourth was doctored in such a way that, with care, the name and address could still be deciphered by holding the letter up to the light, and my oh my, the careless applicant had forgotten to black out the phone number which, by an odd coincidence, just happened to be that of my daughter. She too had been primed what to say in the event of any check being made to verify the letter’s authenticity. The opportunity for the APA to conscientiously check the origin, authenticity and veracity of at least one testimonial, therefore was available to them. (The letters by the way, contained several glaring errors including an address in Brisbane with a phone number that indicated the NSW Central Coast. This should have raised the hairs on the neck of anyone with half an eye, let alone a third eye, yet despite the psychic talent concentrated in the occult sanctum, they raised no suspicion).

Early this year, Joe, our phony psychic, wrote to the APA enclosing photo-copies of the fake letters and applied for membership.

There being no reply, he wrote two weeks later - and then rang the office of the Australian Psychic’s Association at 130 Bourke Street, Sydney, to enquire whether his letters had been received.

The phone call was answered by a male who sounded very much like Simon Turnbull (he was able to recognise certain features of Simon Turnbull’s voice having heard him on radio and television) and, according to his notes, the conversation proceeded as follows. (Joe wishes to remain anonymous, so his real name, phone number and address have been omitted.)

**APA** Good morning , APA  
**Joe** Good morning, my name is Josef — - - - -  
**APA** Yes  
**Joe** I have written to you twice and have not received a reply and wonder if you received my letters, so what has happened as I need a fairly prompt response from you.  
**APA** Right, just one moment please, (pause and rustle of papers). Exactly whom did you write and in regard to what?  
**Joe** Just to the secretary about membership.  
**APA** I see, alright then if you could just give me a second. (Pause...) your details again?  
**Joe** Josef - - - - -  
**APA** And did you send some money with the letter?  
**Joe** No, I asked for details and how much it costs for membership, and I also sent you copies of some

references I have.

**APA** Ah! professional membership?  
**Joe** Yes that’s right  
**APA** Yeah, OK, and your address?  
**Joe** PO Box - - -  
**APA** Alright fine, listen Joe, let me put this in the hands of the relevant people and er what’s your phone number?  
**Joe** 234 - - - - if you could just let me know how much and whether my references will be accepted...  
**APA** I believe we will, you should have had a form sent to you it...er...(costs)...195...195.  
**Joe** So you think it might be successful?  
**APA** Yeah, there’s no problem with that, yeah.  
**Joe** No problem?  
**APA** Yeah.  
**Joe** Alright.

### We don’t take anyone?

From the above conversation it would be reasonable to conclude that either Australia Post was not delivering mail to the APA, or that the efficiency of the APA’s office staff left much to be desired. In either case Joe was not asked to send copies of his references to the APA. (The Secretary of APA is Ms Shabnam Ramzan, a former nurse, who also appeared on the initial *11 AM* programme. Among other things she claimed to have left her well-paid nursing job to psychically help people with their problems. *Woman’s Day* evidently has faith in her claimed clairvoyant ability, the magazine hired her to contact Elvis Presley to find out what he thought about his daughter’s wedding to Michael Jackson. The reported conversation between the clairvoyant and the late lamented Elvis elicited some pathetic gems and a rational mind might see it as a figment of Ms Ramzan’s no doubt fertile imagination.)

To continue, no questions were asked regarding Joe’s background, character or alleged psychic abilities. No interview was initiated, and there was no mention or suggestion of any testing procedure to ascertain whether or not Joe did in fact possess any psychic ability - just fill in the application form and send in the money!

The significant point to note, therefore, is that with no more information than that given over the phone by Joe, an implicit assurance was given to an applicant that there would be no problem obtaining professional membership of the APA. This is somewhat contrary to the statement that “we don’t take anyone”.

Six days later, the membership application form had still not arrived so Joe rang the APA to find out why. The phone was answered by the same voice and a somewhat vague conversation to the following effect ensued.

**APA** Hello  
**Joe** Hello, good afternoon, my name is Josef — I rang you twice last week and your office promised to send

me an application form for professional membership.

**APA** Your name Mr ———?

**Joe** Josef ———

**APA** No, no, I rang you last week.

**Joe** Have you?

**APA** Yes, I couldn't get you, that's right, what I needed was your phone number.

**Joe** Yes, I gave it to you twice, to your office not to you.

**APA** Yes I know, that's the reason for the delay, we like to have the phone number of the person before we process the application.

**Joe** Yes, of course, I sent it to you by mail too.

**APA** So we got your letter but there was no phone number.

**Joe** Wasn't there?

**APA** That's OK, it's all fixed up, it'll be...you should receive that in the next day or so.

**Joe** Oh good.

**APA** We just send them all out at once, so yeah, it's great.

**Joe** I can expect it this...

**APA** You can expect it within the next two days, Friday at the latest.

**Joe** OK

**APA** It's all being processed now, we've got a bunch going out this week.

**Joe** So I should have no problem?

**APA** No, no problem, you know that situation, the fees and all that...?

**Joe** You have received my references too, have you, I hope?

**APA** I believe so, they must be on file if you are getting the application sent out to you it must be on file.

**Joe** On your file...

**APA** Yeah, that's great and if once you've sent back the form and you've ... and your first quarterly fee or annual fee whatever you prefer to do then we'll...anyway we can help you, first of all we'll put you on our computer which means people will get recommendations to you and any other way we can help you with business or anything like that.

**Joe** Thank you and the fee is \$195?

**APA** \$195 per year.

**Joe** So I'll hear...

**APA** So I hope to meet you soon.

### Let's take a check.

Collating the information thus far obtained, it can be deduced from the conversations that it is very doubtful whether the proprietors of the APA themselves possess psychic powers - they have to ask questions, just like the rest of us - sometimes twice! He asked for the phone number, having already rung that number to find out what it was. Asked Joe's name after being told. Asked again for the phone number

notwithstanding it was on the application already filed. And seemed incredibly uninformed about his own business. It is interesting to note too, that "bunches" of applications are sent out all at once (conveyor-belt psychics) and the APA's reference to their dispatch "it's great."

There are contradictions; a suspicion that the APA is not the epitome of business efficiency; an indication that the proprietor may suffer from amnesia, and some pretty strong evidence that having psychic abilities is not a prerequisite for membership of that association. Furthermore, the APA is prepared and willing (by computer listing its members) to recommend them to clients and to promote their business activities. In effect, the APA is merely acting as a well paid listing agency recommending the services of its "qualified" members who are in fact, "just anyone"!

Two more weeks went by and still no sign of an application form. Just what sort of a business are these people running? If I had a business where "bunches" of applications were being processed at \$195 a time I'd be personally delivering the application forms with one hand and holding out the other for the cash.

In the absence of the elusive application form, Joe wrote a letter addressed to Simon Turnbull at the APA expressing his general disappointment, and drawing attention to the unanswered letters and the unfulfilled assurances given over the phone. He also included a photocopy of a genuine diploma, certifying that he had completed an approved counselling course, which should at least have given him a head start over other applicants.

Meanwhile in the Deep South, on Sunday June 19, Adam Joseph and Kathy Butler (Victorian branch, Australian Skeptics) interviewed Simon Turnbull on 3RRR's *The Liar's Club*, and while they rightly pursued the question of membership of the APA, when Kathy asked whether a fake psychic could infiltrate their ranks, she could have inadvertently alerted Simon Turnbull to the fact that someone was currently making a concerted effort to do exactly that. Fortunately for the project Simon did not detect this to be the case, neither did his psychic ability nor his intuition alert him. During the interview some corroborative information was elicited regarding the APA, together with some revealing statements from Simon Turnbull.

There are two grades of membership of the APA, professional and associate and, according to Simon Turnbull, they total 900. The former number between 150-200 with an annual fee of \$195, the latter pay \$45 pa and are considered to be "in training", training being explained as "developing one's intuition." This would put the APA's annual income from fees alone at between \$63,000 and \$70,500 depending on which figures one uses. I say alone, as both Simon Turnbull and Shabnam Ramzan also do paid readings. (\$40.00 was the figure quoted by Shabnam Ramzan during the *11 AM* interview although it will be later shown to be \$60.00). A flyer put out by the APA advertising their weekly psychic fair promotes a "sample reading" at \$20 for 15 minutes, with

30 - 60 minute readings available. When one considers a combined income from membership fees and readings, it favourably compares with that of solicitors and medical practitioners who spend years studying for their qualifications before they are allowed to practise.

Asked how he differentiates between a genuine applicant and a fake, Simon Turnbull responded by saying that prospective applicants must have been trained by other psychics who have been running classes for ten years or more - not just any old classes. Further, applicants must have three letters of referral from clients testifying to their accuracy. In response to the question "how do you tell a fake psychic from a real one?"

Turnbull reiterated the APA's requirement of three referrals, adding that they make it hard by charging \$195 (how that would deter someone earning that much in less than half a day I'm not sure). He also said that by ringing the APA you could be sure that they would only recommend a "real psychic." It was only the overseas imports asking thousands of dollars in fees to remove curses and for their amulets who were fakes. (So it's the size of the fee which determines whether one is a fake or not?) Many successful merchandising companies have been built on the principle of small profits and large turnover, although with psychics' fees ranging from \$40 - \$100 for less than a one hour consultation, I would hesitate to classify them as low income earners.

Taxed on his ability as a psychic, Simon Turnbull fell back on the old excuse - negativity - controlled testing just doesn't work when there are negative feelings around.

On the subject of negativity, Kathy Butler made reference to the biased findings of parapsychologists Targ and Puthoff, to which Turnbull responded with the accusation that CSICOP (Committee for the Scientific Investigation of Claims of the Paranormal) was also guilty of deception in connection with the "Mars Effect" postulated by Michel Gauquelin. He added that if people wished to know more about this issue they

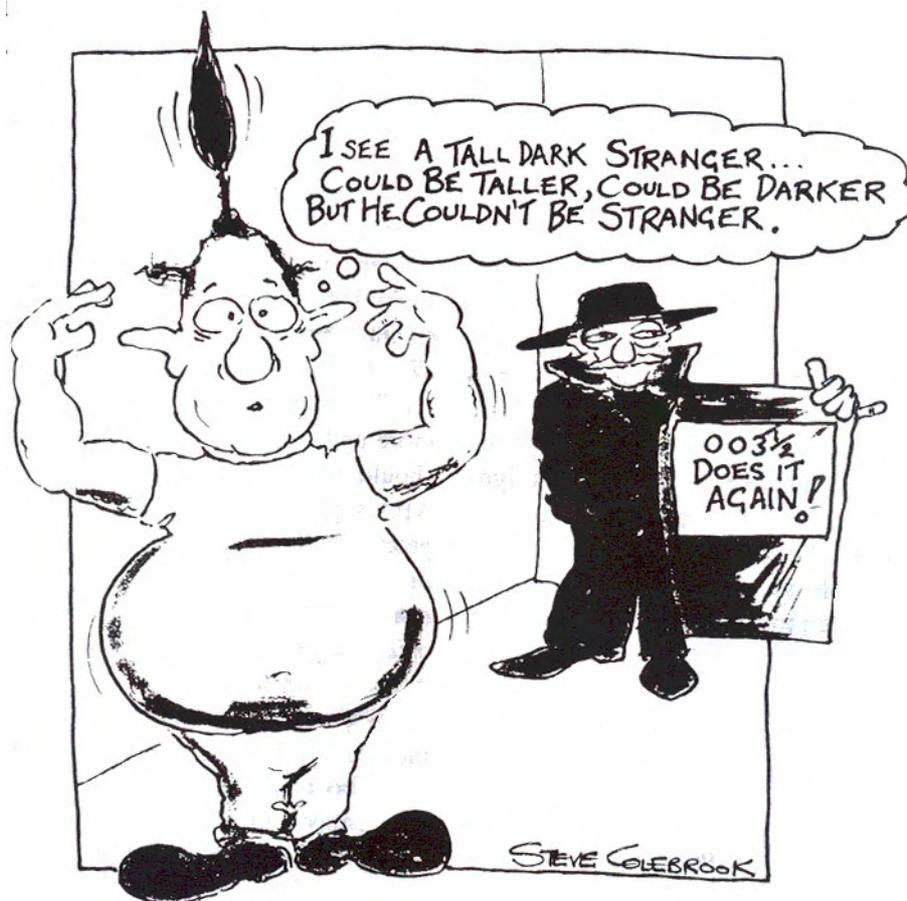
could ring 190 2 63666 (at \$3 per minute) for the "proof". (For those readers not familiar with Gauquelin, and who prefer fact to fiction, a resumé of the Mars Effect and the involvement of CSICOP, can be found elsewhere in this issue under the heading "The Mars Effect Controversy" - at no extra charge I might add.)

Both Adam and Kathy were surprised at Simon Turnbull's claim that there are many doctors, lawyers, psychologists and psychiatrists who are also psychics and members of the APA.\*\* In any case, all the above are presumably professionally qualified to give advice, but the added mystique of being "psychic" probably enhances their standing

in the eyes of believer clients. As far as I am aware, while the NSW Psych-ologists Act prevent persons from falsely claiming to be psychologists, it does not prevent one from holding to be a psycho-therapist or counsellor. The 1987 Fair Trading Act however, specifically states that "A person shall not, in trade or commerce, engage in conduct that is misleading or deceptive or likely to mislead or deceive", this proviso would probably enable action to be taken against anyone

regardless of their appellation if, in a court of law, they were unable to substantiate their claim of possessing the necessary qualifications (psychic or otherwise) to practise. (See Paul Ward-Harvey's article in this issue.) In conclusion, Simon was asked and agreed to supply the names of some of the practitioners mentioned above for a future interview. These have not been forthcoming.

Meanwhile, back on the job, in the absence of any communication from the APA, Joe wrote again, this time by certified mail together with an SAE, suggesting that maybe the mail had gone astray. He also asked, should for any reason his accreditation now be denied, that his testimonials be returned.



### The last nail in the coffin

By return mail, Joe received an APA Membership Application, together with a flyer advertising the APA's regular Saturday Psychic Fair, and a form letter (with notations appended) which in part said that an application form had been previously sent, that Joe's testimonials were on file and most importantly, "*Once your membership has been processed and approved, your name will go on our Australia-wide computer listing of approved psychics. Your name will be referred to people who want a reputable psychic in their area to make an appointment with.*" As "processing" by the APA simply appears to mean "put on file and enter details on computer", it is damning evidence that **anyone, regardless of character, alleged psychic ability, qualifications** or what have you, will be approved, recommended as reputable and foisted onto the unsuspecting public.

Two minor points of interest. The first was the ultimate sentence on the application form which read, "*I understand that although my annual membership fee entitles me to one year's full benefits according to my qualification, I will remain a life-time member of the APA unless I resign said membership in writing or I breach the articles of said association.*" This means of course that there could be a disparity between the actual number of financial members and the total number of members claimed by Simon Turnbull. Further, if one chooses not to pay their dues, does not resign, and is still free to claim accreditation, does Simon have the power to excommunicate? The second point is the APA's definition of "psychic" which, according to the wording on their flyer appears to include tarot readers and palmists in addition to clairvoyants.

The professional membership joining fee (\$50 if paid quarterly) was duly paid, and should be the last nail in the APA's coffin.

### Yes, they do take anyone!

Joe's next bank statement showed that his cheque had been cashed, but in the absence of an official receipt he wrote asking for one and also a copy of the APA's Articles of Association.

At 11.45 pm two weeks later, Joe received a phone call from Simon Turnbull asking for an additional \$5.00 fee and for details of how he would like to be recommended to clients - as a clairvoyant, psychic, card reader or what have you. Joe's membership card was on its way and his name and telephone number would now be given to potential clients. By the end of the month nothing had materialised and Joe wrote to the APA as follows:

"Further to our telephone conversation of August 1st in which you asked for an additional \$5.00 professional membership fee on receipt of which you would forward my membership card.

The money was sent immediately and and two weeks later I have still not received my card. In addition, I have

asked on at least three occasions for a copy of the APA's by-laws, these too have not been received.

With respect, I am not impressed with the service you have provided thus far, (three and one half months to process my application) and sincerely hope that this is not indicative of the way you normally carry on your business."

Fifteen weeks and two days after Joe's first letter and application to become a professional member of the APA, his membership card duly arrived and "**Just anyone Joe**" (a non-psychic and without any pretensions to being one) became accredited to that association and, with their endorsement, will be publicised and recommended as accurate and reputable, to advise the public psychically, with tarot cards, palm reading, or any other unproven and invalid method on virtually all and any matters.

Along with the membership card were copies of the Articles of Association and the APA's Code of Ethics. The former were very basic, the concluding sentence however spoke volumes - "*The above articles were approved by the committee (sic) at it's (sic) inaugural (sic) meeting held on the 17th of June, 1983, at 80 Derwent Street, Glebe.*"

The Code of Ethics advocated a charge of \$60 per hour, more under certain conditions; that medical or legal advice should not be given, (yet according to Simon Turnbull the APA's professional membership includes both medical practitioners and lawyers) and "*under no circumstances will the association tolerate members who are found charging exhorbitant (sic) fees for the preparation of talismans to ward off evil or promising to bring two lovers together with the help of potions and the like.*"

The code seems to have been drawn up to protect the APA members rather than their clients in those areas where they could become liable, and if the clause is taken literally, it would appear that the preparation of potions, magic spells and lucky charms is permissible provided you don't charge exorbitant fees.

It should be noted however, that no clients were referred to him during his three months membership, which calls into question the value of the APA's listing service. A suspicious mind might wonder if someone who controlled a listing might refer calls to members only after their own appointment books were filled.

It can be deduced from the foregoing that my statements on the *II AM* show were substantially correct - that psychics have no scientifically validated credentials (or any credentials for that matter); that the appellation "psychic" can be freely adopted by anyone; and to become a member of the Australian Psychic's Association one needs only to pay a fee. The anecdotal testimonies (allegedly) required by the APA are not legitimate qualifications, are worthless, and in any case appear not to be checked in any way.

### Summary

The APA does not conduct any tests to determine whether an

applicant has any psychic ability.

Testimonials or letters of recommendation (fake or genuine) from an applicant appear to be accepted by the association at face value.

No effort was made by them in this case to check the references submitted. It would not be unreasonable therefore, to question whether other professional members of the APA have obtained their accreditation as easily.

The APA's criteria for membership lend no credence to any claim by its members of professionalism or for upholding ethical standards, and in the absence of any procedures to verify claims of psychic ability or an assessment of an applicant's character, the association is open to membership by any person whose intent could be fraudulent or exploitative practices.

The Association cannot be seen to be acting in a responsible manner, insofar as it is perceived by the public to have legitimised the claimed psychic abilities of its professional membership by accreditation, when in fact no verification of those claims is available or has been sought. Further, the incredible laxity in dealing with prospective members reflects badly on the business acumen and efficiency of the APA's proprietors.

### Conclusion

An association whose title implies that its members are endowed with expertise in one field or another, is, or at least should be, morally and ethically bound to ensure that applicants for membership are in fact qualified and can legitimately substantiate their claims. Failing this, no more credence can be given to that association than those unaccredited institutions who sell mail order degrees.

If **Operation Termite** is evidence of the ease whereby **anyone** who chooses to hang up a shingle as a Psychic Consultant or clairvoyant can obtain accreditation and the recommendation of a seemingly reputable association, it casts more than a shadow of doubt over the abilities of the Australian Psychic's Association and its members.

Serious questions are raised by this article and should Mr Turnbull, or anyone else from the Australian Psychic's Association, care to answer any of the charges made we will be delighted to publish their reply.

\* Throughout this article the title of the organisation has been spelt "The Australian Psychic's Association" in accordance with the way it appears on the association's letterhead and flyer.

As it stands, someone is in fact claiming to be **The Australian Psychic** and the owner of the Association, which would make the APA a one man band. If the name is officially registered in the form in which it appears on the APA's stationery, can those who have paid membership fees legitimately claim to be members of that association?

\*\*I wrote to the Australian Medical Association and the New South Wales Law Society, to see whether they condone some of their members practising mumbo-jumbo. In a written response, the

Secretary General of the Australian Medical Association, Dr W Coote reiterated the AMA's long standing policy:

"The AMA does not recognise any exclusive dogma such as homeopathy, osteopathy, chiropractic or naturopathy or any other practices which are not based on sound scientific principles." Dr Coote's letter continued -

"the AMA is aware that some medical practitioners do offer services based upon various unorthodox, non-scientific "disciplines" (but that) there is currently a move in the AMA to re-examine AMA action based on the above quoted resolution...by re-examining circumstances under which Medicare benefits are payable for unorthodox practice and to examine what powers State medical boards may have in regard to registered medical practitioners who practise modalities not generally regarded by the medical profession as legitimate."

To date, there has been no reply from the New South Wales Law Society.

## Termite- the Aftermath

The operation concluded, the next step was to make public the findings. To this end, the electronic and print media were offered a copy of the report and the supporting evidence. First cab off the rank was Leigh Dayton, Science Writer for the *Sydney Morning Herald*.

Ethics demand that the party under scrutiny be given a chance to respond, and Leigh extended the invitation to Simon Turnbull by informing him that the *Australian Skeptics* had succeeded in obtaining membership of the *Australian Psychic's Association*, without any checks being made on the applicant or their references. It is important at this point to note that Simon Turnbull was totally unaware of the plant until informed by the *Herald* of the infiltration - he did not uncover the mole himself as he subsequently claims.

Conforming to the ethos popular in contemporary politics, the proprietor of the APA emphatically denied that it was possible to infiltrate his association; that the APA thoroughly checks out all applicants; that the Australian Skeptics were liars; made some vague references to James Randi's court cases; hinted at defamation, and indulged in some slanderous remarks that shocked the journalist - all without knowledge of the irrefutable evidence in support of the allegations. Asked more than once why an application for professional membership had been approved without any checks being made, Simon Turnbull failed to respond. It was fairly obvious from his floundering, that despite my concentrated efforts to send him a copy of the report by mental telepathy, he had not received it and had been caught unawares.

Shortly after the conversation with Leigh Dayton, ST rang

Josef, and asked for the names and addresses of his former clients who had written letters of recommendation - locking the stable door after the horse has bolted? Josef refused, adding that he no longer wished to be a member of the APA.

Later in the day, I received a surprisingly cordial phone call from Simon which, had I a video phone, would have probably revealed a disarming smile. But then of course, isn't that a salesman's stock in trade? He informed me that my mole had been uncovered; that he had been suspicious right from the start because Josef had seemed over-anxious to become a member; triumphantly declared that he was no longer a member, and that in future, all applicants would have to sign a statutory declaration.

This explanation is hardly convincing, and raises further questions about the efficiency of the APA's administration.

First, Josef's persistence was motivated purely and simply by the frustrating delays in answering his enquiries. Who doesn't get hot under the collar and persistent when confronted with this type of slackness, lack of courtesy and business inefficiency? Second, the APA had nearly four months in which to check his references, if they were suspicious right from the start, why did they approve the membership without any checks being made, then after the cat was out of the bag, start making enquiries?

### Failsafe?

The future requirement of a statutory declaration is, to my mind, analogous to the handyman who hammers in a second nail to secure a piece of rotten wood.

Although ST did not specify what the stat. dec. was supposed to achieve, one can surmise two possibilities - affirmation( s) verifying the authenticity of the testimonials submitted for membership, or a statement swearing that the applicant is psychic, neither of which alters the status quo. Is this now intended to take the place of the APA's "thorough check" of referral letters? And how could the veracity of such a sworn statement be tested? After all, the person making the statutory declaration only admits to "conscientiously believe" what they say is true. I could sign a stat dec swearing that I am the King of Siam, I may conscientiously believe that to be so but it's not evidence, and what offence have I committed, other than to hold myself up to ridicule? Furthermore, friends, gullible clients or a few dollars changing hands could still provide references, (honest or dishonest) and you can swear until the crows fly backwards that you are psychic, or that the testimonials are authentic, but that is still not evidence in support of the claim that you are psychic. All these cosmetic procedures are totally unnecessary, what is required is a simple test to prove one way or the other whether or not one is psychic. Will the APA's member's shingle now take the following form?

### STATUTORY DECLARATION

I, *Alpheus Charlie Tan*, of 3, Metaphysical Road, Occultsville, in the State of New South Wales do solemnly and sincerely declare as follows:

*That I am psychic.*

And I make this solemn declaration conscientiously believing the same to be true and by virtue of the provisions of the "Oaths Act of 1900-1955".

Subscribed and declared at  
this                    day of  
one thousand nine hundred and  
before me

### Am I or aren't I?

In the leading article, I drew attention to the ultimate paragraph on the APA's membership application form which is quite specific, ... "*I (the member) will remain a life-time member of the APA unless I resign said membership in writing or I breach the articles of said association.*" Josef has not resigned in writing, and after a careful perusal of the articles of association I can find no evidence that he has breached any item listed. He is therefore, (should he wish to make the claim), still accredited to that association whether Simon Turnbull likes it or not! The president of the APA has no authority to dismiss, rescind, sack, fire, boot, eject, terminate, liquidate, discharge, expel, banish or otherwise dispose of a member unless that member conforms to the requirement of a written resignation - unless of course that member charges exorbitant fees for the preparation of talismans to ward off evil!

Of particular interest to the Australian Skeptics is Item 2 of the articles which reads, "It (the association) will promote opportunity for individual investigation of the psychic, paranormal, and allied fields." Since the articles were approved on the 7th of June 1983, we would be interested to know what investigations have been carried out by the Australian Psychics' Association over the past eleven years to provide evidence that ANY of their members have psychic ability?

### It's not over till the fat lady sings.

Finally, Simon's complacency in assuming the affair was at an end, was shattered when I told him that this was only the beginning (meaning that there was still a possible thirteen media enquiries to come.) Without any elaboration, he mistook this to mean that there was still another undiscovered mole in his association. I trust he had a busy week-end going through his membership files!

He was obviously on the wrong track, as in a subsequent interview with the *Sydney Morning Herald* he said that he suspected one APA member who had provoked several

complaints and that “he’s on his way out.” However, as the Skeptics’ mole has not worked as a psychic it was not him, which leads one to believe that perhaps more than one person had gained accreditation without any checks being made.

As an aside, I was once told by an admiring member of the Skeptics that I was devious, cunning and sarcastic - and to keep up the good work! Flattery like that makes life as a sceptical investigator worth while. The *Sydney Morning Herald*, November 14, published a good summary of the sting. Two points of note in that article, Simon Turnbull claimed that “all psychics are clairvoyant” and that they use “tools” such as astrology, tarot cards, palmistry and numerology to assist them. However, my understanding is that any person who is truly clairvoyant would not need any appurtenances unless they were used simply to impress their clients with “magic.”

Membership of the APA was updated by ST at 950 members of which 175 are professional. This puts the annual fees at \$69,000 pa.

### Deeper and deeper

Subsequent media enquiries came in thick and fast. Adam Joseph at Melbourne’s 3RRR, arranged a joint interview with Simon Turnbull and myself on November 13, prior to which Simon had lamented that “Harry set me up.” Such a self-evident statement is hardly profound evidence of the crystal clear perception psychics claim as a fundamental faculty, and in the altercation that followed, his response to some of the questions put by Adam (armed with a copy of the full report), did nothing to extricate him from his dilemma.

The interview commenced with a brief overview of the sting, with Simon Turnbull admitting that he had made a mistake. He said that processing an application would normally take two weeks, but in the case of the Skeptics’ mole it had taken 15 weeks because he was suspicious right from the start. This is not borne out by the notations on his letter dated June 6 however, (just under five weeks from the time of the initial application) which, inter alia, acknowledges the receipt of letters of recommendation and states, “we have mailed you this (an application form) previously.” He claimed further suspicions were raised because of the persistence of the applicant who had written him eight or nine times. (There were actually a total of six letters, four of which would have been unnecessary had the APA responded promptly to enquiries.)

Quoting the APA’s latest membership numbers, ST claimed to have had seven new members since January 1 1994, or

about one every six weeks. This is at variance with his statement in the second phone conversation, “...we’ve got a “bunch” going out this week.”

Adam disputed three or four times in succession ST’s claim to have discovered the mole, raising his voice and hammering home the point that he knew nothing about the sting until informed by the *Sydney Morning Herald*.

Ian Plimer, who was in the studio, quoted Section 53 of the Federal Trades Practices Act referring to misleading and deceptive practices, and urged ST to sue Harry Edwards. (Who needs enemies, with friends like that?) Adam joined in the urging saying that we would be delighted to have ST

in court to have the opportunity to see what evidence he could produce to prove that he was psychic.

The interview ended with ST saying that they (the APA) had had a meeting and would be changing the rules to require future applicants to sign statutory declarations. This requirement, according to Simon Turnbull, would make anyone lying in front of a Justice of the Peace liable to prosecution. For reasons already stated I doubt any such action would hold up in court. There was an attempt by ST to get Adam and Ian to say that psychics are frauds, but

they were well aware of the trap. The APA’s president’s parting remark was an invitation for Harry Edwards to try it again! **Hasta la vista baby - I’ll be back!**

On November 16, an interview with ABC Radio, Hobart, ensued, on which Simon Turnbull twice declined to be heard. The questions and answers were much the same as those on 3RRR but with one exception, “in view of the fact that some doctors, nurses and academia had obtained positions without having their testimonials checked, wasn’t I being a bit hard on the APA?” I hardly think so, and more the shame on those whose responsibility it was to do the checking.

Simon Turnbull is on public record as saying “**we don’t take anyone**” and that applicant’s letters of referral are “**thoroughly checked.**” On one occasion I was threatened by Simon Turnbull and berated because I hadn’t got my facts right, so this time as a sceptical investigator who sincerely doubts the existence of psychic powers, I felt obliged to devise a way of checking the veracity of those two statements, ensure my facts were right, and report the findings. Readers can draw their own conclusions.



*Sydney Morning Herald*, 14/11/94 with kind permission

## LEGAL MATTERS

# Laying Down the Law

Paul Ward-Harvey

I want to open debate among readers (and particularly those lawyer readers) as to the exposure of proponents of the paranormal to legal attack.

The wide variety of paranormal activities gives rise to differing circumstances and therefore different exposure. But to commence discussion, I take as examples fortune tellers, Tarot card readers and channellers. Each receives money for the provision of a service.

In general, sceptics would agree that such people are engaging in misleading and deceptive activities. But does the law take the same view, and if so, what can be done about it?

## Trade Practices and Fair Trading Legislation

Both Federal and State legislation generally provides that:

“a person shall not, in trade or commerce, engage in conduct that is misleading or deceptive or is likely to mislead or deceive ...”

and

“... where a person makes a representation with respect to any future matter (including the doing of, or the refusing to do, any act) and the person does not have reasonable grounds for making the representation, the representation shall be taken to be misleading.”

An enormous volume of law has developed over the last twenty years in regard to the foregoing provisions. However, it is necessary to briefly refer to the following:

### In trade or commerce

Generally, where a person is paid a fee for the provision of a service, being of the nature which he regularly provides and which requires a measure of skill and ability, then it is reasonable to equate the fortune teller with the financial advisor. The words are given a generous interpretation by the courts and they are not terms of art. They are expressions of fact and terms of common knowledge.

### Misleading or deceptive

There is methodology followed to determine whether conduct is misleading or deceptive. This is as follows:

1. Identify the relevant section of the public in relation to whom the question of whether conduct is, or is likely to

be, misleading or deceptive.

2. Consider the matter by reference to all who came within that group (including the astute, gullible, intelligent, educated, illiterate, men and women of various ages pursuing a variety of vocations).

3. Evidence someone was misled is admissible and may be persuasive but is not essential. Such evidence does not conclusively establish that the conduct is misleading or deceptive or likely to mislead or deceive. The court must determine that question for itself. The test is objective.

4. Then enquire why the proven misconception has arisen. Only by this enquiry can it be determined whether the parties involved were misled by the conduct of the particular defendant involved, or held the belief due to an erroneous assumption.

### Unwary or gullible persons

The Trade Practices Commission advertising guidelines have stated:

“Advertisements should be considered in light of their effect, on an ‘ordinary person’, the ‘public’ or ‘an average person’. This may include the ignorant, the unthinking and the credulous but not, however, ‘a very stupid person’ or ‘an insignificant and unrepresentative’ segment of the public.”

The legislation is intended to protect consumers; the fact that many consumers are unwary should not deprive them of protection; it is the very reason why they need it and have been given it. Since advertising is usually directed to the ignorant as well as the knowledgeable, the superficial reader, viewer or listener as well as the profound, and the gullible as well as the cautious, it must be held misleading or deceptive if it has that tendency with respect to the ignorant, superficial and gullible.

### Puffery

It is often argued that the same principle applies to claims for the paranormal as applies to unrealistic and excessive claims in regular advertising. Laudatory, over optimistic, exaggerated, vague, commendatory sales talk does not necessarily lead to liability for misleading and deceptive conduct.

However, this type of conduct is merely peripheral, ancillary to the marketing and sales of a particular product

which has inherent features of its own, whether they comprise those incorporated in the claims or not.

Paranormal claims go to the very heart of the service alleged to be provided. In exchange for payment of money, a fortune teller purports to provide a service which is totally non-existent. No amount of puffery or explanation can make it something which it is not. Accordingly, the purchaser of that non-existent service is suffering a fundamental mistake of fact.

### Remedies

Breaches of Section 52 are not subject to criminal prosecution or fines. Upon a report to the Trade Practices Commission, that Commission may take proceedings for an injunction and/or corrective advertising by the fortune teller.

Available private remedies comprise injunctions and proceedings for corrective advertising which can be obtained by any person, subject to the usual procedural requirements. Any person who has suffered damage as a result of the misleading and deceptive conduct can recover damages therefore.

### Breach of Contract

If the consumer has entered into a contract with the fortune teller for the supply of service which the consumer believes to be in actual existence, then by virtue of the fact that the fortune teller has failed to supply the contracted service, the consumer can recover the price which he has paid for that contract.

### Liability for Negligence

If the fortune teller has been requested to provide advice to the consumer and he has done so, in the reasonable expectation that the consumer will act upon the advice, and the consumer has done so, and as a result of having done so has suffered damage, then the consumer may well recover damages against the fortune teller.

There has been substantial recent legal development in this area which tends to show not only potential liability of the fortune teller, but does not require any payment of any fee in order to incur that liability.

### Criminal Exposure

New South Wales Crime Act: Obtaining money etc by false or misleading statements - Section 178BB Crimes Act

The elements of an offence under Section 178BB are that the accused:

1. With intent to obtain for himself or another person,
2. Any money, valuable thing or financial advantage,
3. Made, published or concurred in making or publishing,
4. An oral or written statement,
5. Which he knew to be false or misleading in a material particular and was made with reckless disregard to whether it was true or false or misleading in a material particular,
6. Shall be liable to imprisonment for five years.

Doesn't the foregoing accurately describe the activities of

astrologers who contribute to publications and most if not all other fortune tellers?

### False pretences etc - Section 179 Crimes Act

The elements of this crime are:

1. That the accused made a false pretence of fact to some other person;
2. That he knew that such pretence was false;
3. That he obtained property (money etc) by means of such pretence; and
4. That he had an intent to defraud (proof of the falsity of the pretence and that the accused knew it was false is *prima facie* evidence of an intent to defraud).

### Conclusion

The foregoing constitutes only a cursory consideration of the way in which I see that the law may touch upon the activities of those engaged in the paranormal. I seek to excite further comment from other readers, and reports of any cases of which readers are aware.

While there may be a general attitude that paranormal claimants are harmless, the areas I consider to be worthy of further examination are:

1. The bringing of proceedings for the purpose of obtaining substantial corrective advertising orders.
2. The fact that those proceedings can be brought by any person.
3. The rights of those who have suffered damage after acting upon advice of a paranormal (especially in the health area).
4. The rights and obligations arising under the respective Crimes Acts of the States. ■

### ... Termite from p 15

Finally, Simon Turnbull claims to be, and engages in business as, a psychic. But what tests has he undergone to support his claim? The little we know of his record certainly doesn't support his claims.

In an ESP experiment on *A Current Affair* (Channel 9, July 14, 1992), Turnbull managed none out of four and in a commentary headlined "Sceptics on the skids", featured in a 1984 *Australasia Post*, made the following prediction: "*That sceptics as a group will lose rather than gain support this year.*" At that time our membership was approximately 200, since then it has increased by 600 per cent!

Despite this lamentable record, Simon Turnbull still claims to be psychic and sets himself up as an arbiter of whether others are psychic and worthy of accreditation.

In a late breaking development, Josef has received a letter from the APA supporting my chronology of events and a cheque refunding his membership fees in full and advising him that his references did not check out!

Extraordinary! ■

## REVIEW

# Creationists Under the Spotlight

Barry Williams

**Telling Lies for God****Reason vs Creationism**

**Ian Plimer, Random House, 303 pp, \$14.95**

Ian Plimer, Professor of Geology and Head of the School of Earth Sciences at Melbourne University, is one of Australia's most distinguished scientists and educators. He is also a friend, whom I hold in the highest personal regard and one to whom I cheerfully award the greatest accolade one Australian male can bestow on another, that of Good Bloke.

Nevertheless, I, along with many Skeptics and scientists who know Ian well, awaited the publication of this book with not a little trepidation. For Ian Plimer is not your typical dry-as-dust academic, so beloved of the writers of fiction. He is a man whose passionate commitment to his profession and to the conviction that scientific literacy is essential for the wellbeing of this country, is uncompromising. Our concern was that Ian might just let his commitment to scholarship blind him to the needs of the audience that would benefit most from a book that exposes creation 'science' for the fatuous and infantile dogma it is. We need not have worried.

There are any number of excellent books which examine in infinite detail, and then go on to demolish, the pretensions of creationists that their primitive religious views have a scientific foundation. But those books, by scientists, are intended to be read by scientists, or at least by those who have a reasonable understanding of science. In *Telling Lies for God*, Ian Plimer writes for the vast majority of the population whose knowledge and understanding of science is limited. In it his passion for the truth comes through loud and clear, but this passion is tempered by a barbed wit and a large dose of common sense.

As one would expect, the chapters dealing with geology contain the most devastating critique of the creationists' scientific incompetence and sophistry. To the oft repeated creationist canard that 'radiometric dating is inaccurate' (essential to their dogma because radiometric dating is one of the more important scientific tools to give the absolute lie to a 6,000 year-old earth) Plimer explains in clear terms just how radiometric dating works. He does so in language that any layman can understand, he explains what is meant by limits of accuracy and he goes on to show how totally separate measurements, using discrete techniques, all come together to show the great age of rocks and thus of the earth.

In a recent issue of *New Life*, an evangelical publication, John Heininger, Director of the Evangelical Apologetics

Society, whose less than total commitment to accuracy has been catalogued in these pages before, describes Ian Plimer as "the Darwinian zealot professor". In this, Heininger, in common with the vast bulk of vociferous creationists, betrays his stupefying ignorance of both science and history. Ian Plimer is a geologist, not a biologist (although I dare say his knowledge of biology would be greater than that of the entire creation 'science' cult put together) and his scientific field has nothing at all to do with Darwin. It was the study of geology that destroyed the foundation stone of the creation 'science' myth of a young Earth, long before Charles Darwin proposed his theory in *Origin of Species*, and in fact many years before Darwin was born. And this geological work was carried out by scientists who, by adhering to the accepted wisdom of the time, would be regarded in today's terms as creationists. Unlike modern creationists, however, these people were far too good as scientists to allow their preconceptions to distort the conclusions that were forced upon them by their discoveries.

In his chapter on the "Great Flood", the cornerstone of the creationists' myth, Plimer begins with the assumption that it was a true account of a real flood (for which, as he shows, there is not a single trace of evidence in the geological record). He then traces at length the consequences of that assumption, and what hilarious consequences many of them are. Without wishing to steal too much of Ian's thunder, I was particularly struck by the fact that to load the Ark with two of every species, 460 organisms per second would need to ascend the gangplank for the entire 24 hours of the operation. Also of interest was the question he put to boat builders about how long it would take four people to construct a vessel of the required dimensions to do the job. Starting 4,000 years ago, the builders would still be hard at it today. The description of the health problems suffered by whichever of Noah's fellow travellers acted as hosts to the large variety of fatal bacteria and of the difficulties Noah would have experienced in ensuring that only two of each were allowed aboard, made me wince in sympathy. His descriptions of the boat building, feeding, stabling and, more fundamentally, the mucking out problems confronting the intrepid Noah family, reduced me to helpless giggles.

But Ian Plimer does not rely on the absurdity of a literal belief in Noah's Ark to make his point. He traces the myth to its probable origins in older stories of a farmer rescuing his breeding stock from a river flood in ancient Mesopotamia and shows, plausibly, how this story could have been taken

aboard and embellished by the Hebrew slaves who lived in the Mesopotamian culture. And, unlike the creation 'scientist' who uses a possibly genuine scientific qualification in one field to proclaim expertise in other disciplines, Ian Plimer has undoubtedly consulted with experts when straying into fields outside his own.

It is those few creationists who do hold genuine scientific qualifications that are the main targets of Plimer's outrage. While the majority of creationists have no knowledge of science and can thus be regarded as the unwitting dupes of the power seeking, authoritarian elite of the cults, these former scientists have no such excuse. They should know better than to peddle the lies which this book unerringly highlights. And Plimer does not rely on unsupported assertions, nor on misquotations (a favourite creationist ploy), to make his case. He documents his charges in detail and he throws down the gauntlet to the creationists to answer his charges.

I have no doubt that the creationists will strive to their utmost to discredit this book, but we can be certain they will not seek to answer Ian Plimer's charges against them of scientific fraud and deliberate lies. That way would only expose them even further to critical scrutiny, which their primitive dogma cannot tolerate. I am prepared to bet that there will be wild and irrational attacks on this book and that the attacks will be entirely irrelevant to what the books contains. This is what we have learned to expect from creationists and they do not seem to learn from previous errors. It will not be creation 'scientists', however, who scrutinise this book to try to find fault with the scientific arguments, it will be lawyers who, on the creationists' behalf, will seek to find a cause for legal action. I doubt if they will succeed, although I have no doubt they will try their hardest, because after *Telling Lies for God*, no creationist will be able to blithely spout his specious nonsense without answering the questions Ian Plimer raises.

And it not only science that is disparaged by the fatuities of creation 'science'. Warning, in his perceptive Foreword to the book, of the dangers creation 'science' poses to religion, Archbishop Peter Hollingworth, Anglican Archbishop of Brisbane, states "If creation 'science' gains a further hold in our school curricula under the guise of science, the teachings of the Christian church will be discredited by more and more thoughtful people, notwithstanding the fact that this is not representative of mainstream theology".

This book is unlikely to be read by those whose need for it is greatest. These are the unfortunate children who are inculcated with creationist pseudoscience in their schools and who give rise to the regrettable statistic of one in eight students who enter biology courses at our universities believing in a young earth creationism. If they have learned this anti-science, anti-religion, anti-intellectual rubbish in their fundamentalist, and Commonwealth subsidised, 'Christian' schools, then they deserve our sympathy. If they have learned it in our state schools, then we, whatever our religious affiliations, have every right to be outraged.

This is an important book and every state and independent school library should have it, as should every science teacher who must confront the reality of creationist infiltration of their syllabus. It is not a text book, but it is a extremely valuable book and every line contains the unmistakable stamp of Ian Plimer, a truly remarkable professor. ■

## Post Script to Review

After I had written the above review, and purely by coincidence, John Mitchell of Willoughby sent me a copy of the *Quirindi Advocate* of November 2, 1994. The *Letters* page, contained stark confirmation of just the sort of thing that Ian Plimer writes about in *Telling Lies for God* and, I will quote from the letter at length.

Under the heading "Why society is going downhill fast!", a correspondent who answers to the name of TM O'Donnell delivered himself of a diatribe against "the 'theory of evolution' which has more holes in it than the kitchen sieve" (What is the 'theory of evolution'?) and he goes on to aver, "This is based partially on dubious fossil records which embarrass (sic) itself (sic) and provide support for Creation (sic, sic, sic)".

It starts badly and deteriorates from there on.

"Piltdown man and Nebraska Man were exposed as hoaxes."

Piltdown Man was a hoax, and a very successful one. Nebraska Man was not. It was caused by an over enthusiastic palaeontologist in 1922, misidentifying a tooth as belonging to an anthropoid, when in fact it belonged to an extinct pig. The important issue here is that while it was briefly accepted in some scientific circles (and beaten up in the media) as being from an ape-man, it was by no means universally accepted as such. Within five years of its discovery, further evidence revealed its correct origin.

It is also vital to remember that it was not some creationist who exposed either the hoax or the misidentification, but scientists doing what scientists do. Scientists may have been embarrassed by these things that happened in the 1920s, but creationists, if they had any sense of shame, should be continually embarrassed to this day by the sort of drivel they espouse, as I shall now go on to show.

Having had a very slight win (one out of two statements was correct), it is the evidence that O'Donnell adduces to support his claims about a 'dubious' fossil record which really exposes his ignorance.

"*Australopithecus Man*, found in 1959 by the *Leahy's* in Africa. This was an ape skull which showed human similarities in the jaws."

Presumably this refers to the *Australopithecus* (Southern Ape) *boisei*, not A. *Man*, a hominid found by Mary *Leakey*, which she nicknamed Nutcracker Man because of its powerful molars.

“Orthodontists have proven that apes and man have such a wide range of jaws that it is totally unreasonable to categorise a species by jaw angles.”

Orthodontists have proven that? No wonder they charge so much to straighten your kid’s teeth, they spend too much of their time on measuring apes’ jaw angles.

“Australopithecus (sic) was an extinct ape and nothing more”.

No, *Australopithecus* is an extinct hominid. It **was** a living hominid.

“Homo Erectus (Peking Man) was constructed out of 14 fragments of skull.”

Wrong! In *Missing Links*, John Reader, Pelican Books, 1988, quoting MH Day’s *Guide to Fossil Man*, on Peking Man, ‘fourteen skulls in varying degrees of completeness were found, together with eleven mandibles, 147 teeth, portions of seven thighbones, two upper armbones, one collarbone (of doubtful attribution) and one wristbone.’ Not a lot perhaps, but a great deal more than ‘fourteen skull fragments’.

“Nellies’ skull had a jaw added to it which was found 80 feet higher in the excavation.”

After speaking to every palaeontologist I know and checking several reference books, I am no wiser as to who ‘Nellie’ is. He couldn’t mean ‘Lucy’ could he? No, surely not; even a creationist could not be that silly.

But TM O’Donnell’s *piece de resistance* is left to last.

“Java Man: (so far, so good) In 1920 (1890) Eugene Dewar (Dubois) found two human skulls called the Wojack (Wadjak) skulls, which he kept secret for 30 years (he didn’t). In the same strata he found a skull cap and 15 metres away a human leg bone (not in the same strata as the two skulls he didn’t). He decided they belonged to each other (well, he thought they belonged to the same individual) and named them an upright walking ape Pithicathipus (sic) Erectus.”

No he didn’t. He originally thought it was a man-like ape, which he named *Anthropopithecus erectus*, but later changed his mind [this was in the early days of classifying hominid fossils remember] and decided it was an ape-like man, which he called *Pithecanthropus erectus*. If he ever called it Pithicathipus, it must have been when he was as pithed as a newt.

“A few years before he died he admitted all that he had found was a human leg bone and the skull cap of an extinct gibbon.”

He didn’t ‘admit’ any such thing. In his old age he changed his mind again and decided the skull was of an extinct gibbon. However other discoveries in Java, plus better techniques and a change in terminology showed that his find was in fact *Homo erectus*, as was Peking Man.

“How could these candidates and others be our ancestors when archeology has proven that man already existed in his entirety in every strata that these missing links have been found in.”

No evidence is presented to support this claim. It is, in any case, a lie.

“We should have countless thousands of transitional forms or ‘in between’ finds for every species in its evolution. But none have ever been found”.

Another lie. There are many transitional forms, but creationists deny this fact by refusing to accept any of them and putting up absurd rhetorical analogies eg ‘where is the transition from a lizard to a dog?’. I could equally claim that kangaroos do not exist by insisting that anything that was not purple with sixteen legs was not a kangaroo.

TM O’Donnell concludes his exhortation with the offer “Any students who seek material to prepare counter evolutionary essays are welcome to contact the writer”.

Considering that TM O’Donnell only managed to produce one factual statement, Piltdown (or three if he managed to get his name and address correct), in his whole letter, one would need to be very careful about accepting any information from him about anything. (I am assuming here that TM O’Donnell is a man but I believe it to be a reasonable assumption. I have never met, nor have I ever heard of, a woman spouting creationist dogma, presumably because in the fundamentalist world, women ‘know their place’.)

It would be easy to dismiss O’Donnell’s letter as the inept ravings of an ignorant individual, but by his offer to students he is acting as an agent, official or unofficial, for the creation ‘science’ movement. I am not a palaeontologist, nor have I had any training in any of the skills required to investigate human origins, yet I found no difficulty in refuting the nonsense O’Donnell propounds, using only readily available materials.

The professional propagandists of the creation ‘science’ movement are more sophisticated than O’Donnell in the way they present their material, though their material is no more factual than his. The main difference is that some small number of members of the official bodies have legitimate scientific qualifications, which allows them to use the scientific jargon more effectively than someone like O’Donnell, who has only made himself look ridiculous.

Not that these qualified people use any science in their dogma, they merely use the language. That is why a book such as *Telling Lies for God* is so important; so that lay people can understand the methods these cults use to pass off their specious dogma under the guise of science.

As to “Why society is going down hill fast!”, I think TM O’Donnell used a very apposite quotation from *Romans* 1.18, 19, “..all men know the truth but suppress it in unrighteousness..”

I couldn’t agree more. ■

## REPORT

# Are There Risks from Electric and Magnetic Fields?

James Gerrand

**EMF Scientific Workshop. 17th October 1994  
Melbourne, Victoria.  
Electricity Supply Association of Australia**

The day long workshop began with an overview of worldwide research into possible health effects from electric and magnetic fields (EMF) by Dr Leonard Sagan, recently retired Senior Medical Scientist at the Electric Power Research Institute (EPRI) in California USA. He reported that ten years of research costing some \$100 million had produced no convincing evidence of any health hazard from EMF.

A problem with the epidemiological studies arises from the fact that the diseases in question, childhood cancer, are rare. Thus in Tasmania a study suggested childhood cancers diagnosed over a period of 8 years - 1972 to 1980 - could have been increased by one, from 70 to 71 from living near HT power lines. But so could exposure to incense burning in homes and other confounding possible causes.

In New Zealand a case-control epidemiological study is in progress of the possible causes of cancer in 340 children. Parents of these children, together with those of a control group of 340 children, are being interviewed about past exposures to potential risk factors, including EMF. Results should be available 1995-6.

A Melbourne study (School of Biophysical Sciences and Electrical Engineering, Swinburne University, and School of Psychology, Latrobe University) is in progress as to possible effects of 50Hz magnetic fields on two human physiological factors - heart rate and plasma melatonin. The human volunteers are exposed to a 20 uT circularly polarised magnetic field.

A transient slowing of heart rate of about 5% was found, occurring 10 seconds after switching on and lasting for about 60 seconds. An opposite effect was noted for switching off the field. The researchers conclude that whilst this exploratory analysis is not definite yet it should prove useful in a larger study.

Melatonin, a hormone released by the pineal gland, is secreted in a circadian (24hr) rhythm, rising in the early evening and falling at around dawn. Exposure to bright light can depress and delay this night-time rise and there is some evidence from animal experiments that magnetic fields may do the same. Six individuals with particularly robust

melatonin rhythms were selected for a series of overnight experiments. Analysis of the data is in progress.

Much research is now being directed to laboratory studies of animals and cells exposed to magnetic fields. One such scientific study, currently in progress in Adelaide, was reported on by Dr M Repacholi. This is a \$2 million project to ascertain whether mice, genetically predisposed to get lymphoma, are affected through their lifetime by exposure to a range of 50Hz magnetic fields.

A number of studies examining whether magnetic fields are mutagenic - cause changes in genes - have proven negative. Similar negative results have come from studies whether occupations such as electricians working in EMF environments have resulted in increase in cancer rate.

All this expensive research is being largely funded by electrical supply authorities. Why should they do this when the probability of getting any positive result is practically zero? The answer is that the power of an emotional public roused to political action can have serious effects, particularly to electrical power authorities. We saw this in Melbourne when such people power caused the then SEC of Vic to spend at least \$15 million more to underground a high tension powerline.

The ridiculous part of this irrational fear of HT power lines causing a health hazard is that the basic objection to these power lines is visual; many people don't like the thought of such giants striding across the landscape. But they know this objection doesn't carry much weight. But if one can instil a medical fear then that is another matter.

I saw a good example of how an unreasoning fear can blind a person to a proven medical hazard when I attended a public meeting held to discuss the proposed SEC HT powerline. A woman at this meeting was most vocal about the possible health hazard whilst busily smoking during the evening.

A final absurdity about the whole EMF debate is that the initial concern was with the electric field with its size associated with the many hundreds of thousands of volts being present in a HT powerline. But when no evidence could be found of any hazard from the electric field but some slight possibility from the magnetic field then this latter became

**Continued p 23...**

## REPORT

# An Innocent Among the UFOonauts

Barry Williams

Sometimes you let yourself in for things that, on mature reflection, you probably wish you hadn't. In September I agreed to speak at the *Great Australian Science Show* in Sydney and gave as the title of my talk "I was abducted by a UFO". This subject was used by the organisers in their publicity for the show and the fact that a Skeptic was giving a talk with that title received a modicum of light hearted coverage in the media.

On the fateful day, I arrived at the lecture theatre to find a full house, a fact I attributed to my identification during a similar appearance the previous year as 'Professor' Barry Williams. (During the intervening time I let no opportunity pass to remind my professorial acquaintances that, while they had to strive with research, teaching, indulgence in University politics, crawling to Vice Chancellors, to achieve their exalted positions, I had acquired equal distinction with no expenditure of effort whatsoever.)

Not being one to disappoint an audience, I assumed my best pseudo-academic demeanour and proceeded to give forth pearls of distilled wisdom on the phenomenon of UFO abductions, with not a few sideways excursions to give verbal kickings to creationists, astrologers and divers other new age crackpots. Carried away with my own rhetoric, I paid scant attention to a certain restiveness among the assembled multitude, or at least if I did notice it, I put it down to the obviously uncomfortable seating arrangements. When my dissertation came to its inevitable (only unkind people would say overdue) conclusion, I beamed out at the audience, noting in the front row the friendly smiling faces of long-time Skeptics Fred and Cyla Flatow, and asked for questions.

The first came from a young man who launched into a ringing denunciation of me for daring to question the *bona fides* of such UFO gurus as Prof John Mack, before declaring me "a very dangerous man" and demanding that I explain "the marks on my body".

My response was that the only serious danger I posed to anyone would be if I stumbled and fell on them. I then tried to explain that the encouragement of people in their delusions, rather than an offer of professional help to understand them, was probably the greatest danger that existed in the UFO abduction debate.

I couldn't see any marks on his body and, not being trained in any medical skills, I probably wouldn't be able to explain them even if I could. I therefore suggested that he ask someone

so trained to have a look. As he seemed to want to continue the discussion at length, I asked him to see me after and asked for further questions.

The next came from another young man who advanced that good old standby of the new age indoctrinee; didn't I think it was time for a paradigm shift in scientific thinking if 'western science' couldn't explain all the mystical things that people were experiencing? My response was equally standard; that we needed a great deal more evidence that any such things were in fact happening before we needed to discard the most successful tool we had yet devised for understanding the natural world. At this stage I made a private resolution to myself to endeavour to meet the philosopher who gave the term 'paradigm shift' to the world; I would like to drop him down a lift shaft.

This young man also seemed to wish to debate the matter at length, while the original young man indicated his desire to continue his discussion and a couple of others threw queries in similar vein, with everyone exhibiting the distressing tendency of talking at once.

Only the Flatows and a visiting Victorian Skeptic whose name I did not catch, seemed inclined to join the debate on my side. And here I must confess my admiration for Cyla Flatow, whose tenacity in pursuit of a point would make Ian Plimer envious.

A horrible thought began to dawn on me. Here I was, almost alone and defenceless in a room full of people who seriously believed that they had been unwilling guests on alien vessels. Where was the nearest exit? Beam me up Scotty!

Nervously, I concluded the session and was presented, by the young man with the marks on his body, with a photocopy of a magazine article which described how he had received them. He had awakened in his room to find mysterious figures at his bedside. He was paralysed and, after various adventures, he awakened again to find strange wounds on his legs. The photographs with the article showed a couple of scars or depressions in his leg and the accompanying caption said that "some doctors claimed they looked like the marks left by biopsy punches". To me they bore a striking resemblance to the scar left on my nose where a skin cancer had been removed recently by a plastic surgeon.

(Wait a minute. A mark on the *nose*? The second favourite site for alien experimentation on humans [after the naughty bits]. I thereupon resolved to investigate my plastic surgeon

who, for ethical reasons, I cannot name here [although he does subscribe to the Skeptic]. All I wish to say to him is “Dr X..., (or should I call you X%3\*!!!? from the Pleiades?), your secret remains safe with me, or it will do if you leave a substantial sum in small denomination, unmarked notes in the Skeptics Post Office Box”.)

The young man also left me a leaflet praising the work of Dr Mack and advertising a Sydney centre for assisting UFO abductees, of which he seemed to be a principal officer. Perhaps, after all, his attack on me was not entirely a disinterested one.

After the event, I fell into conversation with Bill Chalker, one of the more rational of UFO investigators. Bill threw at me the accusation that Skeptics do not investigate UFO sightings but merely call the sightings into question. I responded that it remains entirely the responsibility of those making extraordinary claims to provide the extraordinary evidence to support them and that the proper role for a Skeptic is to raise doubts, to ask questions, to keep the enterprise within the bounds of reason or within the constraints imposed by the evidence.

We agreed that around 97% of UFO sightings could be easily explained as misperceptions of common natural or artificial phenomena, self delusion, or hoaxes, which left a residue of sightings that were not so easily categorised. Bill’s contention was that someone (the Skeptics? the government? “science”?) had a duty to explore these sightings and to explain them to the public at large. My response was that, if anyone found these sightings to be interesting enough, then they certainly would be investigated, but that there was no compulsion on anyone so to do.

Which is where the sceptic and the believer (even a reasonably rational one) part company. Most of the interest in UFOs among the public stems from the wild stories and even wilder hypotheses that are promulgated by the irrational UFOnuts. When that mad hyperbole is discounted, then the remaining phenomena are not all that exciting to the average punter or, for that matter, to the average scientist. So the investigation of the residue of sightings is unlikely to attract funding or interest from among the scientific community until there is sufficient evidence that such interest will be rewarded with tangible results.

This is best exemplified by the strange social phenomenon of the ‘crop circles’. When simple circles started appearing in grain crops, people began to investigate them to find the explanation, which usually took the form of a meteorological phenomenon. As the circles became more elaborate, so even more rapidly did the explanations diverge from the rational. Extraterrestrials, Gaia, ghosties, ghoulies and long legged beasties and things that go bump in the night, were all blamed. But the most logical explanation (and very probably the correct one), the human propensity to have a joke, was

universally denigrated by those who wanted to believe. The investigations and the explanations got wilder and wilder. That is, until the evidence of ordinary humans being the cause, and the continuing inability of those who had become self-elected experts to distinguish between a hoax and a highly dubious ‘real thing’, became overwhelming.

Not that this will be enough to deter the dedicated conspiracy theorist from concluding that it is all a government plot. But now we find some of the less fanatical ‘Cerealogists’, as they describe themselves, returning to the mundane, not at all elaborate, circles in crops and postulating that they could be caused by whirlwinds. To which the scientific community will no doubt respond with a very low volume “wow”.

Has anything useful emerged from the crop circle phenomenon? Possibly a marginal advance in the science of meteorology and certainly a lot of new data for those who study the idiosyncratic ways of the *species homo sapiens sapiens*. But very few insights into the methods and motivations of Gaia, ghosties or ghoulies *et al*.

And that is the problem the serious UFO investigator faces. If we strip away the fantasy and there just might be some new knowledge to be gained about natural phenomena. There might even be evidence that extraterrestrials are visiting our planet, although one would be advised not to bet the mortgage on it. But while the preponderance of UFO believers continue to offer the most ridiculous hypotheses about what is going on, the serious researcher will continue to fight an uphill battle. The reason why very few people will take his research seriously is not because sceptics raise doubts, but because his less rational allies have so muddied the water that no-one wants to drink from the fountain. ■

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### ... Fields from p 21

the culprit. But then the HT powerline should be no longer of such concern because the magnetic field is proportional to the current flowing. The idea of a HT powerline is to transmit power at minimum loss by reducing the current. So close electric blankets, hair dryers should be more suspect than remoter HT lines.

So how can we make the community more reasonable? The Australian Academy of Science is making a bold effort to improve the scientific literacy of the community through its new science \$3.5 million program for primary students, called “Primary Investigations”. This has been trialled this year in 38 Australian schools. Its teacher and student books for the sequenced instruction through the seven grades of primary education should be available for all schools at the start of 1995.

This is probably the only way to lift scientific literacy from its present 6% to say at least 50% and put the Australian Skeptics out of business. But it will take a decade or two. ■

## CREATIONISM

# Ham Boners Exposed

Sir Jim R Wallaby

As a man of the world, I am not one who would normally take umbrage at literature that others would consider offensive, so, when a colleague handed me a copy of a small tract entitled *Dinosaurs and the Bible*, no maidenly blushes mantled my damask cheek. I do, however, draw the line at the corruption of the minds of the young and I was rather astonished to find that this work did not carry a warning label that it was Restricted and not available to persons under 18.

The work of one Ken Ham, B App Sc, Dip Ed, and available through the Creation Science Foundation in Sunnybank, Qld, the tract begins with a question “Is there really a mystery about dinosaurs?” before going on to observe “...there are no real mysteries at all, once you have the key information that is not generally known and is *withheld from the public* (my emphasis). Now I am not sure where Mr Ham, B App Sc, Dip Ed, has been hiding, lo these many years, but if there is anything about dinosaurs that has been “withheld from the public” then it must be information of such an esoteric nature that even motion picture producers and advertising agents have not heard of it. So ubiquitous has the dinosaur become indeed, that I would be surprised if some or other popular singer had not named his unfortunate progeny Triceratops or Muttaburrasaurus.

Mr Ham, B App Sc, Dip Ed gives a brief history of the discovery of dinosaurs and points out that the name was coined by Dr Richard Owen, who he parenthetically notes was a “creationist”. Be that as it may, if Mr Ham, B App Sc, Dip Ed cared to read a little about Sir Richard Owen, and his distinctly ‘different’ sort of creationism, he would probably find it very difficult to welcome him into the fellowship of the Creation Science Foundation. Though Owen was widely regarded by his contemporaries as a mean spirited and spiteful individual, even these characteristics would probably not be sufficient to make him a likely candidate for membership, if only because he was also a scientist of considerable skill and accomplishment.

If the gentle reader will excuse me, I would like to diverge from my main theme for a moment here to make a cogent point. Mr Ham, B App Sc, Dip Ed, and others of like kidney, delight in pointing out that various distinguished scientists who trod the earth prior to the early part of the 18th Century were ‘creationists’. And so they were, or at least those of them who had a European heritage. They were creationists because, with the limited knowledge they had of the natural world, that was the best theory available to explain how life had originated and flourished. But it was because of their

work and their advancement of knowledge that this theory maintained less and less credibility until its fall became inevitable. If not Darwin, then someone else would have driven the final nail into the coffin of Biblical literal creation. It was a theory which had, by the mid 19th century, exceeded its use-by date.

If you will bear with me a little longer, let me draw a parallel with the work, in a different field, of a contemporary of Charles Darwin, French chemist Louis Pasteur. Pasteur is credited with the introduction of the ‘germ theory of disease’. Until Pasteur made his very important discoveries, disease was generally considered to be caused by bad ‘humours’, (ie blood, phlegm, cholera and melancholy). This, like special creation, was the best theory available at the time and it is reasonable to suppose that eminent scientists of the day subscribed to it. Although the world still contains many cranks in the pseudo-medicine field who are equally as determined as creationists to deny the new insights into the natural world given to us by science, it is our good fortune that we do not appear today to have organised groups harking back to the past and citing eminent ‘humourists’ at every turn.

The thought being father to the deed, perhaps I should not have raised that point, as the merest mention of the concept is very likely to make the establishment of a Humorous Science Foundation inevitable. If that turns out to be the case, I offer the readers my sincerest apologies in advance.

Back to the *minim opus* of Mr Ham, B App Sc, Dip Ed, who certainly exhibits a rather felicitous turn of phrase. To his own question “How big were dinosaurs” he responds “Some were as small as chickens, *and others were even smaller.*” What an extraordinary way to put it; but more and better is to come. After allowing that some dinosaurs are even larger than a chicken, he delivers himself of this final devastating statement, “The average size of a dinosaur, however, was probably about that of a small horse”. I ask the gentle reader to take a deep breath and consider that statement for a moment. What on earth could it possibly mean? It seems that Mr Ham, B etc subscribes to the sort of logic which holds that the average Australian has slightly less than one testicle, slightly less than one ovary, and slightly less than two legs.

One question, “When did dinosaurs live?” is answered by a straw man of his own devising. Proclaiming that evolutionists hold that dinosaurs ruled the world for 140 million years before dying out 65 million years ago, and explaining (if it needed explaining) that scientists do not dig

up bones labelled with those dates, he delivers this gem of historical fatuity, “No scientist was there to see the dinosaurs live through this supposed dinosaur age.” An interesting statement, worthy of a Nobel Prize in the Bleeding Obvious at the very least, but also worth bearing in mind for what follows.

Having delivered himself of these fatuous assertions, Mr Ham, B App Sc, Dip Ed goes ever more rapidly down hill, as a brief selection of his following statements will show. “There were no meat eaters in the original creation. Furthermore, there was no death. It was an unblemished world, with Adam and Eve and animals (including dinosaurs) living in perfect harmony, eating only plants.” Plants are not alive? What are they then, some sort of green, flexible rocks? One wonders what sort of Sc, Mr Ham has a B in the App of? It certainly contains no elements of botany, biology, palaeontology, zoology, or any other ology that is apparent.

“However, there were not very many different kinds of dinosaurs... In reality, there may have been fewer than 50 kinds of dinosaurs.” This appears to be an entirely made up solution, utterly unsupported by evidence of any kind, to Noah’s problem of how to fit the many *thousands* of different dinosaurs on the Ark, along with the millions of other species. It is not a very convincing construct.

Mr Ham, B App Sc, Dip Ed then goes on to show that dinosaurs were mentioned in the Bible, citing a reference to ‘behemoth’ in the Book of Job. “Impressively, he moved his tail like a cedar tree. Although some Bible commentaries say this may have been an elephant or hippopotamus, the description actually fits that of a dinosaur like Brachiosaurus. Elephants and hippos certainly do not have tails like cedar trees.” Now hang on a minute here, isn’t this the same Ken Ham, B App Sc, Dip Ed, who, just a few paragraphs back, said that there were no scientists around to see dinosaurs. Now he is using a description of a particular dinosaur, a description that is only possible because scientists, using scientific skills of deduction, have reconstructed what a brachiosaur probably looked like, to make a very dubious point that supports his preordained case? Further, having said quite correctly that elephants and hippos do not have tails like cedar trees, he gives us to understand that brachiosaurs did. In what way did a brachiosaurs tail resemble a cedar tree, remembering that your creationist will not have it that the Bible deals in allegory, but must be read literally. Was the Brachiosaurs tail made of wood? Did it have leaves? Did it sway backwards and forwards in the breeze? There is no reason to suppose that the brachiosaurs tail had any similarity to a cedar tree and, as the Biblical reference to behemoth is singularly unenlightening as to its appearance, we can safely say that this Applied Scientist made the whole thing up. Perhaps that is what App Sc means in the creationist lexicon.

As, no doubt he made up the references later in his tract to dragons and, of all things, the Loch Ness Monster. “...the more we research the historical literature, the more we realise there is *overwhelming evidence* (my emphasis) that dragons were real beasts, much like our modern reconstructions of

dinosaurs, and that their existence has been recorded by many different people, even *just hundreds of years ago*”. The illustrations of St George aiming his lance at a Baryonyx and an Elamosaurus sloshing around in the Scottish loch add an (possibly unconscious) touch of real absurdity to what is in fact a risible attempt to convince young children that creation ‘science’ is not as silly as it appears.

All of this, however, is merely leading up to the point that Mr Ham, B App Sc, Dip Ed really wants to make. And of course, it is that staple argument of the creation ‘scientist’, that the world was created exactly as described in the Book of Genesis. Let us then take the Genesis story as being literally true and apply to it the same test that this B App Sc uses in denigrating the work of real scientists. No-one, scientist or otherwise, was around when God created the world and only Adam (as the subject of the creative act) was around when God created human beings. There are in existence no books, manuscripts, design drawings, notes on the backs of recently created envelopes in the handwriting of either God or Adam, so how can we take this story seriously? Nor is there any other evidence to support such a fanciful interpretation of how things all began. The best that the author can come up with is that “The Bible, God’s very special book (an unsupported assertion), *claims* (my emphasis) that each writer was supernaturally inspired to write exactly what the creator of all things wanted them to write down for us...” The Bible is accurate because the Bible says so? What sort of evidence is that for anything?

I could equally claim that I was supernaturally inspired to write this piece, so that God could let everyone know that He is in no way responsible for the mindless maunderings of a bunch of anti-intellectual know-nothings, who are constantly bringing His reputation into disrepute. In fact I *do* so claim and with evidence to support my claim at least as good as that which creationists adduce to support theirs.

One day, while taking my ease, I was visited by a large, distinguished, white bearded entity who bore a striking resemblance to the portrait of the deity that graces the ceiling of the Sistine Chapel. “Sir Jim” he saith unto me, “I commandeth thee to write a parable that exposeth the stupidity of Biblical semi-literalists. I am sick of these clowns who maketh Me out to be deficient in the full complement of My marbles. They seemeth to think I am too dumb to have thought of evolution and accuseth Me of being nothing but a cosmic conjurer - a sort of omnipotent Geller. Go forth with thy word processor and smite them hip and thigh.”

Now I am not claiming that I have *proof* that it was the Almighty who approached me, and you cynical Skeptics may well conclude that the aforementioned description of my interlocutor could apply equally to the distinguished Editor of this inspired journal, but there is no doubt in my mind that I am spreading the Word of God, as He commanded. My story is true because my story says it is. Which makes my claim just as valid as those of Mr Ken Ham, B App Sc, Dip Ed. Or, for that matter, as those of any other self validating claim. ■

## REVIEW

# A Close Look at Sai Baba

Adam Joseph

**Sai Baba's Miracles - an overview****Edited by Dale Beyerstein , 128 pages****Published by Indian CSICOP \$12.95 inc. P & P****Available from Australian Skeptics (Vic) GPO 1555P****Melbourne Vic. 3001**

According to the Sai Baba movement itself there are currently some 6 million followers with over 2000 centres around the world devoted to the promulgation of the message of Sai Baba. Some groups in large cities around the world number in the hundreds. There are scores of publications which contain records of the many public and private talks and discourses given by Sai Baba. In a good many of these, paranormal claims are made, many by devotees but which Sai Baba is apparently happy to endorse. Australia has a moderately large following and, given a lot of the claims made by this highly controversial guru, this book is a valuable source put together by the Indian Skeptics.

Sri Sathya Sai Baba was born in South India in the tiny village of Puttaparthi in 1926. His given name was Satyanarayana Raju. At the age of 14 he claimed that he was the reincarnation of an Indian saint who died in 1918 named Shirdi Sai Baba. After proclaiming his mission, he began teaching on the basis of his newly announced Divine status. Among his followers are the Prime Minister of India and many influential people in politics and the law.

Some of the claims made about and by Sai Baba are as follows:

He is omnipotent and omniscient. "I am everything, everywhere, omniscient, and omnipresent, and so whatever I will instantly happens". (Sai Baba's words, quoted in Sandweiss, *Spirit and Mind*, P 243)

He has resurrected two different people including one who was pronounced dead by two doctors, and whose corpse was placed in a storage room, his ears and nose plugged with cotton to await funeral rites.

He has complete telepathic knowledge of all his devotees' doings, and can advise even scientists, physicians, engineers, etc, on their professional matters.

He has materialised countless small objects - jewellery,

rings, pendants, etc, as well as holy ash from his palms, and holy ash in amazingly large quantities from an empty urn. As well he has given birth through his oesophagus to several inches in diameter egg-like objects, called 'lingams'.

He has performed countless miracles of all and sundry sorts: he has turned water into petrol when a car was empty of fuel; he once dropped petals onto the ground and they spelt out a message in meticulous calligraphy upon landing on the ground; he has made carved glass bowls appear out of thin air; he has pulled statues out of sands; he has appeared in bodily form in two places at once; and on and on in a veritable cornucopia of anecdotes of the miraculous.

He has performed countless paranormal healings and 'rescues at a distance' when devotees of his have been in danger.

His life fulfils ancient prophesies.

This man is, in short, amazing. Like David Koresh , Jim Jones, Ann Hamilton-Byrne, Doris Stokes, Uri Geller, Maharishi Mahesh Yogi, 'Bhagwan' Rajneesh etc, this self-proclaimed miracle man has tried to be so many things to so many people.

The book studies in summary form the paranormal claims mentioned and many others that have been investigated over the years by B Premanand, President of the Indian Skeptics and his local and international associates. It is aimed primarily at those who have heard of Sai Baba's miracles through second-hand sources such as devotees and sensationalist media, and those who are familiar with some of the organisation's publicity but not with the literature of those who have made investigations.

To be omniscient is to be all knowing. Such a claim is impossible to confirm with certainty. Sai Baba, by his own admission and that of his followers, only knows two or three different Indian languages fluently. In his letters to devotees, he has often had to excuse himself for not having written earlier, explaining that he had no translator about so he could not get his letter translated. Many of his writings include apologies and excuses for not being able to travel because of business commitment in India. This is not exactly a sign of omnipotence.

Mr. Radhakrishna had been dead for three days. On the third day, his body was cold, stiff and dark and decomposition was starting to set in. There was weeping and wailing in the house. That afternoon, at about half past two, Sai Baba went to the room and closed the door after himself. In a few minutes, he opened the door and called the people back in, and they saw Radhakrishna sitting up in bed, looking very well and smiling. Baba said to the wife, "I have given your husband back to you. Now give him a hot drink".

- Kanu, Sai Baba, God Incarnate, p.55.

In fact the circumstances were very much different. Radhakrishna had a history of gastric problems and other complications. Instead of being dead as claimed by Baba followers and publicity, he in fact was muttering semi-coherently throughout the night before his alleged resurrection according to witnesses, including family members. The book articulates well the sequence of events where believers allowed themselves to be led by faith in the swami.

Anyone who has read James Randi's *The Truth About Uri Geller*, or Uriah Fuller's *Confessions of a Psychic and Further Confessions of a Psychic*, would know only too well the preparation put in by magician that is unseen by spectators. A psychic who specialises in 'spontaneous' productions has a ready excuse when confronted by a sceptic. He can say, among other things, that the event was as much a surprise to him as to everyone else, and he cannot just reproduce it on command. Or he can maintain that the 'artificiality of the lab' is not conducive to psi powers. Neither excuse is open Sai Baba, who claims to be omnipotent. If needed, he can produce anything anywhere at any time. The Baba excuse is a little different.

How can science which is bound to a physical and materialist outlook investigate transcendental phenomena beyond its scope, reach or comprehension? This is a fallacy on the face of it. One belongs to the material and the other to a spiritual plane. Science must confine its inquiry only to things belonging to the human senses, while spiritualism transcends the senses. If you want to understand the nature of spiritual power you can do so only through the path of spirituality and not science. What science has been unable to unravel is merely a fraction of the cosmic phenomena; it tends, however, to exaggerate its contribution.....

- Sai Baba interview, *Spirit and Mind*, pp. 252, 253

According to one very popular story, Sai Baba was in a car that would not start because it had run out of petrol. He ordered that water be poured into the tank. Lo and behold, the car started and was able to drive away.

Water into the petrol tank? The faithless forgot to check whether the water can contained petrol or water. The order was so instantaneous, the driver was so quick in pouring the

contents of the can and driving off that nobody wanted to be small-minded, so all the faithless joined the faithful and sang his glories. This incident happened 18 years ago. More accurate instances record other times where the Baba's car broke down similarly and had to be transferred to another vehicle, which must be quite embarrassing for any omniscient guru.

Materialisations are the more popular of Sai Baba's miracle reputation. Given that he came from a theatrical family and learnt stagecraft from his earliest childhood, it is not surprising that he uses the basic principles of conjuring to produce jewellery, glass bowls, candles, watches and other objects before the eyes of amazed believers. Unfortunately he has been recorded on video tape making a few obvious blunders. Reproduced video frames in the book clearly show him 'creating' a gold necklace by pulling it out from his left sleeve.

Producing rice, gold rings and other objects don't fare any better when the simple principles are explained. A study of his 'healing' powers reveals nothing more than stories told with a twist by his publicists and followers. For those sceptics who wish to fill in those boring moments at dull parties with a few neat tricks, one could start with this book, maybe even become a sorcerer's apprentice!



## CREATIONISM

# A Recent Creation

Joe Wolfe

**This paper by Professor Joe Wolfe is the text of a broadcast he made for the ABC Science Show in 1990**

Many people argue whether programmes such as this one should give equal time to creationists and to scientists. I intend to argue that the time given to creationists should be more fairly divided among the different schools of Creationism. In particular I protest that recent Creationism is almost never presented in the electronic or print media.

But first let me explain quickly why Creationism is logically superior to science. I appeal here to Occam's razor: the idea that a simpler explanation is preferable to a complicated one. Scientists have thousands of different, often complicated explanations of observations about the universe. Creationists, on the other hand, can explain all features of the entire universe quite simply: the universe is the way it is because that is how God made it.

Scientists may raise whatever "evidence" they like: they may talk about the (apparently old) fossil record and the (apparently ancient) universe. Why are fossils and radioactive isotopes distributed the way they are? Easy: God created the universe complete with those puzzles - perhaps to test our faith.

Thus every observation that one can make is consistent with Creationism. No observation can ever contradict it. Why is it so? One simple answer: that is the way it was created.

This powerful philosophy guarantees Creationism wide credence. The trouble is that the only creationists one hears about are those that believe that the universe was created about 6,000 years ago.

This view represents only a small fraction of the spectrum of Creationism. Recent Creationists, for instance, believe that the world is much younger than 6000 years. I am a Recent Creationist. I believe that the world was created this morning.

It happened at 7:15 am. - I remember it quite distinctly. First there was nothingness and the void, then suddenly a strange buzzing sound, and the world and my consciousness came into being. The whole world appeared in all its beauty, complete, at 7:15 am. Note that my account of creation is just what one would expect from an all-powerful God.

In contrast, the 6000 year creationists have their quasi-evolutionary sequential creation, first the light, then heaven and earth, then land and sea, then the trilobites or whatever and then of course man. And they tell you that a supposedly omnipotent God took 6 days over it!

Quite frankly I do not know exactly how long it took. A friend of mine from the other side of town says that the world

was created at 7:45 this morning so perhaps it was not created instantaneously - or perhaps the clocks were created differently.

But the point is this: both the scientists and the 6000 year Creationists claim that there was gradual development: they seem to doubt the clear evidence that an all powerful God created the universe complete. Both scientists and 6000 year creationists seem incapable of accepting the idea of an omnipotent creator who could create the beautiful universe that we see around us as it is.

Recent Creationists, on the other hand, have faith. Now of course some people will bring up the question of memory and talk about some vague thing called "the past" to try and test our faith. Robin Williams tried to trick me with that one. "Look", he said, "you came in today because you wrote me a letter, and I reserved a studio for you because I remembered receiving that same letter. Isn't it an impossible coincidence," he asked me rhetorically, "that we both remember the same letter - unless you actually wrote it?"

Now of course I did not write any letter last week because I did not exist last week. But neither is it any coincidence that Robin and I were created with complementary memories - it is just an example of the beautiful internal consistency of creation. We were both created with a memory of that letter, just as we were both created with the memory that it was dark last night.

Robin's far-fetched theory about my writing the letter is just an example of his doubting God's infinite capacity for creation. Why should a God who made suns and galaxies (or at least the light which seems to come from them) be unable to create a letter?

Both scientists and the 6000 year creationists seem to set great store on what they think they "remember" from this imaginary "past", without realizing that it is all the work of God. They seem to doubt the divine will. If God was creative enough to make a human brain, why shouldn't he/she/they or it be creative enough to fill that brain with thoughts and memories?

Some people, in a crisis of faith, ask why our memories were created in such excellent agreement. Well, I tell them, what would you expect from a divine creator? But perhaps it is a test of faith. Here there is a comparison with the 6000 year creationists. They will tell you that the confusing distribution of dinosaur bones and isotopes is just a test of faith.

**Continued on p 31...**

## NUMBERS

# Mother Nature can Count to Decimal 1869

Geoffrey H Sherrington

We have heard stories about the counting ability of life forms other than human. There is an old story whose accuracy I do not promote, about an observer of birds raiding a granary. When a person was inside, the birds stayed away. If two people entered and one departed, they still stayed away. Over the course of time, it is related, the observer deduced that the birds could count up to seven people or so, entering and leaving until there were no people left inside. This experiment might or might not have been properly controlled, and hence believable, but it is a neat basis for further such experiments. How about lower life forms?

Consider the simple sunflower and the non-simple concepts of parastichy,

Fibonacci numbers and phyllotaxis. Fibonacci numbers form a series whose next term is the sum of the two before it, thus 1,1,2,3,5,8,13,21,34,55, 89, 144, 233... More of this soon.

Phyllotaxis literally means the arrangement of leaves on a stem. Consider a simple, single stem of a plant which has one leaf growing from it. Another

leaf is emerging higher up the stem. This second leaf can emerge at an angle around the stem that is variously random, a simple angle like 90 or 120 degrees, or a complicated angle that leads to mathematicians writing papers. In Nature it is often observed that the next leaf emerges at a rotational angle of 137.5 degrees with respect to the one before it. Thus, successive leaves trend up the stem in a kind of spiral pattern.

The concept of phyllotaxis can be taken a little further, in this case to the formation of the head of a sunflower. As the florets (the loci of the eventual seed) increase in number as the head grows, they can (and often do) grow by adding new florets to the existing ones at a rotational angle of 137.5 degrees.

The head of the mature sunflower has a large number of

seeds, whose number in the ideal case has grown in proportion to the square of the radius of the head. The appearance of the head can be described as formed from the intersection of two sets of curves radiating from the centre, one set radiating with curves concave to the opposite sense of the other set. Let us call one set 'clockwise' and the other 'anticlockwise'.

These intermeshing spirals are named parastiches.

In another dimension, parastiches are seen around the pineapple, whose skin appearance is governed by the intersection of its clockwise and anticlockwise parastiches.

People have often counted the number of these curved parastiches from plant material such as sunflowers and pineapples. When there are no discontinuities or defects of growth, the number of both the clockwise and anticlockwise

parastiches will usually be a number from the Fibonacci series.

Fibonacci was a Tuscan mathematician who lived around 1200 AD. It is probable that the sunflower preceded his time on Earth, so he did not influence the shape of the sunflower by

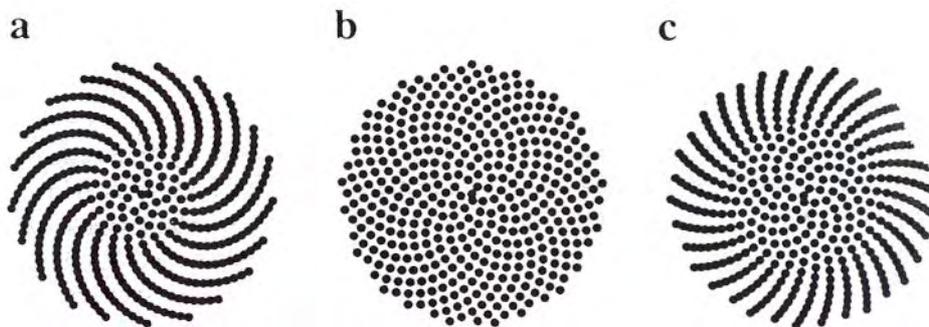


Figure 1. Generating phyllotactic patterns on a disk. These three patterns differ only by the value of the divergence angle  $\alpha$ , equal to (a)  $137.3^\circ$ , (b)  $137.5^\circ$  (the correct value), and (c)  $137.6^\circ$ .

discovering his series of numbers.

It was the other way around. Nature was first. It is easy to simulate the appearance of a sunflower head by drawing dots whose addition is every next 137.5 degrees, and whose packing is close. In the resulting pattern, figure (b) (from reference 1) shows the radiating curves, the parastiches; but you can see them on a pineapple in any case. You can ink in these parastiches for clarity and count them. Or you can cross-section a pineapple and count them.

The patterns on either side of (b) are fascinating, because as the legend says they are drawn with divergence angles near to, but not quite, the magical 137.5 degrees (which itself

Continued p 31...

## SETTING THE RECORD STRAIGHT

## The “Mars Effect” Controversy

Harry Edwards

The name Michel Gauquelin and the “Mars Effect” is often invoked by psychics to try to discredit CSICOP (The Committee for the Scientific Investigation of Claims of the Paranormal) and sceptical groups generally. The issue was again raised by Simon Turnbull of the Australian Psychic’s Association in a radio interview with Adam Joseph on 3RRR in Melbourne on June 19.

The following is a brief resumé of events which took place nearly twenty years ago and are still as contentious today as they were then.

Prior to the formation of CSICOP in May 1976, an article critical of astrology, by LE Jerome, a science writer and engineer, appeared in the September/October 1975 issue of the (American) *Humanist* (Ed Paul Kurtz), which questioned claims made by the French cosmobiologist Michel Gauquelin. Gauquelin’s data showed an above chance expectation that France’s outstanding athletes were born when the planet Mars was in either of two certain key sectors of the sky. This hypothesis became known as the “Mars Effect.”

The January/February 1976 *Humanist* published Gauquelin’s detailed rebuttal together with an article critical of astrology by astronomy professor George O Abell.

The same issue contained an article by statistics professor Marvin Zelen that proposed a new test of the Mars Effect hypothesis, using Belgian and French data. This became known as the “Zelen test.”

Notwithstanding some data-gathering problems in carrying out the Zelen test, Gauquelin concluded that his findings supported his hypothesis. However, in a companion paper, Kurtz, Zelen, and Abell ( now co-Chairman and Fellows respectively of the newly formed CSICOP) **while acknowledging that the results showed that provided one had a high prior belief that there is a Mars Effect then the Gauquelin data would serve to confirm this prior belief**, (My emphasis throughout) they also raised several serious questions about the data and cautioned that the results should not be considered a clear verification of the Gauquelin claims.

In 1976 Abell wrote, “If all of Gauquelin’s work is rechecked and his results hold up, then it is necessary to repeat the experiment with a new sample, say in the United States.” Dennis Rawlins (on the editorial board of CSICOP) played a role in the US test by performing the astronomical calculations **-the results of this test published in the Winter 1979-80 *Skeptical Inquirer* were negative; that is, if there is a Mars Effect it does not exist for outstanding US athletes.**

Rawlins expressed doubts about the Zelen test in so far as it ensured a pro-“Mars Effect” and also wrote in the Winter 1978 *Skeptical Inquirer*, **“It should be clearly understood that the CSICOP as a body never had anything to do with the HUMANIST Zelen test “challenge” published before the committee was founded.”**

The relationship between Rawlins and the Committee deteriorated for several reasons mostly unconnected with the issue at hand, and at the 1979 annual meeting in New York City the committee opted not to re-elect Rawlins.

Subsequently, in the October 1981 issue of *Fate* magazine, Rawlins, in a long article titled “sTARBABY” charged CSICOP with an attempt to “cover-up” the Zelen test results, and made many false, inaccurate and misleading assertions.

In a statement by the CSICOP Executive Council in response to Rawlins, apart from granting that there may have been problems with the Zelen test, they added that such difficulties are not only common, they are expected.

The above is an extremely abbreviated version of the “Mars Effect” controversy which, with unsubstantiated assertions and out of context quotations, has been used by those who wish to discredit an organisation dedicated to the critical investigation of extraordinary claims.

Perhaps Simon Turnbull should re-assess **his** facts before he gets a phone call from CSICOP.

For a more comprehensive coverage of the Mars Effect controversy, the following references are recommended and can be found in various issues of the *Skeptical Inquirer*.

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**... Recent Creation from p 28**

I do not presume to understand the Divine Design, but perhaps our whole remembered and recorded "past" is a test of faith.

Yet the truth is that you, I and everyone else were created complete with our sincerely believed memories of a world which did not exist before this morning. Going back to the fossil record for a moment, I am not entirely convinced that there is a confusing fossil record. Indeed, if you speak to a scientist, nearly all of them will admit that they have never actually seen the fossil strata: they have only read about them in books and journals - books and journals that were only created this morning! The real fossil record - if there is one - may be quite different.

The 6,000 year ago creationists are just as bad: they base all their beliefs on what is written in a book. On a single book with human authors, human translators and human editors. Can they seriously doubt that an omnipotent God is capable of creating books? What sublime presumption to assert that puny human authors and publishers are able to do that which a god cannot!

So beware of 6000 year creationists. They will tell you about an all powerful Creator and then tell you which bits of the world He created and which bits were made by humans. They, like scientists, have no faith.

But be even more aware of scientists. They make a big fuss about how their science doesn't just explain, but make predictions as well. Look, they say, an aeroplane will fly if you build it according to scientific laws, it won't fly if you don't. Well before we start taking that argument seriously, let's see them actually use their science to make a plane that flies! The planes that were divinely created at 7:15 this morning seem to fly quite well. But wait until humans start trying to make some. Would you trust your life in a plane made according to the laws of human scientists? ■

**... Mars Effect from previous page**

Report on Claimed "Mars Effect": Results of the US Test of the "Mars Effect"

Are Negative. 4(2):19-26

" Response to the Gauquelins. 4(2):44-63

" The Contradictions in Gauquelin's Research:

" Rejoinder by Kurtz, Zelen, and Abell (F). 4(4):62-68  
Rawlins, Dennis. Dennis Rawlins Replies. 3(2):72-73

" Report on the US Test of the Gauquelins' "Mars Effect" 4(2):26-31

" Remus Extremus (F). 6(2):58-65 Statement by CSICOP Executive Council in Response to Rawlins. 6(2):66

Note: Each of the above issues of the Skeptical Inquirer is available for \$10.00 from Australian Skeptics, PO Box A2324, Sydney South 2000 ■

**...Mother Nature from p 29**

is rounded to the nearest half degree here.)

Ridley (reference 2) writes :

"While it is reasonable to assume that the plant could contain genetic information determining the divergence angle to some extent, it is completely impossible for this alone to fix the divergence angle to the incredible accuracy occurring in Nature, since natural variation in biological phenomena is normally rather wide. For example, for the 55- and 89-parastiches to be conspicuous, as occurs in most sunflower heads,  $d$  (the convergence angle) must lie between  $21/55$  and  $34/89$ , a relative accuracy of one part in 1869"

Several puzzles remain for those with inquiring minds. First, why are the parastichy numbers equated with Fibonacci numbers and not with any other mathematical series?

Second, is the anticlockwise parastichy always greater than, lesser than, or neither than the clockwise parastichy?

Third, if there is a constant relationship, does it change between Genera of plants? (If it is predictable for the pineapple, for example, one could do a party trick by telling guests which side of their pineapple slice is up.)

Fourth, is the dominant parastichy the same in the northern hemisphere as in the southern, a la rotation of bathwater argument?

The fifth point needs a lead-in. There is a delightful vegetable which around Melbourne is known as a Broccauli. It resembles a green cauliflower, except that when you break it down you are left with nicely geometric cones resembling broccoli, rather than irregular white masses. Each of the cones can be viewed from the top, like a sunflower head, to observe its parastichy; for each cone is made up of smaller cones which spiral away from the peak of the cone. Each of these smaller cones, when broken off for examination, is a smaller replica of the parent cone; and so on for several replications. This is a wonderful example of Nature building macroscopic objects from the repetition of smaller cell designs and the Broc-cauli deserves a paper of its own, for replication infers to me a simple binary counting system rather than one counting to 1869.

This leads us to the final question. After boiling the Broccauli for 20 minutes, is it best served with a bechamel sauce or a *sauce au gratin*?

**References.**

(1) Przemyslaw Prusinkiewicz & Aristid Lindenmayer (1990). *The Algorithmic Beauty of Plants*, Springer-Verlag, New York. This book has beautiful pictures of computer-generated numeric pictures of plants, but the maths are reasonably heavy.

(2) JN Ridley (1982). Packing Efficiency in Sunflower Heads. *Mathematical Biosciences*, 58:129-139. ■

## HISTORY

# Charles Dickens - Sceptic!

## Harry Edwards and Charles Dickens

Thumbing through a mouldering tome (circa 1853), I discovered that Charles Dickens had pre-empted my observations on Old Moore's Almanack (*the Skeptic* Vol 14, No 1, p 46) by nearly a century and a half.

Francis Moore, the 19th century astrologer, has long returned to dust, but the vagueness, ambiguity, and the general inability to forecast the future by observing the position of the heavenly bodies as recorded in this old manuscript, lives on.

Before proceeding however, I offer my apology to Dickens lovers for the occasional ellipses, reluctant albeit necessary interpolations to limit the author's comments to passages most relevant to Skeptics.

Writing in *Household Words*, (No. 138, Saturday, November 13, 1852), a weekly journal conducted by Charles Dickens, the author had the following to say about Francis Moore, Physician:

"Whatever has been done by our fathers, certainly it is not we who are disposed to stone the prophets. Such prophets we have, we hear.

"Moore's Almanack for many years lies now before us, and should tell us the world's history in whispers from the stars. The sharp look-out kept by those little eyes that peer over the world, enables them, of course, to look a-head, like a bright throng of Sister Annes, and tell the curious astrologer what they see coming. Here, for a string of years, is the connected chronicle of things to come; and here, for ten years lies behind them, in that strict record the Annual Register, the dogged chronicle of things that came.

"That is all very stern, if we propose in a cold way to say, here is the chaff and there are living coals; now let us put them side by side and make comparisons...

"Now we must quit the subject of these personal associations and be stern. Here is the year 1815. O thou dull Moore, or Are the stars dull, that they don't exult in the "æstival or summer quarter," over an event worthy to be boded in the skies?- if skies bode anything at all beyond immediate probabilities of fine and rainy weather. For the æstival quarter of the year 1815, Moore's Almanack predicts that 'A certain emperor seems gaining ground, and in favour with the French nation or French Government, to the mortification of a certain exalted family. The arms of England will be mostly successful or victorious, notwithstanding Britannia has been, and may be still, in mourning for many sons,' &c. For October, 1815, the astrologer saw 'Some glimmering hope of bettering our

Misfortunes, and converting our Fears into more peaceful and better days.' For November he suggested 'Expectation of better things, but perhaps not the things themselves.' O Francis Moore, in what November fog were future things enveloped when you strained forward to catch sight of the great deeds of 1815- the fall of Napoleon, the close of war, and the commencement of another epoch in the story of the world-and yet could do no more than all your neighbours did, expect better things, or rather not the things themselves, whatever they might be, but you expected expectation of them.

"Now let us be methodical; and, beginning with the year 1840, follow the prophet through the ways of history so far as he adverts to them, and we have leisure to apply a test to his fore-knowledge. We are soon perplexed by finding that our Moore is by no means of a free and open nature. He certainly takes pains not to commit himself. After the usual moralities (might we venture to say Moore-alities) by way of preface, the great Astrologer informs us solemnly, as his judgment for the year 1840, that 'On taking a prospective review of the various motions and the relative positions of the heavenly bodies, together with the probable effects deduced therefrom, there is reason to anticipate-' breathless expectation hurries to read on,- "that the year 1840 will be chequered with many events, both as respects nations and individuals. Certainly, different things happened in the year 1840, and it is true that events occurred to individuals as well as nations.

"The relative positions of the heavenly bodies did not, up to that point, mislead the sagacity of Francis Moore, Physician. There will be wars, he says, and rumours of wars, which 'relate at this time to Russia, poor Poland, fine but brutalised Spain, Portugal, Holland, and Egypt.' Well, there was Beyrout bombarded in that year, and Saint Jean d'Acre fell; the war in Syria-which country the stars did not name-related certainly to Egypt. The other countries, so far as war was concerned, went on in their usual way; but the King of Holland abdicated. The stars did not mention that. The King of Prussia also died without a warning from the stars; though Francis Moore had ventured to ask on his own account, 'How long will the old king last?'

"Our Queen married in February; the marriage in high life was not announced, however, in the high quarters which Moore consults; nor did the Almanack foretell the birth of the Princess Royal. These were the events most prominent in the in the year 1840 to the minds of Englishmen...

“In the year 1841 Moore’s Almanack appeared with a prophecy almost distinct. The prophet evidently had a notion. In his hieroglyphic, which he never explains but leaves always ‘to the ingenuity of the reader.’ there was something that would serve very well for Walmer Castle, and on the sad November page we are told that “A great general stoops to fate; death alone convinces us that all men are vanity.’ In the prophecy on the æstival quarter it said that *‘The grim king of terrors is stretching forth his gigantic arms; he strikes down the greatest.’* Moore went into italics on the subject, but the stars were out again, though they luckily could save their credit by asserting (through Francis Moore, Physician) that they meant General Harrison, President of the United States, who died early in the spring.

“The Annual Register tells us of the dissolution of Parliament and fall of a ministry upon its reassembling in the autumn—a fact which the prophet might in common kindness have hinted to a nation of electors. Great events also were taking place in India and China, about which the prophet might have surely told us something. On the other hand it was polite in him to state that ‘The position of the presiding star of my fair readers both in this and the preceding ingress requires them to be more than usually cautious against wet feet and evening dews.’”

“For the year 1842 Moore’s Almanack, taking the usual sweep, prophesied ferment and agitation in India, Mexico, Greece, Prussia, Saxony, &c. ‘France, Italy and Greece,’ he said, ‘are uneasy.’ Except this casual mention of India, with Mexico, Saxony, and so on, among the agitated places, there was not a ray from the stars to warn us of the terrible disasters in Afghanistan, and there was no hint whatever on the Chinese war, although it was in the year 1842 that our squadron entered the Yang-tse-Kiang, and the terms of a treaty of peace were settled...

“In that year there were in England the Corn-law debates, and Sir Robert Peel was burnt in effigy in our manufacturing towns. That was the year of the tariff and the income tax. That was the year of two attempts on the Queen’s life. That was the year of a great earthquake in St Domingo, by which ten thousand lives were lost. That was the year of the great fire of Hamburg. Not a syllable was in the Almanack to touch in the remotest way on any one of these great facts, unless it be the prophecy made for the autumn quarter that ‘Many things will turn up which will lead the thoughtful mind to serious reflection.’ Many things did turn up which lead us to the serious reflection that Francis Moore knew nothing of events to come.

“We have seen that Francis Moore did not predict what happened. In the same year there were one or two things which the wise man did predict; they of course did not happen. ‘The fate of Turkey.’ the stars cried, ‘is already sealed.’ ‘Turkey is in a tottering condition.’” Turkey stands where it is even to this day. ‘The system of Louis Philippe seems now wound up to its stretch; and therefore some great change may shortly be experienced.’ Astrologers have always safely

predicted change in France, agitation in Ireland, discontent in Italy, and so on. But in this case ‘the system of Louis Philippe’ had five years to run, and Mr Moore was very much deceived by some too hasty planets.

“For the year 1843 Francis Moore predicted, with his usual courage, that ‘From the whole I should infer that we shall have some good intermixed with the evil, which will sooth the minds of man,’ &c.; he predicted, with an ambiguity most creditable to him as an oracle, that there might or might not be some atrocious murders at the close of the spring. The planets left the matter doubtful, he said. ‘The dark cloud which I named in 1841 as hanging over Turkey, is now rapidly increasing in opacity, and must shortly burst on its devoted head.’” The prophets wage incessant war with Turkey; nothing, however, comes of it. For the same year, 1843 Francis Moore predicted a deficiency in the flood of the Nile, which did not happen, and claimed (upon no better ground than we have already examined) to have predicted the disasters in India in his last Almanack; at the same time, however, he did not make good his case by predicting, or even hinting at the important affairs in India which were to follow, and belong to the history of the year 1843;—the battles of Meeanee & Hyderabad, the victory at Maharapoor. “For the year 1844...the noisiest event of that year was the French war with Morocco, a matter one might think specially concerning a Moore’s Almanack, but there is not the remotest hint of such an event.

“For 1845 Francis Moore—still carrying on his private war with Turkey—said (and was again wrong in saying) that ‘The final overthrow of the Mahometan despot at Constantinople may ere long be expected, when a better form of Government will be established in that empire.’” ‘Jupiter at the end of spring’” the Astrologer said—in 1845, be it remembered—‘passes over to the ascendant of Ireland, and will benefit that country; which I hope, is on the eve of experiencing better things.’ This was the astrologer’s prediction of the terrible potato famine! “For the year 1846, Moore’s Almanack did little in the way of prophecy.

“The year 1847 was marked, according to the Annual Register, by the dreadful condition of Ireland...Moore prophesied also, safely as he thought, judging from the past, danger of war with America ‘about a piece of land.’” Of course, nothing of the kind happened...the conjurer announced, for the year 1847, that ‘Some momentous intelligence arrives from India.’ India, however, perverse stumbling-block to guess masters, again disturbed Mr. Moore’s credit. The affairs of India for 1847 are characterised in the Index to the Annual Register by these words, ‘Profound tranquillity throughout the year.’

“For the year 1848, the Almanack really prophesied, so far as everybody foresaw at the end of 1847, that ‘certain great changes are likely to take place affecting some of the crowned heads of Europe.’ These changes however, were to ‘bring about a congenial state of things;’ we don’t think that the Heavens—meaning the stars—themselves know whether they

may be considered to have done so... So far were the stars from hinting to the prophet the real truth, that he was led to predict for October 'Much bustle of a friendly and benevolent nature.' The true history of 1848 is quite fresh in all memories.\*

"For the year 1849, Francis Moore, Physician, did not venture to commit himself to very much more than the safe prophecy that 'Our cabinet will be frequently engaged in matters relative to the great struggle and contention'" (or, the bustle of a friendly and benevolent nature?) 'in the European states.'

"When the time came for a really safe hit at Russia, the stars missed fire. Mr. Francis Moore, in wondering about the world after a far-fetched prognostic, did not stumble upon California or Australia; the gold discoveries, which promise to effect a small revolution of their own, came heralded by not a breath of portent in the Almanack.

"Serious inquiry of this kind may seem very absurd to the thousands who know well what ground there is for astrological pretensions; but, there are many in this country, and there may possibly be some among our readers, to whose profit it will be, to see distinctly that even Francis Moore, the safest of astrologers, who sticks to generalities as much as possible, and feels his way and takes great pains never to get out of his depth, errs as grossly as it is possible for a man to err whenever he attempts to tell what lies behind the blanket of the dark. Other prophets who attempt to tell more, err more, and would appear even more ridiculous if brought to the same test by which we have now tried ten years of Moore's Almanack."

Charles Dickens' unrestrained scepticism was not confined to deriding the prognostications of Francis Moore. In a later edition, he dismisses the Ghost of Cock Lane, the Fox sisters and mediums and seances with the same ebullience. He would have been a worthy member of any Skeptics organisation.

\*For those readers unfamiliar with the events of 1848 here are some. Mexican-US war ends. Revolutions in Sicily, Vienna, Venice, Berlin and Milan. Revolts in Paris, Parma, Cracow, Prague and Naples. Communist rising in Paris. Second Sikh war begins. Sardinia declares war on Austria. Prussia invades Denmark. German Confederation suspended by German National Assembly. US obtains Texas, New Mexico, California, Nevada, Utah, Arizona and parts of Colorado and Wyoming from Mexico. Russians invade Danubian Principalities. Boers defeated at Boomplatz by British forces. Count Rossi, Papal Premier assassinated. "Friendly and benevolent nature?!" ■

## OBITUARY

# Karl Popper 1902-1994

## Rafe Champion

Karl Popper, the great rationalist and sceptic, died in September. His restless and fretful spirit is finally laid to rest, leaving to posterity a magisterial contribution to scepticism and liberalism.

Popper was one of the fiery Viennese particles who scattered around the globe during the 1930s. He came down under to the Canterbury College in Christchurch and he very nearly moved on to the University of Sydney in 1945 but local agitation about the appointment of foreigners gave him second thoughts and he went to London instead.

As a youth he pursued wide-ranging studies, from psychology to physics, until he graduated as a high school science teacher. He helped Alfred Adler as a volunteer social worker in the slums and he gained a certificate in cabinet-making, inspired by Tolstoy's doctrine that intellectuals need to keep in touch with manual labour. In his spare time, in addition to skiing and mountain climbing with his wife, he wrote a revolutionary book on the philosophy of science, printed in German in 1934 and some decades later as *The Logic of Scientific Discovery* (1959). He showed that the most effective use of evidence is to test scientific theories, not to purport to verify them or to assign numerical probabilities to them.

In New Zealand he produced the two volumes of *The Open Society and its Enemies*, his war work as he called it, a critique of various ideas which undermine our traditions of democracy, rationality and tolerance. This work has recently achieved huge recognition in Eastern Europe and the Russian translation is selling like hot cakes.

His ideas did not penetrate the academic mainstream of philosophy as he might have hoped and he became more at home in the company of scientists. Nobel Laureates such as John Eccles and the late Peter Medawar gained great inspiration from his thoughts, as did many scientists of lesser note, especially in New Zealand. There, a philosopher's newspaper article in the 1980s which criticised Popper attracted a storm of letters to the editor from elderly scientists.

Popper made many enemies by his forthright criticism of received opinions and he antagonised many friends by his criticism of deviation from his ideas. These factors have unfortunately limited the spread of his thoughts. As David Miller explains in *Critical Rationalism: A Restatement and Defence* (Open Court, 1994), there is still much to be learned from Popper despite the widespread opinion that his ideas have been overtaken or refuted by recent developments in the philosophy of science. ■

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## RELIGION

# Nietzsche's Zarathustra and the Historical Zoroaster

David Miller

In 'Ecce Homo' Friedrich Nietzsche (1844-1900) claims, in reference to his work, 'Thus Spake Zarathustra', "My concept 'Dionysian' here became the highest deed". If Nietzsche had named his hero after the god Dionysos, rather than after the prophet Zarathustra, I would have had one less quibble with him.

The historical Zarathustra, whom we know by the name that the ancient Greek historians gave him, Zoro-aster, not only represented quite different values to those given by Nietzsche to his fictional hero, but is also accredited with originating a 'moral and ethical' religion, Zoroastrianism, whose modern-day remnant are the Parsees of Bombay.

This is the religion from which, some historians claim, the Jews and Christians borrowed the majority of their concepts, ie the creator god, Heaven and Hell, Satan, individual judgement, the final battle between the cosmic forces of Evil and those of Goodness (led by a messiah), followed by the standing up of the corpses, the general Last Judgement and heaven on earth, etc.

This latter point brings me to my second quibble. Nietzsche blamed the Jews and their offshoot, the Christians for creating a religion based on, what he called, 'slave morality'. However, on the contrary, it was Zoroaster himself who at approximately 1200 BC gave forth a revelation which made salvation dependent on the individual's own moral behaviour, and not on the amount of booty the individual had sacrificed to the amoral war-gods. My third quibble is with the Nazis and their precursors who misused Nietzsche's writings to extol an imaginary white Aryan race.

The historical Zoroaster was born into the Spitaman clan in Khwarezmia, south of the Aral Sea. His people, the Iranians, were named after the Aryans. The Aryans are those among the Indo-European speaking peoples whose mythologies refer back to a pre-historic homeland called Airyanem. The Parsee tradition places this homeland in present-day Kazakhstan. This location is immediately to the north east of the area designated as the Proto-Indo-European homeland by many historians and linguists. The proto-Indians moved south out of the Aryan homeland and invaded India in 1500 BC.

The proto-Iranians followed soon after, moving south west and then across the Iranian Plateau toward the Iranian Plateau,

Mediterranean. With their bronze-age weaponry and horse-drawn chariots, these nomadic pastoralists were fairly invincible. Inspired by their war-gods, these warriors were hard fighting and hard-drinking pillagers who destroyed the civilisations in their path. In the Rigveda the god Indra is pictured as destroying the 'water dragons', that is, smashing the aqueducts. This behaviour by his own people Zoroaster found horrifying. He declared it a manifestation of absolute evil.

Nietzsche remarks in 'Ecce Homo' that, "... the poets of the Veda were priests and not even fit to unfasten Zarathustra's sandal ... ". The irony here is that the historical Zoroaster had himself been a Vedic priest. Or rather, to be more precise, Zoroaster had been a priest of that religion held in common by the proto-Iranians and the proto-Indians which, after it was taken into India by the invaders, became known later as 'Vedic'.

The creation myth of this religion depicts its gods as creating an original man, bull and tree. The gods then sacrifice these initial three in order to spread their seed far and wide to cover the world with humans, cattle and vegetation. Originally, life after death was seen as a grey joyless underground existence.

Eventually the belief arose of a heavenly paradise. Salvation was dependent on the amount sacrificed to the gods but was restricted to warriors and priests. Concomitant with this belief, funerary procedures changed from burial beneath the ground to that of (in India) cremation. The 'corrupt' flesh was burnt off, allowing the spirit to rise to paradise, and the bones were buried with the expectation that a year later they also would rise to paradise to be clothed in a new 'heavenly' body which would encase the spirit. It was believed that the spirit alone could not fully enjoy the pleasures and sensations of paradise. On the Iranian plateau, at a later stage, exposure of the corpse to scavengers was used as the means of disposing of the corrupt flesh.

## Mazda

Zoroaster's reformation of his old religion commenced with a revelatory vision of his being led into the presence of the moral god of wisdom, the Lord Mazda, Ahura Mazda, later known as Ohrmazd. Mazda informed Zoroaster that originally

there had been two diametrically opposed equal and eternal spirits, himself, on the one hand, representing Goodness and Light, and on the other hand, the hostile spirit, Angra Mainyu, later known as Ahriman, who represented Evil and Darkness.

Although it was the moral duty of Goodness to destroy Evil, Mazda could not destroy Ahriman as both were in spirit form and hence invulnerable to each other. So Mazda decided to create a material world knowing that Ahriman would naturally decide to attack it and would need to adopt material forms to do so and would consequently become enmeshed and trapped within that world, and hence be himself vulnerable to attack. So Mazda enlisted the aid of two other moral gods, Mithra the god of loyalty and Varuna the god of truth. Together they created the earth and the heavens, as well as the initial man, bull and tree. The ground was flat, it was constant noon, there was no death.

As expected Ahriman attacked. Aided by the amoral gods (such as Indra), the forces of Evil destroyed the initial man, bull and tree, so inaugurating death, time, darkness and the motion of the heavens. They attacked the ground making hills and valleys, and went on to sully as much of Creation as they could. The water of the sea they turned salty. They caused things to go mouldy, to putrefy, to rust, to deteriorate, to wither. They created disease as well as all of the varieties of animals, reptiles, insects, vermin, and vegetation that could be designated as a nuisance by humankind. Finally, that special symbol of divine order, fire, they sullied by making it smoky.

The forces of Goodness rallied to the defence of the good Creation land and soil, sea and rivers, sky and air - all created for the express purpose of destroying Evil. The good gods rescued the remains of the initial man, bull and tree and, as in the old creation myth, covered the world with humans, animals and vegetation. These, especially the humans, were to be soldiers in the defence of the good Creation, as well as playing their part in the defeat of Evil.

Thus in Zoroastrianism there is no mystery as to why its god Mazda created, nor any mystery as to the role required of each individual. Even the lowliest can participate in the great fight by cleaning up dirt and decay, and in so doing, push back the forces of Evil. Nevertheless, each individual is free to make the choice between Good and Evil. To be good means good thoughts, words and deeds. To be evil means following the Evil gods, the amoral gods, the gods of deceit, plunder and looting.

Upon death the soul of each individual is judged by a panel of three divinities. Those judged evil are sent to Hell, to the nether-world caverns where Ahriman is trapped. It is conceived to be a place of torment. Those souls judged to be worthy are raised to sunlit paradise to await the final defeat of Ahriman and the forces of Evil. Following that defeat there will be a final judgement. The souls, good and evil, will return to their bones and be encased in 'new' bodies. The gods will melt the ore in the mountains (this was the bronze-age,

remember) and its flow will engulf all. To the virtuous, the stream will be like warm milk. However, the wicked will be incinerated, body and soul, and the molten stream will then flow down into the caverns of Ahriman, finally destroying him. The virtuous will remain, together with the moral gods, in an eternal paradise on earth.

As is often the way, Zoroaster's clan did not take a blind bit of notice of him. He managed to obtain only one convert. So he journeyed to another area and converted the Kayanian tribe. This caused the surrounding tribes to violently object. Not only had Zoroaster decreed that their warrior behaviour was evil, but he had stolen away their reward of paradise, as well as condemning them to an after-life of torment in Hell. Zoroaster was also offering, horror of horrors, the chance of paradise to women, children and lowly herdsmen. So they attacked. Unfortunately for them, they lost.

Zoroastrianism spread south, then west. A belief arose that at a future date a human Messiah would come to lead the cosmic forces of Goodness into a victorious final battle against the forces of Evil. This emphasised humanity's vital role in the defeat of Evil. The Messiah would be born of a maiden who had bathed in Lake Kasaoya (Lake Hamun on the present-day Afghanistan/Iran border) and been impregnated by the seed of Zoroaster therein.

### Classical and Biblical

Zoroastrianism enters classical as well as Biblical history when Cyrus, King of the Persians, defeated his father-in-law, Astyages, King of the Medes, in 550 BC. This created the Achaemenian Empire which stretched eastward to the borders of India, and in the west swallowed Babylonia and Egypt and attacked Greece. This latter occurrence we know only too well, as our culture is permeated by the Greek version of these events.

The Achaemenian Dynasty led the first of the three Zoroastrian empires which were to span the next thousand years. During the Achaemenian period the Persians adopted Aramaic as their lingua franca; their own language they considered too noble for such purposes. The Zoroastrian texts remained in oral transmission, writing being seen as unholy.

Cyrus was tolerant of the religious beliefs and practices of the various groupings within the areas that he had conquered. This was typical of the Achaemenian Dynasty. However, they were not tolerant towards any of their own people, the Aryans, who were found to be worshipping the Devs, as the amoral gods were called. As we find detailed in the Bible, Cyrus sent the Jews, exiled in Babylon by Nebuchadnezzar, back to Jerusalem to rebuild their Temple.

Later, King Artaxerxes 1 sent Ezra to Jerusalem in 456 BC to be Commissary for Jewish Religious Affairs. (Ezra has been associated with the Priestly Code, the fourth strand in the Pentateuch). He was followed in 444 BC by Nehemiah whom Artaxerxes appointed as Governor of Jerusalem. These two were the great revivalists of Judaism, yet both were quite

familiar with Zoroastrianism; indeed, Nehemiah had been a cup-bearer in the Persian Monarch's household. There was quite an amount of overlap between the purity laws of the two religions, and the Jews could not but have been impressed with their imperial benefactors.

Over the next few centuries the Jews were increasingly influenced by Zoroastrian religious concepts, particularly the radical elements among the Jews. For example, in the Old Testament's Book of Job, although Satan appears as a doubter among the angels, there is still no resurrection of the dead, no eternal salvation or damnation, all reward is in this world. However, by New Testament times, St Paul was able to split the Council of the Jews by declaring his belief in the resurrection of the dead and so obtained the support of the Pharisees against the Sadducees. The ensuing rumpus panicked the Romans into rescuing Paul from the Council chambers. (Acts 23.6-10). Some scholars go so far as to claim that the name Pharisee is derived from the ancient name for Persia, Farsis. In 331 BC Alexander the Great overran the Achaemenian Empire. Although during the fighting many Zoroastrian priests and temples were destroyed, it was not Alexander's intention to suppress the religious beliefs of those he conquered. Rather, some say, it was to spread Greek culture and to form a marriage of east and west. Others claim that the conquest was for gain and glory.

After Alexander's early death his Empire was divided amongst his Generals, with the Zoroastrian areas falling under the control of Seleucus. On the eastern edge of the Seleucid Empire, Parthia, under its Arsacid Dynasty, arose to Zoroastrian hegemony, finally conquering the Seleucids in 141 BC, and going on to be Rome's major adversary. The Arsacids were quite tolerant of religious diversity. Although sullied with Hellenistic concepts, it was during the long Parthian period that a start was made on the writing down of the orally transmitted Zoroastrian texts.

The Persians once more gained Zoroastrian hegemony when Adashir defeated Ardaban V, the Parthian King, in 224 AD, inaugurating the Sasanian Dynasty. The Sasanian Empire used a fervent Zoroastrianism, purged of Hellenistic and Arsacid influences, as a religious ideology with which to rally their people against their Roman enemies. The Romans were so impressed with this use of religion that they attempted to do the same, firstly with Mithraism, and finally with Christianity. During the Sasanian period the surviving Zoroastrian texts, both written and oral were transcribed into the Pahlavi script. Pahlavi was Middle Persian laced with Parthian.

### Manichaeans

An interesting religious development occurred within the Sasanian Empire during its early days with the advent of the Babylonian prophet Mani in 240 AD. Manichaeism is the only form of Gnosticism to become an exoteric religion, and a world-wide one at that, lasting a number of centuries. Mani

reformed the Zoroastrian creation myth.

The problem with the moral stricture that Good must destroy Evil is that, from a pacifist viewpoint, the action taken by Goodness to achieve this end makes it evil too. So Mani has Evil take the initial action by attacking the Light (Goodness) and consuming part of it. By so doing Evil drugged itself, enabling the forces of Goodness to build the universe out of the bodies of the drugged forces of Darkness.

The purpose of this universe is to act as a machine with which to extract the particles of Light out from their mixture with Evil. The forces of Darkness counteracted by generating the human species, within whose bodies the particles of Light were incarcerated, as Soul. An additional Evil stratagem was the use of re-incarnation as a means of retaining Soul in their possession.

Into this reformation of the Zoroastrian creation myth, Mani introduced Judaeo-Christian elements, by naming the first human couple as Adam and Eve, as well as naming as Jesus the particular emissary of Light sent to enlighten the pair. The Zoroastrian priesthood succeeded in having Mani executed for heresy in 277 AD and getting Manichaeism suppressed within the Sasanian Empire. (For Manichaeism and the various forms of Gnosticism leading up to it, I recommend, 'The Gnostic Religion' by Hans Jonas, Beacon paperback, 1963).

St Augustine (354 - 430 AD) was a major influence on the development of Christianity. He had been a Manichaeian in his youth. But Augustine failed to make Christianity into as ethical a religion as Zoroastrianism, let alone Manichaeism. In Zoroastrianism the suffering in the world is justified by the inability of Goodness to destroy Evil without there being a world history. However, in Christianity, for reasons of mere self-aggrandisement, Goodness, despite having the ability to destroy Evil, deliberately delays that destruction (and hence allows the suffering of history) in order to delude Evil into believing that Satan can seduce the majority of the world's souls and win the 'game'.

The Muslims conquered Persia in the 7th century AD. Not realising that the various religions of the 'People of the Book', including their own, had borrowed so much from Zoroastrian concepts, the Muslims often treated the Zoroastrians as infidel. By the tenth century only a remnant remained. A group of Zoroastrians from Khorasan in Parthia journeyed by ship to Gujarat to seek a new life in India. They prospered. We know them as the Parsees of Bombay.

It was mainly through European contact with the Parsees over the centuries that Western scholarship became aware of Zoroastrianism. However, a variety of theories were put forward by these scholars. In 1700 Thomas Hyde, an Oxford Orientalist, concluded that Zoroaster had been a strict monotheist sent by God to repeat the work of Abraham among the ancient Iranians. In 1760 Anquetil du Perron made a

Continued on p 39...

## REPORT

# Nostradamnfoolery!

Steve Roberts

In 1555 Michel de Nostradame (N for short) wrote a book of astrologically obtained prophecies, with a moving preface to his son which clearly stated that they should all be fulfilled within the son's lifetime. Despite this, people keep dredging it all up and re-interpreting it.

N wrote his prophecies in mediaeval French, using terrible handwriting, and since he lived in politically difficult circumstances he deliberately made them obscure and allegorical. He also did not bother to arrange them in any kind of order, and expressed them all as rhyming four-line verses (quatrains). So you can read anything you like into them; for example:

*Le tremblement de terre a Mortara Cassich,  
Saint George a demy perfondrez  
Paix assoupie, la guerre esveillera,  
Dans temple a Pasques abyssmes enfondrez. (IX,31)*

Three different books have a go at this as follows:

(1) The ground will be shaken by terrific artillery fire (Mortara with a small M, and change a to par); tin-bearing (Cassich??) England (St George) will almost be defeated; a sleepy peace will be woken by widespread war; on Easter Day a great cathedral will be hit by a bomb. (Obvious WWI or WWII implications, apart from the fact that no great cathedrals were particularly hit by bombs at Easter).

(2) Earthquakes, which indicate that the date is in May 2005, when a planetary alignment will occur, at Mortara (a town 23 km SE of Novara, Italy); during the progress of World War III, England will be flooded (perfondrez) and the Vatican (temple) will be destroyed by fire or tidal waves, giving the last Pope further tribulations.

(3) There will be earth-shaking war at Mortara; by a trap (cassich) half the Italian army (symbolised by the Company of St George, a regiment of condottieri) will be overthrown (perfondrez); peace being weary, war will break out again; disaster in the Catholic Church at Easter.

The author notes that something like this did come to pass in March, 1849 - even if it wasn't really half the Italian army. And it wasn't a trap. And there was no peace followed by renewed war. And no disaster at Easter. Hey, look, he got Mortara correct, OK?

Recently I had the unfortunate experience of being invited to a lecture by Dolores Cannon, a little grandmother who is currently in worldwide vogue since she claims to communicate with N. I felt the need to become familiar with the subject, but alas I had only 48 hours' notice. What was I to do? I got both the books on N from my local public library

and frantically read them on the bus going to and from work. I also bought an old, second-hand book which had all N's quatrains in the original mediaeval French, although without the necessary accents. I spent two lunch hours in bookshops, flicking through glossy new books by Dolores and others.

After these labours, I now believe that I can hold my own against anyone peddling any interpretation of Nostradamus, and you can all do it too. All you need to know is:

(a) Authors nearly always disagree over the meaning, or even the context, of the quatrains. They either do not read, or ignore, each others' books before rushing into print, and some like to adjust the text a bit. All draw wild conclusions. See the example above.

(b) Very few books give the original French text. It is easy to understand old French (as far as anyone can understand N) and hilarious to see how modern authors have mistranslated it, usually with their own particular bias in mind. See the example above again.

(c) Every interpreter of N has assumed that his/her own ideas and obsessions were what N was talking about.

N patently wrote about his own time - for example nearly all place names mentioned are in France or Italy - and took no interest in places or times beyond. See - oh, you know.

Fortified by my 5 hours' worth of arduous study, I came to Dolores Cannon's lecture. She had been taken in by all sorts of paranormal phenomena, including crop circles; she was glad that psychic TV programs were being made without sceptics, so that progress could be made without all those doubters popping up and nay-saying all the time. She wasn't impressed by archaeologists, either, except when what they dug up agreed with what her hypnotic subjects had already found in their past lives, which she had been reading for them for about 20 years now.

Although she denied it, she had found the large number of famous past lives that we have come to expect - for example, not just one, but three different people who had been students together with Jesus (at Qumran, of all places), and someone who was guillotined, and someone who died at Hiroshima.

She had regressed one guy all the way back to a life when the Earth was still being constructed by space beings (there were lots of volcanoes, it was very hot, and his job was to clean up the atmosphere), and another lucky bloke got taken 100 years into the future for his "past life".

Anyway, during all this frivolity, she found a past life of someone who was a student of N and then one day N himself came through and said g'day. He told Dolores that she could

now reach him through any of her hypnotised subjects - but (usefully) that only she could do this. And (of course) that he would speak in modern English; this must have been a relief, since Dolores doesn't know any French (and curious, since N almost certainly didn't know any English). As a useful cop-out, N also said that people have been misinterpreting his quatrains, and that the printed versions tend to be in error.

A voluminous re-interpretation of the whole body of N's work then began; half of it fills three of Dolores's books, and these cost \$30 each. But poor N, with a brain dating from the 1500's, sometimes had difficulty with the technology and concepts of the twentieth century. For example, he said "Macedonia and Albania" when he wanted to say "Yugoslavia", and he didn't know what glass was; he would say "Hermes" to imply communications and "Vulcan" to imply war. (Never mind that there are other Yugoslavian countries, all closer to France; that neither Albania nor Macedonia existed as such in N's time; that glass was well-known by 1500BC and glass-blowing was on the go in the time of Jesus; and that Vulcan was never the god of war). On the other hand, N did advise that although the North Koreans do have atom bombs "they lack the delivery system". (Dolores's husband is a retired US Navy officer; there may be a certain seeping through of ideas).

Which leads us on to seek prophecies that apply to modern times. Dolores had plenty of these, with accurate dates if before late 1994 and vague, or no, dates if after. She made a big thing of having correctly forecast the 1991 Gulf War (but this was done in 1989, when it was already a certainty) and then tried to tell us that this was the beginning of World War III; the Gulf War would escalate and then spread throughout Europe, and the whole kaboodle would be over by the end of the 1990s.

Wait! the Skeptical reader may exclaim - here we are halfway through the 1990s, the Gulf War never escalated beyond Kuwait and Iraq, and there has been historical and unprecedented peace in both the Middle East and Europe, in particular following the Gulf War.

Ah, but N has informed us that the Third Antichrist (after Napoleon and Hitler, and worse than either) was born in Jerusalem on 4 Feb 1962, has studied Computing Science in Egypt, is a handsome man being groomed by wealthy Arabs to unite the Arab nations as the Mahdi, and lead them into battle in a final Jihad against the Christian world. So you can't trust those Arabs - they may put up a pretence of wanting peace, but you know they are really conspiring for a huge holy war .....

Dolores added that the future is not fixed (so how can N predict it?) and that we can change the future by positive thought and action in the present; this was the evening's only useful observation, and the audience paid \$45 a head to hear it. N's quatrains are a "worst case" describing what will happen if preventative action is not taken; for example, it is now clear that a bit more opposition to Hitler in the 1930's would have been good. We have to beware of people who

claim authority and claim to have all the answers.....

This seems reasonable, but wait a minute .... didn't Dolores say that the authentic Nostradamus can be contacted only through her; that anyone who disagrees with her is working with misprinted or misinterpreted texts; and that the activities of sceptics are undesirable and interfere with progress? Where have I heard that sort of monopoly of knowledge before? Russia in 1917? Germany in 1934? China in 1966? Iran in 1977?

Although I didn't learn much to add to my 5 hours' knowledge of Nostradamus from this lecture, I learned a hell of a lot about people like Dolores Cannon. ■

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### ...Zoroaster from p 37

French translation of the Avestan texts.

The Zoroastrian sacred texts are known as the 'Avesta', named after the language, related to archaic Sanskrit, in which they were held in oral tradition. The Zendavesta is a commentary on the Avesta. Perron's translation, contrary to Hyde's interpretation, showed a polytheistic faith. In 1860, Martin Haug, a German Philologist who taught Sanskrit at Poona University, discovered that those sections within the Avesta called the Gathas, were in a more ancient dialect. Only those sections were to be regarded as the authentic utterance of Zoroaster, and these could be interpreted as teaching a simple theism. EW West, who collaborated with Haug, was an English Chief Engineer of one of the Indian railways. His translations of Pahlavi texts made them known to Europe. However, his work began to undermine the theory of Zoroaster's monotheism.

The history of Zoroastrianism is a controversial subject. Every aspect is hotly debated. I have presented you with the merest outline. As an introductory text, I recommend, 'Zoroastrians: Their religious beliefs and practices' by Mary Boyce, Professor Emeritus of Iranian Studies at the University of London, Routledge & Kegan Paul, paperback 1984.

### Nietzsche

Talk of Zarathustra and Zoroaster was all the rage in Germany in the latter half of the 19th century. Could Nietzsche have been ignorant of what the name Zarathustra represented? Janko Lavrin, in his book, 'Nietzsche', attempts to give an answer that, "... may provide a clue to Nietzsche's choice of Zarathustra as a destroyer of the old morality in the name of new, entirely different values. The prophet Zarathustra (or Zoroaster) had once founded a religion in which morality was a metaphysical phenomenon and an end in itself. But Nietzsche, who rejected the idea of any metaphysical morals, conjured up Zarathustra in order to make him correct the mistake Zoroaster had made when founding the religion of Zendavesta." (page 83). What can one do or say about Nietzsche's quest, except giggle? ■

## FORUM

# Language and the Skeptic

I read with interest David Lewis' article in *the Skeptic* (Vol 14, No 3, pp. 33-35) about human language. As a professional academic linguist, I would like to make some observations on his discussion.

The claim that humans have a unique instinct for language, although certainly debatable and not necessarily accepted by all linguists, is not primarily based on a priori philosophical considerations, but rather on the observed facts that human language is a) learned very readily by all normal human children and b) much more complex and much more open-ended/flexible than any other known animal communication system.

If we found another species with a similar spontaneous talent for language learning, or another system of equal complexity (etc), this claim would be disproved. Whether the above claim is true or not, it is clear that human language has evolved from earlier animal communication systems (no mainstream linguist would dispute this).

There is no suggestion that humanity is somehow utterly separate from the rest of the animal kingdom in this respect. However, human language has clearly existed, in much the same general form, since such an early date that discussion of its origins is bound to be largely speculative (there are no 'primitive' languages representing earlier phases in the development process).

It is unfortunate that David Lewis at times gives the impression that we (more or less) know how human language began. He is, however, right to suggest that the development of human language was probably gradual and piecemeal. Claims about animals acquiring impressive amounts of human language are to be treated with caution. Even the work with apes has produced equivocal results and, as David Lewis admits, apes seem not to acquire syntax (which is a very important, perhaps even defining, feature of human language). All claims regarding animals such as parrots actually manipulating (as opposed to "parrotting") human language have appeared suspect (to say the least) when examined by linguists.

However, it is possible that animals of certain species might be able to learn human language if it were taught to them. The fact remains that these species have not developed any such system on their own and show no spontaneous abilities in this direction.

David Lewis' point about the emphasis on spoken language possibly obscuring more general and basic aspects of human language is well taken. The focus on speech *per se* in the linguistic tradition was at one time very heavy (for good

reasons, it must be said), but has lessened somewhat in more recent work on the nature of human language. David Lewis and RE. Englefield seem to have misunderstood what Chomsky means when he says that all normal human infants have access to a universal grammar enabling them to acquire the syntax and other aspects of their native languages very rapidly.

The term "grammar" here (as elsewhere in linguistics) does not refer only to standard/formal grammar as taught in schools and socially endorsed as "good usage" (etc). It also includes the grammar (ie the syntactic structure) of informal and indeed of non-standard usage, such as is used naturally by many native speakers of each language. These often come from less educated backgrounds, but this has no bearing on the linguistic status of their usage.

Thus, "double negatives" such as "I never got none", while deemed non-standard and thought of as "bad usage", exhibit grammar just as much as do the equivalent standard forms such as "I did not get any". People who produce forms such as the former have not failed to acquire grammar, nor have they acquired and then suppressed it; they have simply acquired a different grammar. The idea that non-standard or informal usage somehow lacks grammar, while widespread among non-linguists, does not stand up under careful examination.

Incidentally, whether Chomsky's account of language acquisition is true or not, some spectacular explanation is required; human languages are much more complex than, say, mathematical systems, to the extent that, as Chomsky admits, we do not have an adequate theory of syntax or of human language generally, yet almost all children, very quickly and without any systematic instruction, become fluent in one or more languages, producing sentences they have never heard before (so imitation cannot be the sole factor) and very largely "getting it right".

I stress that I myself think that Chomsky in particular is badly wrong on many points, as do many other linguists. There is no one orthodoxy in linguistics; we are a developing subject and there are many different viewpoints. However, Chomsky is still a great linguist and his views should be treated with some respect and not dismissed without good argumentation. In any case, the points made here are more general in nature and would, I think, be accepted by virtually all mainstream linguists. I hope this helps to clarify matters.

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## More Language

I am not a linguist, so my comments on David Lewis' review Language - Instinct or Invention in *the Skeptic*, (Vol. 14, No 3), are those of a relatively ignorant lay person. It is up to the editor and readers to decide whether there is something to be got from my critique, or to invite some professional linguist to provide more informed comments.

Many, many years ago I studied English language at university, and subsequently read germane articles and books occasionally. About 25 years ago I came across Eric Lenneberg's *The Biological Foundations of Language*, which I thought, and still think, a useful book. It has an appendix by Noam Chomsky, but I also read other pieces by Chomsky, including his well-known critique of Skinner's behaviourist explanation of language which Chomsky showed to be quite inadequate even within the range of its limited explanatory intentions.

The other day I glanced at *The Cambridge Encyclopedia of Language*, by David Crystal, which is more up to date and covers the more 'linguistic' aspects quite well.

The Lenneberg book has another appendix, on the history of the biological basis of language, by Otto Max. Lo, he refers to Condillac, 'a defender of Locke's sensualism'. Condillac concluded,

"I have said enough ... to show that languages are the work of nature, that they were formed, so to say, without us and that we, as we worked at language, blindly followed our way of seeing and feeling."

That hardly sounds like invention.

I am even less informed about progress in the understanding of mental functioning and the nervous system. An important belated discovery some decades ago was the existence and role of hormones in the brain as controllers of various kinds including maturation.

More recently much was made of an appreciation of how, in many biological systems, the vast numbers of more or less randomly varied bits allow 'selection' by controlling units to fit the external circumstances at a time. Edelman is the name bandied about, who started with antibodies and the response of the body to invasions of bacilli etc. It is believed that relatively few of the vast numbers of neurons and synapses in the brain can be 'selected' and the pathways 'strengthened' in response to whatever is picked up by the senses. This makes it easier to understand how the brain copes with constantly new and different input - this relates especially to the 'creative' aspects of language. It was always hard to see how there could be specific genetic control of such a multitude of possible situations. It could be said then that previous assumptions of such detailed direct genetic control are no longer needed. I think something like this is meant by Lewis and his sources when they talk of more invention and

less instinct. Both my impressions of the Edelman position and Lewis' points may be wide of the mark, the first because of my ignorance, the second because of Lewis' lack of clarity.

Perhaps a short piece like Lewis' cannot do justice to the complex ideas involved. Any connection - which Lewis makes - of modern views on biological aspects of language with an 'anthropocentric religious view' of 'man in God's image', and with some 'Cartesian argument' of 'reason and the possession of a soul', seems far-fetched. In the *Encyclopedia* any former influence of a Christian mindset is hardly noticeable any more.

Nor is it true that the 'biological' explanations deny language-like capacities to animals, on the contrary. However, it seems also self-evident that the 'languages' of animals, whether innate or acquired by being taught by researchers, are nothing like the languages in daily use by humans. The trouble seems to be that Lewis does not bother, in his own opinions and those he attributes to others, to identify what meanings of 'language' and other key terms he or they have in mind.

(Who are Lewis' sources? Professor Wells' crops up without any identification. This makes one wonder why Lewis refers to any sources at all, though, of course, his piece consists largely of a classification of sources into 'good' ones and 'bad' ones. Would they share his interpretation of their thought? It is plain that he misinterprets Chomsky. In view of this it is also possible - but without a reading of the book cannot be assessed - that he gives a misleading impression of what 'Professor Pinker' says in the book which Lewis is supposed to review.)

The whole thing seems very sloppy, such as to talk about the 'intellectual appreciation' by apes of the possibilities of gestures, or about 'capitalising on the original embryonic invention of language', or that 'early man did not have to discuss the meaning of a reaching or grasping gesture because it was very familiar and self-evident anyway'. To say that 'the difference between ourselves and a group of animals in terms of language ... is one of degree rather than kind' is surely stretching the meaning of 'degree' beyond reason. You might as well say that the difference between people and birds, in terms of movement through the air, is one of degree.

Right or wrong, Chomsky has had a tremendous influence on modern linguistic studies, and his contribution is beyond question, even among the linguists who may dispute one or another of his ideas. His attempts at discovering essential features of an universal grammar should be judged not by whether such a thing exists - presumably there is something shared by all common languages which allows people to learn to communicate fairly precise meanings by way of language - but whether his formulations, his mappings of the language landscape so to speak, are useful for practical purposes, and consistent with the relevant 'facts' of physiology, cognition, etc which we possess.

Curiously, in the same issue of *the Skeptic* there is in fact an example of what could be described as the origins of

something of a human quasi-language. I am referring to p. 36 where Harry Edwards says in connection with his work as a telegraphist spy,

“Plain language was strictly forbidden so as not to compromise the operator. This was really pointless as individual keying styles are as recognisable as hand writing ...”

The coded messages themselves were no separate language: the codes and the Morse code used and the telegraphs simply changed the methods of transmission. The new language, ie that which provided a unique identification of sorts of the senders to the recipients, depended integrally and inseparably on a range of mechanical, technical, cultural and historical circumstances.

Take any of these elements away and the language disappears or at least changes in some key characteristics. Change any elements and this may lead to a new language, ie a novel configuration which can allow the communication of new meanings between ‘language-ready’ communicants - I am inventing these words as I go along.

If it is true that new or significantly changed ‘languages’ like this come into being all the time, it seems pretty pointless to speculate about the origin of ‘language as such’. Does a notion of ‘language as such’ make sense? More than a century ago people had realised the futility of such speculations. I read that ‘in 1866, the Linguistic Society of Paris published an edict banning discussion of [language origins] at their meetings’.

The whole of Lewis’ review is purely speculative. (‘Similarly, though probably much later ..., an initial inventory of natural sounds ... could have slowly developed ...’) I suggest that it behoves us not to take sides -and certainly not in an abusive fashion - where one is merely guessing what may have happened, or what, among a range of untestable surmises, is a satisfactory explanation of something. It behoves us not to be dogmatic about unverifiable things, and to do those we attack the courtesy of allowing them an opinion. (Lewis’ unnecessary rudeness: ‘Given [Chomsky’s] struggles with the perversities of even English grammar it is hardly surprising that he concedes “discovering the principles of universal grammar ... [is] the most challenging theoretical problem in linguistics” [ie he hasn’t done it!]’)

It is impossible for me, and would be difficult for the professional, to take all the points touched on by Lewis, define them properly and indicate the problems which are well understood, or are being tackled but remain in doubt, or are still largely unsolved. I am sure, however, that debates about ‘the origin of language’ are not among the things which should press most urgently upon linguists. I do believe that linguistics, in all its ramifications, is among the most important and fascinating studies there could be. There are also many outdated, irrational silly ideas about language around still - often held with fanatical zeal - which require

urgent debunking by sceptics. The biological foundations of language are not among them.

More generally, I want to say something about people with a sceptical disposition who wish to analyse things rationally. Speculation has an important place in the scheme of things, but before the real work starts. It raises possibilities: ‘what if ...?’, ‘why not ...?’, ‘could one ...?’.

The next step is to collect data, information, etc, all there is to know. Only then would one formulate hypotheses - and these also cautiously. Hypotheses are distinguished from speculation because they can be subjected to some kinds of analysis or tests and are clearly defined and circumscribed. The sceptic would require evidence of such careful analyses before commitment to action based on such ideas. As regards speculation, honest sceptics would not condemn it, but would also not necessarily give it credence one way or another, nor use it for their own ends, nor pay people to engage in such pleasant but rather useless speculative arts.

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## Even More Language

David Lewis in his article ‘Language - Instinct or Invention’ (Vol 14, No 3), makes some good points, but seems to suffer from a number of confusions.

Lewis’s comments are provoked by a book by Steven Pinker called ‘The Language Instinct’, which, according to Lewis, argues for the claim that our language abilities are instinctual, a theory pioneered by Noam Chomsky, and which Lewis disagrees with. As I have not read this book, I do not know exactly what Pinker is arguing, and so I am not going to defend Pinker. I also have not read Chomsky on this, so I am not going to defend Chomsky. I am, though, familiar with some of the general ideas surrounding this issue, and I would like to clear up some of the confusions that Lewis seems to be subject to.

Lewis makes four explicit claims about the idea that language is instinctual. The first is that ‘it smacks of the traditional anthropocentric religious view that man was created in God’s image “to have dominion” over every other creature’. Now, some people may take the thesis this way, but most of those who advocate it certainly do not believe in any such thing. Whether Pinker does I do not know. Lewis does not present any textual evidence to show that he does. Lewis seems to think that Pinker’s argument is ‘an attempt to salvage some of that old superiority’ of humans over animals that was taken for granted by most people before Darwin. But virtually no-one who accepts the ‘instinctual’ thesis holds any such thing.

What they do hold is that it is an obvious fact that humans are ‘superior’ to animals in that they have far superior

language abilities and intelligence. How superior we are in such respects is yet to be determined, but that there is a considerable difference is obvious. But to say that humans are superior to animals in these ways is in no way to say that humans are 'superior' to animals in the sense that we are a fundamentally different kind of thing than animals, or that we somehow have a 'natural dominion' over animals.

Virtually all 'instinctualists' would agree with Lewis that human beings are evolved biological mechanisms just like animals. The only difference, the instinctualists claim, is that humans have evolved so that they have inbuilt language abilities, whereas animals have not.

Lewis's second point is that 'to say we have a unique instinct for language sounds suspiciously similar to the Cartesian arguments equating language with reason and reason with the possession of a soul'. (By 'soul' Descartes meant an immaterial soul). But this is in no way part of the 'instinctual' argument. Any instinctualist who argues in such a way is going a long way from the view that language is instinctual. This Cartesian argument is, of course, subject to all the devastating criticisms that it has faced ever since Descartes put it forward. But these criticisms would not have any bearing on the instinctual thesis. Anyway, there would be very few instinctualists who would hold such an argument. Most do not believe in any immaterial soul, in humans or in animals.

Lewis's third claim is that 'it is very difficult to ignore the fact that our cousins the apes have shown themselves well able to manipulate sign language intelligently and inventively'. What Lewis fails to realise is that this issue is completely separate from the issue of whether language is instinctual. Lewis is running two separate theses together. The first is that language is instinctual, and the second is that only humans have the language instinct. (A failure to distinguish these two claims is perhaps understandable, given that the two claims are often put forward together, and not always distinguished by their proponents). If animals do not have language it does not necessarily follow that humans have a language instinct, and if animals do have language, it does not necessarily follow that humans do not have a language instinct. (Perhaps animals have a language instinct too).

Now it may be that issues arising out of a consideration of whether animals have language bear on the instinctual thesis, but this needs to be shown. If animals have language, it does not thereby follow that language is not instinctual. So whether or not animals have language is, in itself, irrelevant to the question of whether language is instinctual. (It may or may not be relevant to the question of whether humans have 'natural dominion' over the animals, but, as we have seen, that is not part of the instinctual thesis).

Let us then turn to the interesting question of whether animals have language. The answer appears to be a qualified 'no'. It is true that animals have rudimentary ways of communicating, but it does not seem that they can

communicate in the inventive, systematic and productive way that humans can, and it is this sort of communication that is being referred to when it is said that animals do not have language. Some studies, such as those on 'Washoe' the chimp, which Lewis referred to, at first appeared to provide evidence that animals can use language, but these studies have been subject to considerable criticism.

Lewis's fourth point is that 'the sharp focus on spoken language deflects attention from the intimate relationship between words and gestures which is vital to an understanding of the origin of language'. This may be true, but I do not see that it has anything to do with the claim that language is instinctual.

Lewis then goes on to speculate how language may have arisen as an 'invention'. He speculates that perhaps what happened was that some primitive gestures or noises were able to be interpreted by other animals as indicating something, for example, an animal reaching its hand out towards a piece of food could have been taken by another animal to indicate that the first animal wanted the food, and so the second animal passed the piece of food to the first. The reaching out of the hand may have come to mean, amongst those animals, that the animal wants the thing that the hand is reaching towards. Lewis thinks this sort of basic communication could have gradually developed into a language.

Now what Lewis says here seems to me to be entirely possible. His confusion comes from not realizing that the instinctualist could agree that this maybe how language originated. What the instinctualist will add, though, is that over time, those animals who were better equipped to understand such basic communicative gestures were better at surviving and thus passed on their abilities to future generations.

Such inbuilt ability to 'understand' basic communicative gestures became more and more widespread. Occasionally, mutations would produce animals even better at 'understanding' communicative gestures, and such animals would flourish and pass on these abilities to offspring, and so these inbuilt abilities would also flourish, as would the 'invented' languages, which would become more sophisticated.

Such a process of evolution eventually produced creatures who were genetically endowed so that their brains were structured so that in the right environment, they interpreted certain sounds and images in certain ways. Their brain's structure, that is, 'reflected' the basic structure of the invented languages, and so enabled them to very quickly develop and master an extremely sophisticated skill, namely, using language. The instinctualist, then, can hold that the language instinct evolved through a process of natural selection.

It is not the case, as Lewis claims, that to 'argue that language is instinctive is not far removed from saying that it is a gift from God'. It is completely removed from it. The language instinct can be (and most instinctualists intend it to

be) a product of evolution, just as our ability to perceive colour is a product of evolution. There may be individual instinctualists who make claims about the language instinct coming from God, but this does not show that the view that there is a language instinct is committed to the view that it comes from God, any more than the fact that some scientists claim that God exists shows that it is a part of science that God exists.

Whether or not language is instinctual is a further question, which I do not propose to attempt to answer here (partly because there is much confusion over what the actual issues are). I would like to disentangle two issues that Lewis confuses, and say something about his position on them.

The first issue is between the instinctualists who claim that humans have an inbuilt grammar and animals do not, and those like Lewis, who claim that humans do not have an inbuilt grammar. Lewis, I think, would have to agree that there must be some inbuilt, or 'hard-wired' abilities that humans have, and which animals do not have, which explain why we can learn language, and they cannot. The interesting question is, what exactly are these abilities?

Chomsky thinks that we have fairly explicit and fairly high level grammatical abilities built in. Others think that much less language ability needs to be 'hard-wired' in for us to learn a language. Lewis, it would seem, belongs to the second group. He refers with approval to RE Englefield's claim 'that when so many people can communicate quite happily without the benefit of any formal grammar, if we inherit our grammatical rules "it is quite surprising how many people learn at an early age to suppress them"'.

This seems to miss the point of Chomsky's thesis. Chomsky is not claiming that the rules of the 'universal grammar' that we inherit are at the level of the sort of 'formal grammar' that occurs in English. So the fact that people can communicate without knowing any such 'formal grammar' does not show that they are not using the more basic rules of the universal grammar. In fact, the Chomskian will claim that the only way we can explain why we can learn languages without learning formal rules, and why, as Lewis points out, there can be 'reasonable communication ...between people of different languages with no knowledge of each other's grammar but a smattering of their vocabulary', is because we have inbuilt basic grammatical abilities. I am by no means convinced that Chomsky's thesis is true, but Lewis has not provided any good reasons for doubting it.

The other issue is between those who claim that there is a big difference between animals and humans in regards to those inbuilt abilities that underlie the ability to communicate, and those who hold that there is not. This is not the same issue as whether there is an instinctual grammar, as one can reject the claim that there is an instinctual grammar (or be unsure whether it exists, as I am), and still hold that there is a large difference between the inbuilt abilities of humans and animals that underlie communication.

Lewis, however, goes so far as to claim that, in regards to

any such abilities, 'early man was hardly distinguishable from many animal communities that we can observe today'. Lewis does not say what he means by 'early man', but if he means *homo sapiens*, he is just wrong. If he means some earlier ancestor, then he maybe right, but this will be trivial. Of course our ancestors were at some stage little different from animals.

The thing is, they evolved to acquire language, and the animals did not. The question is, how much more did they need to evolve to be able to acquire the sort of language that we have today? I think quite a lot. This is supported by the differences in size between the cerebral cortex of humans and animals, and the fact that there is good reason to suppose that the sort of powerful language that we possess could not be developed until most of these evolutionary changes had taken place. (This is not to say, though, that our inbuilt abilities had to evolve to the point where they constituted an 'internal grammar').

Lewis says that the 'fundamental function of language is still the same -to deliberately influence the behaviour of others through word, deed or demeanour', and that 'the difference between ourselves and a group of animals in terms of language, then, is one of degree rather than kind'. If you define language in this very broad way, then it is true that animals have language. But the claim that animals have language in this sense of 'language' is not one that many would deny. It is not an interesting claim. When it is claimed that animals do not have language, what it usually meant is that animals do not have language in a stronger sense of 'language'. And it seems that animals do not have language in this sense. We can still, though, see the differences between humans and animals as one of degree

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## FORUM

# Fundamental Doubts

This article is a response to Rob Hyndman's criticism (*the Skeptic*, Vol 14, No 3) of David Lewis's article "Fundamental Doubts" in Vol 14, No 2.

Rob says he "welcomes any sceptical analysis of the Bible and traditional Church teaching, but it should be based on informed scholarship". I hope the following satisfies Rob's requirements in that regard.

Rob's line that Matthew follows Joseph's line and Luke Mary's is an old chestnut, and is easily refuted by reference to the text itself. Mat 1:16 says (in the Greek): "and Jacob begat Joseph"; Luke 3:23 says "Jesus ... being son, as was supposed, of Joseph (son) of Heli, (son) of Matthat, (son) of Levi, etc".

Mary's line is not mentioned. But why not? Since it is claimed that Jesus did not have an earthly father, what is the relevance of a genealogy of Joseph in either gospel? Put simply, it was the evangelists' way of reconciling the story of a miraculous birth (which has parallels in several other religions and myths) with the traditional belief (cf for example Jer 23:5-6; Mat 1:1) that the Messiah would come from the House of David. There was no evidence that Mary was descended from David, but as she was married to Joseph, who was, that should satisfy the popular requirement.

AJ Grieve, in Peake's "Commentary on the Bible" (1959 ed, p.701) says: "The explanation that Lk gives the line of Mary is not found in early Christian writers. Their view (Eusebius, Hist. i.7) was that Joseph was the Real son of Jacob (Mt.) but the legal son of Heli through a levirate marriage". [see Deut. 25:5-10]

There is, of course, no evidence whatsoever anywhere in the Bible or anywhere else that this was so, nor any reason why we should think so. It is pure supposition, thought up by early Christian writers, who had already noted the discrepancy and were then, as now, desperately trying to explain it away. The Jesuit scholar Fr John L. McKenzie, in his "Dictionary of the Bible" (1981) is honest about it; he comments (p.301): "The difference has never been satisfactorily explained."

Grieve goes on to say: "The genealogies warn us not to worship the letter of Scripture. They were the best the time could produce, and we must not expect more. The Jews were more interested in genealogy than in accuracy."

There are further discrepancies that illustrate this point. Matthew speaks of three groups of 14 generations -but there are only 13 in the last group! The last name common to both Matthew and Luke is Shealtiel (Salathiel). Assuming a date about 560 BCE for the latter (the date can only be approximate, since we have no precise information in this

regard), we get an average of 26 years for Luke, but (dividing by 12) 46 for Matthew. So Jacob's ancestors lived on average nearly twice as long as Heli's, over the same period of time and in the same location!

Now that does seem extraordinary, to say the least. A great deal of dubious juggling and supposition would be needed to reconcile these figures. Now to the famous problem of Mat 1:23 v. Isaiah 7:14. The "Hebrew scholars" and "ancient Hebrew linguists" referred to by Rob are almost certainly fundamentalists, who have an axe to grind: the inerrancy of Scripture. All the best "neutral" authorities, (ie those concerned only with the language as such, and not with theological considerations) give the meaning of *almah* as "a young woman (ripe sexually; maid or newly married); a female adolescent, a young woman of marriageable age, whether married or not". According to Brown, Driver and Briggs' "Hebrew Lexicon", it is derived from a root probably meaning "be mature (sexually)", and is cognate with words in related Semitic languages meaning variously "be strong" (Aramaic), "young man" (Sabeen), "girl" (Phoenician), "Harlots" (Palmyrene), "young man, young woman" (Syriac). Derived words in Hebrew are *alumin*, "youth, youthful vigour" and *elem* "young man".

The word for "virgin" is *bethulah*, with its derivative *bethulim* "virginity". If Isaiah had wanted to specify the girl's virginity, surely he would have used *bethulah*? As for the word *parthenos* (Greek for "virgin") used in the Septuagint and quoted by Matthew, it should be remembered that the LXX was translated by Jewish scholars into a language not their own (Greek), and the accuracy of the translation varies from book to book. It was frequently revised over the years. A better word for *almah* would have been *neanis* "young woman", which was in fact used by later translators. In this context, McKenzie says (p.234): "Since *parthenos* is used in Gk of women who are clearly not virgins, it is not certain that LXX intended to express virginity by its use of the word." Indeed, even Dr Spiros Zodhiates, in "The Complete Word Study Dictionary: New Testament", gives one definition as "a maiden or damsel of marriageable age".

My next point necessitates a brief explanation of some elementary Hebrew grammar.

All Hebrew nouns are either masculine or feminine (like French). As in Greek, there is no indefinite article (a, an) but, again as in Greek, there is a definite article (the), Hebrew *ha*. The attributive adjective follows the noun, and if the latter is preceded by *ha*, this also precedes the adjective, so "the good man" becomes "the-man the-good". There is normally

no copula (am, is, are) between a noun and an adjective used predicatively, so “the man is good” becomes “the man ... good”.

The Hebrew verb is very complex, but it has no tenses as we understand them. Its forms are perfect (indicating completed action), imperfect (incomplete action), participle (continuous action), imperative and infinitive. In modern Hebrew the perfect is used for the past tense, the imperfect for the future, and the active participle is used for the present tense. But in Biblical Hebrew, the tense had to be inferred from the context.

Furthermore, the endings of the 2nd and 3rd persons (thou, you/he, she) vary according to the number and gender of the subject.

Now, in the passage in Isaiah, the word that follows *halmah* is *harah*. This can be either a verb, meaning “to conceive”, or a feminine adjective meaning “with child, pregnant”. But if it were a verb, the form *harah* could only be *Qal* (the simplest form) perfect 3rd masc, singular, and would then normally be translated as “he conceived” - it lacks the feminine verbal ending. It must therefore be the adjective, used predicatively (since it is not preceded by *ha*), and is correctly translated by the New Revised Standard Version, the New English Bible, the Revised English Bible and the Jerusalem Bible as “is with child”<sup>1</sup>. And if she was already with child, she was obviously no longer a virgin!

Now let’s take a look at the context. Isaiah was speaking to King Ahaz, trying to persuade him to follow a certain course of action (read it for yourself), and the birth of the child, to be called Emmanuel (= “God with us” [=Israel?]) was to be a sign (which Ahaz rejected) that Isaiah was right. Note that his exhortation begins with “Behold!” (or “See!”). Now, although the Hebrew word *hinneh* used here could be used to introduce a solemn or important declaration, its first use was when pointing to persons or things, so its use here could imply that Isaiah was actually pointing to the young woman concerned, especially since both the Hebrew and the Greek use the definite article before *almah* and *parthenos*: “See, the young woman is with child!”<sup>2</sup>

Some commentators have suggested that Isaiah may even have been referring to his own wife. It certainly had nothing to do with a supposed event some 700 years into the future!

The author of Matthew was at pains to bolster his account of the life of Jesus by frequently claiming that the main events he was narrating were fulfilments of scriptural (ie Old Testament) prophecy. The expression “that it might be fulfilled which was spoken by [the prophet]” occurs nine times in his gospel, and in no other. Here the quotation is clearly out of context. He was also, as I said above, quoting from the Septuagint translation, and not from the Hebrew original. Indeed, some scholars have suggested that he may not even have been able to read the original - after all, that is precisely why the Greek translation was made: because many of the Jews of the Diaspora could no longer read their scriptures in the original language.

1 The much vaunted but plainly fundamentalist New International Version tries to disguise the discrepancy between Matthew and Isaiah by sticking to the Septuagint translation of Isaiah!

2 The King James (Authorised) translation “a virgin ...” is incorrect.

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Tahmoor NSW

## More Doubts

Rob J Hyndman’s letter “Bible Doubts” (*Letters* Vol 14, No 3) disputes David Lewis’ “Fundamental Doubts” (Vol 14, No 2). Rob’s ploy needs to be exposed. His implied claim that all, “...eyewitness accounts (of) the resurrection accounts (of Jesus Christ) can be harmonised” is quite correct, as any fiction writer would agree, but how does Hyndman explain the blatant plagiarism of Old Testament texts? The eyewitnesses copied their claims from Psalms.

You want evidence? Compare these.

“They divide his clothes among themselves by throwing dice” (Luke 23:34);

“They gamble for my clothes and divide them among themselves” (Psalms 22:18)

“My God, My God, why have you abandoned me?” (Mark 15:34)

“My God, My God, why have you abandoned me?” (Psalms 22:1)

“Father into thy hands I commit my spirit” (Luke 23:46)

“...into thine hands I commit my spirit..” (Psalms 31:5)

The authors of Matthew and Mark quote the last words of Jesus as “My God, My God, why have you abandoned (forsaken) me?” Yet the author of Luke wrote the last words as “Father, into thy hands I commit my spirit”. So what were Jesus’ last words? Nobody knows.

Hyndman defends the genealogy of Joseph, yet if Jesus was the son of God, Joseph’s lineage is irrelevant. Similarly with Mary, the mother of Jesus, who we are told by Christians is God. How could a mortal be the mother of a god who has been around since creation? Also, how can Jesus, who as a god or a son of a god is immortal, die? The resurrection would have been a farce, Jesus would have known he was only faking death for a few days. Or are we to believe that Jesus’ father god created a human son to be tortured to ‘death’ and then to revive him. It seems to be a very bloodthirsty thing for a loving father to do.

If the Bible were divinely inspired it would hardly need interpreting by biblical scholars. Surely its message would

be clear to all, regardless of the language they spoke and the culture they professed? It should contain a wealth of Truth and morally righteous examples, so why does the Bible, inspired by its God, condone slavery, rape, adultery, prostitution, the degradation of women, genocide of nonbelievers, and mass slaughter of various groups? In short, the Bible is the work of ancient people caught up in a cult through which they gained temporal power. Rather than being a supreme being, the god of the Bible is a superstitious creation of power hungry charlatans.

I have harmonised the Bible to show that the resurrection myth was probably adapted from earlier religions, re-jigged to seem to bear out the prophesies of Ezekiel. Ezekiel calls him Tammuz, Semitic people called him Adoni, the Egyptians had Osiris, Zeus decided to spend half the year on earth and half in the underworld. All reflecting an agricultural culture's requirement for death (winter) and rebirth (spring).

This was accepted and assumed by the early Christians such as Paul. 1 Corinthians 15:36 states "You fool! When you plant a seed in the ground, it does not sprout to life unless it dies (first)." The similarities between Tammuz and Jesus are striking. Both were gods; both were resurrected; both left empty tombs; both were born by special creation; both were accepted back into a divine house.

Finally, if the Bible God is All Powerful, surely it does not need the help of mere mortals.

**Ron Bernardi  
Boolarra VIC**

## And More

The Judaic/Christian Bible is believed, or not believed, to be inspired written evidence of the existence of a supernatural being that used thought power to create the universe, and to create his son born out of a mortal virgin. The son, as it turned out, was actually immortal. Thus the preordained sacrifice (murder) by proxy, of the son, was a sham as he was brought back to life. The Bible would have us believe the father did not lose his son and never meant to. This follows the common ancient agrarian rituals of the death and resurrection of gods in concert with winter and spring.

Jesus' being part of a polytheist 'trinity' god, is important to the question of his being born by mortal means. His father could again have him born out of a mortal, murdered by proxy and resurrected, in the way of the ancient rituals, without sacrificing himself as his third attempt to put humanity right was a failure. His first attempt was Adam and Eve, his second was Noah and his third was Jesus. He punished his chosen people countless times in order to get them to toe the line. Most people would be grateful that he was not *their* god.

Rob J Hyndman raises many questions that have never been resolved when he introduced the meaning of various words in the Bible. Many Bible stories were plagiarised from other cultures, which were transmitted orally in several languages, making translation complex. They were changed to suit the bias of the authors, some of whom were not those named in the Bible.

In his words "The famous prophecy of the virgin birth..." Hyndman is drawn into word entangling traps. Words such as 'prophecy' now have a different meaning from their original usage. In the lament attributed to Isaiah, he made no specific statement about the marital status of the young woman. In those days, most girls were married in their teens and it appears that Mary was a young teenager when she became pregnant. The point is, does the statement attributed to Isaiah relate to the birth of Jesus centuries later?

Thomas Paine did not think so, nor do a great many other people. Ancient (and modern) Hebrews deny that Mary, who was obviously a Jew, had an immaculate conception and gave birth to Immanuel, Jesus and Thomas (Thomas didumos Gk, for twin), sons of their god. And the word 'probable' is not used in their denial.

Rob Hyndman infers that only biblical scholars understand the Bible and he obviously includes himself. Therefore, he would know that much of the Christian Bible is fabricated, plagiarised, disjointed and biased to favour the One (oops) the polytheist Three-in-One true god of the Christians.

Its contradictions deny it presenting any shred of evidence to support the concept of a god or gods. Hyndman does not defend certain areas of the Bible. He cannot be selective (by using reason) to suit his idealistic concepts of a faith which denies the use of reason.

**Peter Plane  
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## FORUM

# Response to “Abuse by Whom?”

Stephen Heydt

I refer to the article “Abuse by Whom?” by Barry Williams in *the Skeptic* (Vol 14, No 3). While the author “welcome(s) submissions from readers whose knowledge outstrips (his)” it would have been as easy to present factual material as the innuendo of such words as ‘fads’, ‘sexual victim industry’ and the somewhat bantering style of writing (for which he is generally known and loved). His qualification that he is quote not trying to be flippant about people who have suffered real (sic) sexual abuse, begs the question.

Sexual abuse happens. Incest happens. Ritual abuse happens. Memory repression and dissociation, according to the American Psychiatric Association 4th edition of the “Diagnostic and statistical manual of mental disorders”, happen (APA, 1994). It happens at a rate and in environments which should be abhorrent to all of us. The recent procession of convictions of men in positions of trust in the church for their abuse of their charges is, I fear, only the tip of the iceberg. If I appear unduly melodramatic I invite you to spare a moment to consider the effect of such an assault on someone you love and what effect that may have on you.

Much substantial research has been undertaken and published in properly refereed scientific journals (Green, 1994). Barry gives “figures, I won’t call them statistics, because that exalted term usually refers to figures with at least a modicum of evidence to back them up”. Then, free of the encumbrance of referencing, “Various sources have estimated that between 25% and 35% of American people, especially women, have been sexually molested in infancy between 10% and 20% of Americans are involved in Satanic Cults and up to 10% have been abducted by extra terrestrial aliens”. I am unable to comment on alien abductions as they are quite outside my field and will therefore leave them to the expertise of the author (though I am still interested in the source of his).

I believe it is possible that the author may have confused figures on general sexual assault on women with those for incest and, figures on ritual abuse with abuse by satanic cults, although without the appropriate references this is difficult to ascertain.

I quote statistics on the former are that, according to a meta study, depending on the studies included, 24-53% of all women report having experienced a sexual assault (Kilpatrick and Resnick, 1993) and reports of childhood sexual abuse are being reported by 27% of women and 16% of men (Finkelhor et al, 1990).

A study which interviewed 3000 people in Los Angeles,

in person, reported 17% of women and 9% of men experiencing at least one incident of assault (not necessarily sexual) during their lifetime (Sorenson and Siegel, 1992). In North Carolina 7% of subjects less than 45 years of age reported at least one assault (Winfield *et al*, 1990). A national community sample of Dutch women found that 34% of them reported at least one incident of sexual assault or abuse in their lifetime and 16% of them reported abuse that had occurred within their families (Draijer, 1992). A study in San Francisco found that 16% of women in the study reported at least one episode of intrafamilial abuse and 31% experienced extrafamilial abuse before the age of 18. Thirty-eight percent of all women studied reported at least one experience of abuse (Russell, 1983). Of 3800 college women interviewed nationwide in the USA 54% reported experiencing some form of sexual victimisation with 15% legally qualifying as rape. A study of 2019 men and women in Great Britain reported that 12% of women and 8% of men reported being sexually abused before the age of 16 (Baker & Duncan, 1985).

While self-reports in surveys are always subject to some level of error and the specific nature of the questions asked is most germane, I would suggest that the number of investigations have developed something of a critical mass of evidence. While our American friends take something of a battering (I know such puns are out of favour at the moment) in Barry’s article, the sample of research quoted above would indicate that high levels of all forms of abuse of women (children and men) and sexual assault are prevalent in other countries as well. Even a thirty percent error rate in the research would point to horrendous levels of sexual violence in Western society. Available research points to even higher rates of sexual violence in some other societies.

Domestic violence, depending on circumstances, may be referred to by clinicians as ritual abuse because of its repetitive nature or the manner in which the abuse is enacted. The regularity of such events for the victim is what leads to them being termed ritual abuse. They need have nothing to do with Satan and/or Cults.

High rates of domestic violence based on a national American telephone survey reported severe abuse as occurring at an annual rate of approximately 11% and severe couple violence at about 6% (Strauss & Gelles, 1986). If the violence follows patterns of time of day or week or regular use of a certain implement to administer the abuse then it may be described or discerned as being ritual in nature.

My experience as a student counsellor (raised eyebrows,

no doubt), notwithstanding my profound scepticism (a subscriber to *the Skeptic* since 1987), has amazed and horrified me. The prevalence of childhood and adult sexual and other abuse as voluntarily disclosed, without using hypnosis or suggestions from myself, by both male and female students is of great concern and it is this point, notwithstanding scepticism, which needs to be made. While I readily acknowledge that there is a danger of inappropriate therapeutic approaches imposing false memories on patients there is also, sometimes, the case of the truth being stranger, and more horrible, than fiction. By way of example I am appending a couple of abbreviated case histories suitably disguised to protect the identities of the people concerned.

### Case 1.

In 1991 a twenty-one year old female student, living at home in an affluent area of Sydney, attended for counselling because of difficulties she was having in her physical relationship with her boyfriend. Notwithstanding her stated wishes, whenever she and her boyfriend began to get intimate she experienced paraplegia and began to tremble, often sobbing uncontrollably.

This young woman was a most accomplished artist. On one occasion she attended for counselling, on her way to an art tutorial, with a number of her paintings. While each painting was of a quite different subject they each contained the image of a vulnerable young woman and an aggressive animal of varying appearances (her adjectives).

To cut a long story short, through having her explain the paintings over time, it transpired that this client had been and was, at the time, still being invasively sexually assaulted by a family member, at least once per month, since the age of six. She had so successfully dissociated from the experience that even at the age of twenty-one she was consciously quite unaware of what was occurring and, even more surprisingly, totally denied her own experiences of pain and physical injury such as bruising, which was in evidence on a regular basis. When questioned by me on one occasion about a visible, large and livid bruise on her arm she professed to not being aware of it at all and quite unable to see it.

On eventually developing an awareness of what had occurred and telling her mother about it, in my office, her mother affirmed that she and several family members had been aware of what was occurring but hadn't said anything because it didn't appear to be worrying the student or doing her any harm.

### Case 2

A nineteen year old student from a non-English speaking background presented for counselling, for a quite mundane issue, and quite casually disclosed that she would not be able to attend regular evening lectures as she would be beaten by her brother-in-law if he wanted sex with her and she wasn't home by 8 pm because his wife (her sister) was pregnant. Her casual manner was almost unbelievable and while

counselling her, to the best of my ability, for some months to assist her with a number of personal and study related problems, I achieved very little.

Matters came to a head when various family members were arrested on drug trafficking charges. The police found explicit video recordings of various male family members and friends having intimate relationships with each others wives, girlfriends and children. The videos displayed extensive physical violence.

While there may be potentially other sorts of victims here namely those who are falsely accused, as far as I am aware there have been few successful damages claims in the USA. It is for the courts in all countries to properly determine guilt. In Australia, where there are much less chances of windfall gains from successful claims of sexual assault, there are hopefully less likely to be whatever level of false claims as may potentially occur in the USA.

I am aware of a much reported case of a woman charging her father with ritual abuse in WA. Evidence has been led in this case that the woman and her sister recalled the alleged incidents after undergoing hypnotherapy. Although the descriptions of the case (*Sydney Morning Herald*, Nov. 5, 1994) contain all the worst and most suspicious features highlighted in Barry Williams' article, at the time of writing the case is proceeding and we will have to await the outcome. Were it not for the direct experience with the client in Case 1 outlined above and other similar cases, it is quite likely, that I too would react to the evidence in the case in WA with complete disbelief and reject it out of hand.

While Barry Williams presents something of an apologia when he writes "Let me stress that I am not trying to be flippant about people who have suffered real sexual abuse". I have to inform him that that is exactly the impression I and several colleagues gained.

The two cases I have summarised will give some indication of the terrible experiences that many women (and men) have had to suffer. It is extremely difficult for woman (and men) to admit, even to themselves at times, that they have been victimised so as to be able to undertake their own rehabilitation through appropriate counselling or therapy. In my entire experience of counselling victims of sexual assault, with over 100 cases, only one victim has sought legal redress. The pejorative nature of articles such as that written by Barry Williams is to incline women (and men) who have been victimised to feel that they are unlikely to receive succour and support within our society and that it is far better to keep such assaults to themselves; put incest and rape back in the closet where other men (and women) will no longer have to confront the viciousness of their species and conduct their lives in comfortable ignorance.

In closing, if I may on a low note, recently published research into domestic violence experienced by pregnant women undertaken at the Royal Women's Hospital (Brisbane) (Webster, Sweett and Stolz, 1994) showed that 29.7% experienced different types and levels of abuse and 5.3%, of

pregnant women, experienced sexual abuse.

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### Barry Williams replies

I must admit when I read this response, I had to go back and read my article again. I was not aware that I had given any indication that I believed that sexual abuse and incest did not happen, nor that I thought the victims of these horrible crimes did not deserve to receive all the help that society could provide. After re-reading the article, I still do not believe that it contains any such implications and I really cannot understand how Stephen Heydt and his colleagues could have gained that impression.

Although my article referred widely to sexual abuse of many kinds, that subject was only incidental to the point I sought to make, which was really about a very dangerous strain of so-called therapy which uses extremely dubious means to seek the truth about what causes people to suffer from a variety of mental and physical disorders.

By putting aside my reference to alien abductions, as not being within his field (and which, I would suggest very strongly, is not within *anyone's* field) Stephen has succeeded in distorting the whole thrust of my article.

Let me restate it as unambiguously as I can. If a therapeutic technique is capable of convincing someone that they have

been abducted by extraterrestrials to have experiments performed on them, (a phenomenon for which there is not one scintilla of reliable independent evidence) then any information gained by using that technique should be treated with the profoundest scepticism. Further, I would suggest that anyone using such techniques on any person, for any reason, is arguably doing that person much more harm than good.

Stephen criticises my use of figures that suggest certain levels of perceived abuse of individuals and states, correctly, that I did not attribute them to anything. They are figures that are bandied around in popular discourse and I gave them no weight at all, apart from that they were common public perceptions. He then goes on to give a selection of statistics from refereed journals, though the public rarely reads refereed journals, usually relying on media reports or popular mythology of the "everyone knows" kind.

Be that as it may, the statistics Stephen uses only seem to obscure matters even further. Figures from as low as 7% to as high as 54% for various forms of abuse seem to me to leave a rather large margin of error. He states that self attribution in any survey is subject to some level of error and I would go further and suggest that it is a notoriously unreliable indicator. There are any number of other confounding factors that render any estimate of the level of sexual or other forms of abuse tentative, not least of which are the legal definitions of what constitutes abuse in different societies and the perceptions that are current in any sector of a society.

After all, does it seem plausible that college women in the USA are eight times as likely to suffer from sexual abuse as are women in North Carolina, college or otherwise? Or three times as often as women are likely to experience assault of any kind in Los Angeles? The impression I gather from the figures Stephen uses is that we really have no idea at what level sexual abuse stands in our society. And I am always wary of claims along the lines of "if the reported level of anything is X% then the unreported incidence must be at least three (or five, or one hundred) times higher." If these cases are unreported, then, in the absence of any independent evidence, any estimates of their magnitude are at best guesswork and, to say the very least, unhelpful.

But there is one point on which I am sure Stephen and I would agree and that is that whatever the level of sexual abuse, it is too high. But equally worrying to me, and the reason I wrote the article, is that there are people who are being forced to suffer needlessly the trauma of sexual victimhood by relying on the 'help' of dubious therapists who use techniques that are not only unproven but are, by any rational analysis, extremely suspect. The legal profession has the view "Better ten guilty persons go free than one innocent person be convicted" and I do not think that we can in conscience overturn the principle inherent in that dictum, just because we have a repugnance for the crimes being committed in sexual abuse cases.

## FORUM

# Misleading or Misreading Science

Andrew Parle

Recently I received a flyer from the Victorian Branch regarding a presentation by a guest speaker, Colin Goodwin, Creative Atheist, which stated “The Australian Skeptics, apart from confronting the scientific validity of creationist claims, does not normally take a stand on religious beliefs.” then goes on to claim a special case for Colin Goodwin.

Now all this seems to me to be a classic inconsistency and prompts me to ask a few questions.

1. Why do the Australian Skeptics “Not normally take a stand on religious beliefs”? Why are religious beliefs sacrosanct (that being the apposite word on this occasion).

2. If creationist claims do not constitute “religious beliefs”, then what the hell are they? (and be careful what you answer here, I may report you to Ian Plimer and then you would be in strife!)

3. Why do you differentiate between “creationist claims” and “religious beliefs”? Is it that you see religious beliefs as being less unacceptable or creationist claims as being less credible/more way out? Or what?

4. Surely to god (oops - that just slipped out) many - if not most- of the claims made by all religions (not just the Christian) are open to challenge.

5. Is it that you have members who are sceptics but who are also believers (in a religious sense) and you don't wish to offend such members?

6. If fundamentalist creationist claims, such as all life being created on Oct 23, 4004 BC, Adam and Eve etc are open to scientific challenge, then surely virgin births (there are many such which precede the Jesus myth), bodily resurrection (must be damned cold up there at Absolute Zero temperature) etc are also open to scientific challenge.

7. You are probably aware that - particularly in the UK - many members of the Cof E clergy are openly expressing their doubts (and even open disbelief) concerning some of the cherished tenets of formal belief in God him/her/ it self. That being so, how come the Australian Skeptics are so timid? I have other questions but these will do *pro tem*.

**Daryl Haslam  
Glen Iris VIC**

## Barry Williams responds

These questions have been answered in the past, but they probably bear reiteration from time to time.

The first of the Aims of Australian Skeptics reads “To investigate claims of pseudoscientific, paranormal and similarly anomalous phenomena from a responsible, scientific point of view”. This indicates, or at least it should indicate, that Australian Skeptics is not a dogmatic organisation, nor, in my view would it be possible for an organisation to be

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## ... Abuse from p 50

Again I ask, can the pain and anguish suffered by someone who has been sexually abused by someone they trust, be any more traumatic than that suffered by people who have been falsely convinced that they have suffered such abuse, or by those who have been falsely accused of perpetrating such abuse? I think not. By all means let those in the counselling professions develop new and better methods of relieving pain and trauma, but before letting them loose on vulnerable people, let us make sure that their therapies are treating the cause of the trauma, not causing the trauma.

To use an analogy, which I admit is not always the most reliable way to make a point but possibly useful in this case, any new drug treatment is required to pass stringent clinical trials before it can be prescribed by doctors, and even then unsuspected and deleterious side effects sometimes show up later. Is there any such control on the validity of therapies offered by counsellors? It would appear not, though surely

that is the very least that we should expect of any type of treatment.

If, as its proponents assert, there is evidence that this type of psychotherapy can reveal repressed memories of past trauma (and there may well be), then we cannot ignore the, at least equally strong, evidence that false memories can also be generated in the mind of the patient by the counsellor.

To revert to my medical analogy; supposing someone invented a cure for arthritis. Fifty percent of the recipients were totally cured of the disease and the other half died in agony and there was no way to determine before hand, into which category any patient might fall. Would it be reasonable to release this cure onto the market? I would be surprised if anyone answered “Yes”. And I would be equally surprised if anyone seriously espoused the view that a psycho-therapeutic treatment, that had the potential to create as many victims as it helped, should be given any more support. ■

both sceptical and dogmatic and retain any credibility in either sense.

Nor is there any inconsistency in the Victorian Branch's choice of speaker. It may well be that the Vic Committee judged that he would be interesting for the Vic Skeptics to hear. I have given talks to all sorts of groups that do not necessarily share our objectives and I doubt if my performance compromised their integrity in any way.

But to answer your question, Australian Skeptics takes no position on the social phenomenon of religion any more than it takes positions on political, artistic or sporting, or any other social phenomena. These phenomena are not paranormal, pseudoscientific nor anomalous, but commonplaces of human experience.

To get to your specific points, first we must distinguish between 'claims' and 'religious beliefs'. The claims made by creationists undoubtedly *are* religious beliefs, but it is the creation 'science' advocates, not the Skeptics, who insist that these claims are supported by scientific evidence. And of course, the creationists adduce no evidence whatsoever to support the claim that creationism is scientific, as a reading of any of their childish literature will make crystal clear.

Although the note you received from the Victorian branch may not have spelt it out, this is by no means the only claim made by religious groups on which we do have opinions. Faith healing is one, exorcism is another and there are many more. The connecting factor, and the factor that brings them within the purview of Australian Skeptics, is that these claims are amenable to testing using the tools of science.

In the realm of religious 'beliefs', things are very different. Using your own examples, virgin birth and bodily resurrection into Heaven, (and, incidentally, science tells us that the temperature in space is not Absolute Zero, as you state, but around three degrees higher) the various Christian churches claim that each of these, arguably improbable, events happened only once and that about 2,000 years ago. One off events are generally not easily scientifically testable and I am not sure just how one would design a scientific test that would throw any light on these particular ones.

The same applies to the Buddhist belief in reincarnation. While it is possible to investigate the new age claims about 'past lives' in which people claim to remember incidents from those past lives, Buddhists make no such claims. They hold these beliefs as part of their religious traditions, just as the adherents of all religions hold beliefs for which they can offer no testable evidence. Religious beliefs are held on 'faith' and faith is not a rational reason for believing anything; it relies purely on the personal preferences of the believer.

Nor are religious beliefs the only ones that can be held purely by personal preference, without any pretence that they can be justified in rational terms. For example, you may believe that Dean Jones is the most exciting batsman in Australia and I might favour Mark Waugh. You may 'claim'

that Jones has the higher test aggregate and I might 'claim' that Waugh has the better average, and research can show which, if either, of these claims is correct. But no amount of rational discourse and no scientific test can tell who holds the correct 'belief'. Or, you may hold that Wagner's operas are more satisfying than Verdi's and I might regard your view as being completely misguided, but I know of no way to test it. If, on the other hand, you claim that Wagner wrote *La Traviata*, then I could test your claim and the result would undoubtedly show that you were the musical equivalent of a creation 'scientist'.

Therefore, it is not a matter of one set of statements being more or less acceptable or credible than the other, but of whether they are the sorts of things that can be tested, as specified in our Aims. Of course religious beliefs and practices are open to question, as are the selection policies of the Australian Cricket Board or the programming decisions of the Australian Opera, but it is not a role that Australian Skeptics seeks to fulfil. Other organisations do choose to question these beliefs and practices, and it is entirely proper for them to do so in a democratic society.

However, any reading of *the Skeptic* will show that articles and items have been published on issues relating to all of these phenomena and many others. This does not reflect any 'policy' position on behalf of Australian Skeptics, but rather of the sort of articles that contributors to *the Skeptic* write, filtered through the Editors' perceptions of what the readership is likely to find interesting. If the totality of what has been published in the Skeptic is taken as representing an official position, then I suggest we must be an extremely schizoid organisation indeed.

As to the religious beliefs of the readership of *the Skeptic*, we have no certain way of knowing, nor is it a matter of great importance to us. Unlike groups such as the Creation Science Foundation, Australian Skeptics does not require people anyone to sign a statement of belief, (or disbelief for that matter). I would suspect that the religious affiliations of our readers would encompass the spectrum of religious beliefs of Australians at large, though I would also suspect that it was numerically skewed towards the unbelief end of that spectrum. But I don't know, nor do I wish to know, as it irrelevant to the aims of the Skeptics.

In the case of the Anglican clergy who are unbelievers, I have a sneaking suspicion, for which I have no evidence at all, that this is not as uncommon as we may think among the clergy of those religious denominations that encourage the acquisition of education by their office bearers.

Finally, I do not believe that *Australian Skeptics* exhibits timidity in its dealings with a wide range of issues, including religion. We are not here to put the whole world to rights, just to shine the light of reason into a few selected dark corners. When all things are considered I think we do a pretty good job of it. ■

## FORUM

# Facilitated Communication: An Answer

Rosemary Crossley

Vol 14 No 1 of *the Skeptic* contained an article called 'Facilitated Communication'. The author, Adam Joseph, describes it as a summary of a book chapter by Alan Hudson (Hudson, in press).

The article presented a strongly negative view of facilitated communication training. There is no doubt that the use of communication aids with facilitation by people with severe communication impairments has given rise to controversy. What Joseph neglected to say is that Hudson, a psychologist, is an active player in the controversy, not merely an onlooker. To take Hudson your sole source of information on facilitation is as sensible as accepting *The Hawke Memoirs* as your sole source of information on politics in the 1980s. I cannot claim to be impartial myself, but I can quote the public record accurately.

## Let's get the facts right for starters

The first formal testing of communication produced with facilitation of which I am aware took place at St Nicholas Hospital in 1977, not in the Supreme Court in 1979 as stated by Joseph/Hudson. The subjects of the test were Anne McDonald, a resident with severe cerebral palsy and no intelligible speech who had been diagnosed as profoundly intellectually impaired, and myself, her teacher and facilitator. The tests were devised and administered by Dr Leo Murphy, then Dean of Special Education at Burwood State College, and Mrs Jean Vant, former Senior Psychologist for the Victorian Mental Health Authority. Mrs Vant reported that in my absence Anne "was given a passage to read whose contents were known only to Dr Murphy and myself, then three typed questions relating to it." to answer with my support. Ms Vant herself had supported Anne's arm while she spelt answers to other questions. She further reported that "I have observed her [Anne] working with the magnetic letter board both as the person supporting her and the person who was asking the questions. I am satisfied in both instances that she did indeed answer the questions and in each case had read the material and the questions." (Crossley & McDonald, 1980, pp 125-130).

This report, endorsed by Dr Murphy, was provided to the Mental Health Authority, who had requested the investigation. Despite an attempt by the Mental Health Authority to conceal it from the Supreme Court (*loc cit*, pp 215-221) it was available to Mr Justice Jenkinson in May 1979 when he granted Anne's application for Habeas Corpus and allowed her to leave the hospital. Since then Anne McDonald has

completed a BA at Deakin University, incorporating a major in Fine Arts from the University of Melbourne.

Joseph/Hudson correctly state that the Eisen Committee, set up in 1979 to investigate the communication of eleven other St Nicholas residents, reported that "No child shows evidence of even the most elementary level of literacy or numeracy." (Eisen, 1980, p6). As it happens, there is a direct conflict between the Committee's report and the minutes of their investigations, which became available under FOI in late 1984.

The Eisen Committee papers record, *inter alia*, examples of successful spelling and message passing including comments such as "P is competent with fractions", "N can handle sums and doesn't need her arm supported all the time" (13/7/79) and, that in answer to a question about Isaac Newton asked in my absence, L "spelt out NEWDON (sic) No arm support needed no doubt about letters hit." (6/7/79). Unless L was deemed illiterate because she spelt Newton with a D this would seem to be compelling evidence of at least an elementary level of literacy.

Moving along to 1989, Joseph is correct in stating that the Intellectual Disability Review Panel (IDRP) reported that the communication of each individual using facilitated communication who was involved in controversy needed to be assessed individually. He omits to say that the IDRP did in fact assess the communication of six individuals who used keyboards with facilitation and who were clients of DEAL Communication Centre and found that:

"The validity of the communication while using the 'assisted communication technique' was demonstrated in four of the six clients who participated in the two studies." (IDRP, 1989, p 40).

Given that the thrust of Joseph's article is that there are no proven cases of valid communication involving facilitation, this is a significant omission.

Joseph then raises the issue of allegations of abuse made with facilitated communication. The topic is complex, involving not only questions about the validity and veracity of communication but also about the procedures of the agencies involved in handling allegations of abuse by people with disabilities. Readers interested in the details of specific cases are referred to *Facilitated Communication; A set of readings (Sharing to Learn, 1994)* which includes articles by Hudson and myself.

### Questions of validity

Joseph outlines one study in which all participants failed to communicate information unknown to their facilitators (Wheeler *et al*, 1993) and there are others (Hudson, in press). Other published studies, conversely, report valid communication by people using communication aids with facilitation. For example, investigation conducted by the Queensland Department of Family Services found that within a year of starting to use facilitation:

21 (87.5) of the client sample of 24 had their communication validated using content and structural analysis (QDFSAIA, 1992, p 10).

Preliminary results from six university-affiliated research teams and from two clinic-based teams were presented at the FCI Conference at Syracuse University, NY, in May 1994. In total seven six communication aid users were involved in the research projects. Fifty-seven had completed testing, of whom fifty two had passed the tests they were given (Crossley and Graham, 1994).

### Recent research into the testing of facilitated communication

Early in 1994 DEAL Communication Centre participated in research conducted by staff and students from the School of Communication Disorders into the testing of communication produced with facilitation. The aim was to examine the factors that may affect test performance in individuals using facilitation, looking in particular at testing experience, the nature of the task, the skills of the facilitator, and specific language impairments. Ten individuals, ranging in age from eight to thirty have participated to date. All have diagnoses of significant intellectual impairment associated with diagnoses of Down syndrome or autism.

This investigation followed the methodology of most of the studies with negative outcomes, in that the communication aid user was shown stimulus material screened from the facilitator, and had to provide the facilitator with information about that material. Preliminary results show that of the ten participants, one to date has not completed enough trials for the data to be significant, one has not validated his ability to identify correctly or describe items unseen by his facilitator, and the remaining eight have validated their ability to identify correctly or describe items unseen by their facilitators. Six of the seven participants diagnosed as autistic were successful, and the other two successful participants have Down syndrome.

The outcomes of current research has significant implications for the testing of students in facilitated communication training programs. Specifically, they raise questions about the validity of results obtained in one-off tests which use a pre-determined methodology not previously trialed with the students being tested. As most students who have failed one-off tests have had their access to facilitated communication training terminated, this is an important finding.

### Kennett cuts

Joseph appears to have augmented the information provided by Hudson with a hefty dose of similarly unbiased information from the Victorian government's PR system about the withdrawal of funding from DEAL Communication Centre. A little more scepticism and some investigative journalism might have asked why the funding cut-off came when it did, and any inquiry would have discovered that after the Commonwealth State Disability Agreement (CSDA) came into full effect on July 1, 1993, there was a substantial financial motivation for the State to cut funding to DEAL and other agencies previously funded by the Commonwealth directly. Investigation would also have revealed that DEAL had been reviewed by the Commonwealth immediately prior to the commencement of the CSDA implementation and had passed the review with flying colours.

### In conclusion

Joseph's only positive finding was that there "is no evidence that facilitated communication constitutes an advance in clinical psychology" (p 29). Given the egregious errors perpetrated in the name of clinical psychology (which could be an appropriate field for in depth sceptical investigation - let's start with its theoretical underpinnings) this is a relief.

Nonetheless, it's appropriate to ask some questions. Why did *the Skeptic* publish an article on a topic so different from the fire-walking, spoon bending and UFO's which usually and quite rightly provide entertaining material for its correspondents and readers, without applying a degree of scepticism? What about at least making some attempt to check those facts available on the public record before publishing an article which is obviously potentially defamatory? Surely even minimal scepticism might suggest that the Supreme Court does not make its decisions solely based on the spelling or mis-spelling of two words. Would the article have been published at all if the name at the end had been Hudson and not Joseph, an office bearer in the Victorian Skeptics?

More seriously, was any thought given to the possible implications of this article for those people with severe communication impairments whose disabilities force them to use facilitation in order to communicate? None of them use these methods of communication from choice - they do so because, despite its obvious drawbacks, facilitation is the only way they can get words out. They are not helped by publication of an inaccurate and one-sided article which says they are all "manipulated ... allegedly to communicate." (p 26).

The last word belongs to Anne McDonald, from a paper she delivered at the 1992 TASH conference in San Francisco:

"Communication falls into the same category as food, drink and shelter — it is essential for life. Without it life becomes worthless."

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## Adam Joseph Replies

Rosemary Crossley indeed has the right to reply to articles in *the Skeptic* as has any other reader in a manner they see fit. Crossley more so, given that the article on 'Facilitated Communication' made a number of references to her and DEAL. One cannot simply separate the two in any discussion on facilitated communication.

Its interesting in her reply to read of the correct statements I sourced from Alan Hudson's study. As are the omissions. To fully appreciate the depth of the study Alan Hudson researched, and one where he certainly became an active player in facilitated communication testing, one need only read his full report "Disability and facilitated communication: A critique" in *Advances in Clinical Child Psychology* (Vol 17) New York: Plenum Press, as was also accurately credited in the article, along with all other appropriate sources. In condensing the paper of 41 pages and adding some, there are certainly going to be omissions, not necessarily in favour of or against facilitated communication. There is no doubt that there are many health professionals who have faith and belief in facilitated communication, but this alone does not make it a valid therapy. The only way to test a modality is to put it through years of rigorous testing and facilitated communication has been tested on many occasions - in and out of the public eye.

I could be wrong, but I get the distinct impression from the reply that facilitated communication can only be properly

evaluated if under the watchful eye and participation of Ms Crossley. On the occasion I met her personally, and on the several times I have spoken to her on the phone, I found her to be an extremely polite person, one with a strong and somewhat charismatic personality. Understandably others have found this too.

The claim that the topic of sexual abuse is 'complex' amazes me more than somewhat. Many cases of such abuse emanating from facilitated communication are documented and have been or are before courts in various countries, particularly in the USA. This is on the record and has been well reported within the health profession and general media. The Melbourne case involving 'Carla' was the most sensational because of the pain it inflicted on an entire family who not only had their daughter taken from them, but were accused of the most heinous crimes against her. The courts clearly ruled against the accusations and in so doing against facilitated communication.

*Autism Research Review International* is an easily accessible digest to obtain and has listed many cases of sexual abuse allegation involving facilitated communication. When the allegations have proven false, then it does matter to many that the cause needs to be addressed. One Victorian case involved Robert Williams, a worker at a residential unit for disabled adults in Traralgon, who was accused, via a facilitated communication coordinator and a Canon communicator akin to a typewriter, of injecting himself and a victim with heroin and raping her. He was sacked and charged with the rape of three female residents. A magistrate dismissed the case.

The State Ombudsman investigated and found that none of the women making the claims could, in fact, communicate. Williams was unable to find another employer in the town, and even his wife lost her job. Police also charged Williams with making threats against former colleagues. The Ombudsman, while not condoning this measure, said it was understandable, given the anger and frustration involved. He strongly recommended he be reinstated or paid compensation. Community Services Victoria, his employer, refused. Police later dropped all charges.

It would take many pages to list other similar cases throughout the world. This, of course, is not to presume that sexual abuse does not occur; each case has to be judged on its merits, and the cases dealing with facilitated communication have certainly shaky foundations, as the records show.

In relation to government funding cuts, Premier Kennett's Treasurer has certainly withdrawn funding in many areas. All such funding requests are based on an investigation, which may or may not recommend, depending on the view of the needs involved. If this writer is expected to be sceptical about government press releases relating to funding withdrawal (which I most expressly am about all Govt activities), then not only how taxpayers money is spent, but the validity of the claims of the 'product' must also be looked at sceptically. When it comes to the area of health, even more so.

The claim that the intellectually impaired do not use facilitated communication through choice, but - "they do so because, despite it's obvious drawbacks, facilitation is the best or only way they can get words out" - is nothing more than emotional blackmail against the many loving and caring families who will forever hold out hope that something might help the situation they and their children find themselves in. And someday a therapy just might provide that hope. But before we can deem it hope and not false hope, thorough research and evaluation must be embarked on. Facilitated communication has not passed the criteria required so far.

In June 1994, the Board of Directors of the American Association on Mental Retardation adopted a resolution :

"A substantial number of clinical evaluations and well-controlled studies indicate that facilitated communication, a technique of physically assisting people with autism or mental retardation to communicate through typing or communication boards, has not shown to result in valid messages from the person being facilitated.

Therefore, be it resolved that the Board of Directors of the American Association on Mental Retardation does not support the use of this technique as the basis for making any important decisions relevant to the individual being facilitated without clear, objective evidence as to the authorship of such messages."

In October 1993, the Council of the American Academy of Paediatrics officially concluded :

"Studies have repeatedly demonstrated that Facilitated Communication is not a scientifically valid technique for individuals with autism or mental retardation. In particular, information obtained via Facilitated Communication should not be used to confirm or deny allegations of abuse or to make diagnostic or treatment decisions."

In August 14, 1994, the Conclusion from the resolution on Facilitated Communication from the American Psychological Association reads:

"BE IT RESOLVED that APA adopts the position that facilitated communication is a controversial and unproved communicative procedure with no scientifically demonstrated support for its efficacy."

There are many other similar conclusions in countries where facilitated communication is utilised. I have used the US examples because of the continually growing controversy there and the fact that many of the Australian studies have been well aired. It is still a controversial technique. Given the emotional content of any such technique, I can well understand why people hope it is valid, but given its capacity to cause harm if it is not valid, I think we should withhold judgement until it can be shown, without serious controversy to be a valid method. Alan Hudson's paper is worthwhile reading in its entirety for those who wish to follow the issue

in detail.

As to not applying a degree a scepticism about the mounting studies being published against facilitated communication, one can go around in circles looking at the available information for a concise and compact article for *the Skeptic*. I did ... and I still came to the same conclusion. There is currently no universally accepted scientific validity for facilitated communication. Maybe one day there will be and that would be fantastic. But please, Rosemary, just because you say so, doesn't mean there is. ■



## FORUM

# A Challenge

**Noel Bryning**

To Wallaby - from Dingo -

Dear Sir Jim,

Your "Wallaby" tag suggests that you have a love of our native fauna and your Report in *the Skeptic* (Vol 14, No 3 p 46 ) shows that there is a love affair between you and your two dogs. A dog lover myself, I chose "Dingo" as my art pseudonym years ago when our native dog was seen as a supreme artist among animals. Using something like "psychic" intuition and intelligence he was able to outwit humans in his own area of tracking and traps -sceptical of poison baits too. His art was the art of scepticism where man was discernible.

One reason why some dogs may be less than psychic is that they become demoralized by association with clowns and careless owners. I was glad to see that your Chewie and Gypsie are too shrewdly sceptical to be disturbed from rest by your visits in an alien car at odd times when you would obviously not be staying home to be of use to them as a feeder or walker in the park. It is not that they consciously plan it that way, but any dog knows its master's motor a mile off and all the pleasures, and perks associated with the time and torque of his chariot would invade their dreams and stir them to action if the time was ripe. If anything, my Dingo would think your shaky experiment shows that Chewie and Gypsie are on his wavelength in the dream-trance state of siesta. In other words Dingo would be too psycho-scientific to display shaky experiments on unsuitable subjects.

Seriously, though, I am grateful to you for your reminder of Rupert Sheldrake "the British Botanist" (sic). We can excuse your "untutored eye" for conveying a distorted view of a beat-up from the *Sydney Morning Herald* but a more tutored eye would see sense when the books are read. If I had his book, *Seven Experiments That Could Change The World*, I might criticise him too for a scientist's sacred dependence on experiment, however unsuitable, when the only ultimate test would be through long experience and frequent observation.

But I was able to get two of his books. In both he is rated as a PhD in bio-chemistry (not botany) at Cambridge and Harvard. The author of *A New Science of Life* [1981] and *The Rebirth of Nature* [1991], he featured Morphic Resonance and the Habits of Nature in *The Presence of the Past* (1988).

Judging by your Report, one could have expected the author of the *SMH* article 'Bridging Science and Religion' to be soft on religion and lacking true scientific scepticism. But if

you had read any or all of his books you could hardly claim the privilege of untutored eye to ridicule creative scepticism at its best. Sheldrake's positive attitude of searching like a dingo for the truth behind the material facts is paramount. "All nature is evolutionary. The cosmos is like a great, developing organism and evolutionary creativity is inherent in nature herself" (p96) *The Rebirth of Nature*). "The neo-Darwinian theory of evolution shares this vision of evolution as a vast, spontaneous, creative process. In Monad's conception, the creative role of chance, the indeterminate, is expressed in its interplay with necessity, the determinate" [p73].

Concerning us - Dingoes and Wallabies - he writes: [p74], "Although many materialists have a romantic side and implicitly acknowledge the life of nature in their private lives, most of them explicitly deny it, adopting the conventional view of mankind as the only truly conscious species in an otherwise inanimate world". Nowhere does he say that animals are psychic but he does describe [p99], "Three Theories of Life and Nature". "One tradition of thought, vitalism, has maintained that living organisms are truly alive - organized by souls, vital factors, formative impulses or entelechies. Vitalism is a development of the animistic theory of nature that held sway before the mechanistic revolution. But vitalism has confined life to biological organisms, leaving the rest of nature to mechanistic physics. By contrast, the mechanistic theory of life denies that there is any essential difference between living and dead organisms or inanimate matter in general. It regards them as inanimate machines, governed only by the general laws of nature that apply in the realms of physics and chemistry (Chapter 2)."

"In the 1920s, in a holistic spirit, a number of biologists independently proposed a new way of thinking about biological morphogenesis: the concept of embryonic, developmental or morphogenetic fields" [p108]. Under "Morphic Resonance" [p110], Sheldrake writes, "The hypothesis of formative causation, first proposed in my book *A New Science of Life* [1981] and further developed in *The Presence of the Past* [1988], suggests that self-organizing systems at all levels of complexity are organized by "morphic fields". This hypothesis is controversial but it is testable by experiment and there is already considerable evidence in its favour." [p111]

Ten years later, in *The Rebirth of Nature* [p117] he writes, "This idea enables the working of individual memory and the inheritance of instincts and behavioural capacities to be

seen as different aspects of the same phenomenon. Both depend on morphic resonance, memory and capacities for learning take place against the background of a collective memory inherited by morphic resonance from previous members of the species. Such a concept already exists in Jung's theory of the collective unconscious as an inherited collective memory. The hypothesis of morphic resonance enables the collective unconscious to be seen not just as a human phenomenon but as an aspect of a far more general process by which habits are inherited throughout nature."

On Creativity and Habit [p144] he points out that "the evolutionary process involves an interplay between creativity and habit. Without creativity, no new habits would come into being; all nature would follow repetitive patterns and behave as if it were governed by non-evolutionary laws." [p182] "If nature is alive, she can be thought of as entirely autonomous, with no need for God." This means that evolution has created the variety and immensity of nature through the creative activity of all organisms - animal, vegetable, mineral - with the help of the electric energy of Sun, Moon and Stars, no doubt.

As a dedicated Dingo, dear Wallaby, I must admit to a bias in favour of Sheldrake and his Morphic Resonance. It sums up, in other words, much of what I and other Dingoes have thought out for ourselves over the last 65 years. The books are well and clearly written, with good diagrams and bibliographies. Copious quotations include our scientist, Paul Davies. On the jacket of *The Presence of the Past*, Davies says, "Bold clear and incisive... Sheldrake has a remarkable ability to identify the weak spots of scientific orthodoxy". What better challenge to the sceptics of established science? Hoping that all little rock-wallabies can face the challenge of reading the Sheldrake books for themselves,

I remain your dearest critic,  
the Dingo.

Noel Bryning is well qualified to speak for animals that can only converse in the non-verbal (psychic) ways of body language, intuition, mental pictures "on the nose" and love. Through intimate living with and loving a dozen or so dogs and cats over the last 75 years he has achieved an intuitive understanding of animal mentality that grows with practice and a sense of wonder. He started as an infant with a stray sandy terrier bitch, called Gypsie by his mother. This was superseded by a pure bitch fox terrier, also named Gypsie to heal a broken heart. Later, a white bulldog with black spots named Domino showed how a stupid animal with a sense of fun could captivate the minds of even the non-lovers. More terriers, poodles followed. A highly intelligent Border Collie cattle-dog (Bluey) and Buster, his stray successor showed how better training can build on instinctive traits. Long association with cats in later years showed them to be wise and even more "psychic" in their own way of thinking. The theory of Morphic Resonance is a way of explaining these things more clearly in the context of cosmic causation.

## Sir Jim R Wallaby Responds

Let me start off by saying that if the article in the *Sydney Morning Herald*, "Bridging Science and Religion" was a beat-up, it was a beat-up under Sheldrake's own by line. The note at the end of the article is where he was described as a botanist, so I took him at his word.

On the substantive issues you raise, as one whose association with science is tenuous at best, I am not qualified to judge Sheldrake's hypotheses, which sound to me a little like Lamarckianism. But as a casual observer of the human condition, I suspect that if he is right, then at some stage the evidence for his rightness will become overwhelmingly persuasive. I don't think we have reached that stage yet.

My experiments were those suggested in the article and, as far as I can tell, they were failures. I cannot agree with you that a dependence on experiment is to be discouraged, nor that a reliance on long experience and observation is all that a scientist needs.

A lifetime's experience and observation tells me that the Sun revolves around the Earth. I am glad, however, that someone experimented and deduced, to show me that it isn't so. It may not matter much in the quotidian round, but it does open up more exciting prospects.



## Reiki

A recent Liar's Club program on Radio 3RRR (30 October) featured a discourse with a reiki healing practitioner followed by comments from listeners which ranged from derisive to supportive of reiki.

One of the callers was a medical GP generally supportive of such alternative practices where placebo can elicit a healing response, just as it can when used by orthodox medical practice. Should society encourage humbug philosophies for the benefits they can deliver? In my opinion this would be regression to the Dark Ages and should be resisted.

Revolutions can happen slowly and move us backward as surely as move us forward. Is a creeping revolution of irrational new-age bunk contribute to our disturbingly low rate of infant vaccination? Could this new-age revolution bolster the political constituency for irrational health practices to the position where they attract taxpayer funding? It couldn't happen in Australia! Could it?

**Evan Gellert**  
Essendon VIC

## Transactional Analysis

We are a couple of mature-aged sceptics (well, quite senior citizen ones really) who responded to an invitation by the Transactional Analysis Association of WA to attend a series of meetings to hear about and discuss matters of psychological and socio-psychological interest.

The first couple of meetings brought quite useful talks and good discussion on socio-psychological aspects. The third was an entirely different matter. In charge was a man who said he was from the University of Western

# Letters

**We welcome letters from our readers on any topics that may be of interest to other Skeptics. We reserve the right to edit letters for**

Australia, there to promote the forthcoming tour of yet another US guru, a Dr Jean Houston (as we recall), who he claimed to be a very famous psychologist. Her meetings were, as usual, very expensive. Her promotion was presented as of the "universal" type - world unity and all that - and we were invited to participate in activities that would give us some idea of what she was about.

Before it knew where it was the audience was performing various "shut-eye" arm and leg movements, which our speaker said would induce certain mystic feelings. These two old sceptics rapidly abandoned these meaningless and demeaning activities and noted the behaviour of the remainder of the audience, a large proportion of which professed to all sorts of strange effects and states of mind. Apart from us, one woman maintained a critical stance and joined us in expressing it. Another - who had moved arms and legs in accordance with instruction - was brave enough to say she had experienced nothing of what she was supposed to. The rest, predominantly women and many quite young, were sucked in and made no question.

After the "event" the Transactional Analysis organisers, obviously responding to our concern, defended the situation by saying they were offering this demonstration as part of their program to inform the public. However, although the demonstration was said to apply to all people, it became clear at the end of the mumbo jumbo that its aim was to promote Christianity.

We came away concerned that a

professional psychological group could allow this promotional exercise to occur without criticism, thus apparently endorsing it. It should have been dissected and challenged by them, especially regarding its purpose and the technique employed.

We have not been back since.

**Ralph & Denise White**  
Dianella WA

## Bent Spoon

It was with great delight that I read the heading AG wins BS on page 9 of the last *Skeptic*.

As you know, AG stands for *Australian Geographic* and BS for Bent Spoon, so I suddenly realised that our campaign to sell water divining rods imported from the UK had won us the award! Of course, the only reason we imported the divining rods was to benefit from the immeasurable publicity that the award would bring. How disappointed I was to find near the end of the article that AG did not refer to *Australian Geographic*, but to Attorney General.

Don't worry, Australian Skeptics, we'll try harder next year.

**Dick Smith**  
**Australian Geographic**  
Terrey Hills NSW

Dick, perhaps you are not aware of a clause hidden in the small print of our Articles, to wit:

"Any patron of Australian Skeptics who shall, by his actions, be deemed a suitable recipient of a Bent Spoon Award, shall not in fact be so awarded but shall instead be horsewhipped on the steps of his club by the Hon Secretary of Australian Skeptics or by such other person (or persons) as the Hon Secretary shall lawfully deputise to carry out the said horsewhipping."

I understand that the Hon Sec is currently conducting an investigation into the whereabouts of your club, so Beware.

**Ed**

## Fuming

In Vol 14, No 2 I critically reviewed an article on smoking by David Lewis. David had quoted information apparently sourced from the Australian Bureau of Statistics, but failed to provide a reference. I claimed that this data was not obtained from the ABS and asserted that, as presented, it misrepresented their findings.

The basis of my claim was that the information provided by David conflicted with the information I had obtained directly from the ABS. I expected that David, as a supposedly scientific sceptic, would acknowledge both his error and the true ABS findings. In Vol 14, No 3, David did state that the information did not come directly from the ABS, but far from admitting that he had made an error, he goes on to “defend himself” from what he calls an “unpleasant implication”.

David stated that he obtained the information from a book (written by a sceptic no less!) and as it was repeated in two newspaper articles and on a radio programme he apparently didn't see the need to question it.

The scientific sceptic does not just accept what another person says merely because it fits with a pre-existing belief, or because it is thought the individual is trustworthy. This is dogmatism. The author of the book was wrong and thus, so in turn, were the newspapers, the radio and David Lewis.

If the response to my claim had been scientific (I'll check the evidence) instead of dogmatic (Don't threaten my belief) then I may have thought differently about motives. It's not even as though the source material is obscure. Many public libraries carry ABS publications, as do the major university libraries. David's unwillingness to check the evidence in this case is bad enough, but to try and defend his actions, even when faced with the facts, is remarkable, and I believe says a lot about his objectivity.

Given the available evidence a more

gracious conclusion in this case would seem to be unwarranted.

(Dr) Stephen Basser  
Heidelberg VIC

This discussion seems to be running out of puff. It has reached its last gasp and the draw back in its continuance is that it is starting to drag on too long. It's time to butt out, pipe down and draw a discreet smokescreen around the issue. We will not accept any further king sized articles on this topic and any letters will have to undergo the Editors' filter processes.

Eds

## Cold fusion

Cold fusion will not go away. It is the 'perpetual motion', 'cars which run on water' scam of our era. The incredible claim from the Mormon Brigham Young University, that the puny energies of a couple of volts could produce nuclear fusion in a primitive device, was front paged around the world by our so reliable media, as the greatest discovery of the century.

Skeptics were in awe of this great advance in 'science' and did not dare to mock it as they might a mere spoon bender - no bent spoons for Cold Fusion.

Mainstream science, rather than treating this nonsense with the utter derision it deserved, wasted much valuable time and many millions of dollars in attempting to repeat these miracles. In the most exactingly, exhaustive, honest and impartial way, they demonstrated that nothing unusual was happening, ie that magic had not suddenly started happening in our part of the universe. That the paranormal, the tooth fairy, wishing makes it true, are still, for the time being, in the realm of the impossible.

But Cold Fusion will not go away. the enormous media hype has spawned a new race of con-men. It is today a fast growing, world wide industry in the tens of millions of dollars. The continued

media hype about the terrible dangers of conventional power stations, ie the ones that work and keep us from freezing, ensures a growing investment in alternative energy scams from the general public. Every wild, unsubstantiated claim is given great publicity and we are constantly assured that the ultimate breakthrough is just around the corner. Invest your money in Cold Fusion research today and become a billionaire tomorrow.

The great myth the media consistently flogs is that if only enough money is poured into research, anything can be made possible. With enough research money, even the tooth fairy can be made to work.

But gentlemen, where are the Skeptics while these giant frauds rampage through the world?

Keith Rex  
Paddington NSW

While I generally agree with your views about cold fusion, Keith, I have no idea on what grounds you assert that “Skeptics were in awe of this great advance...”. Any references I can find to cold fusion in *the Skeptic* seem to treat it as a very dubious proposition. It was, however, the scepticism exhibited by scientists in the field which caused them to try to replicate the original experiments and to show that the whole mass of media enthusiasm was based on very shaky premises.

Australian Skeptics is certainly not in a position to conduct major scientific experiments, nor are we a professional scientific organisation. We neither promote, nor disparage, sides in a scientific controversy, but we do draw attention to claims which cannot be shown to be scientifically valid.

As to why we did not award a Bent Spoon to the cold fusion proponents, the truth is much more mundane than you suggest. The Bent Spoon is awarded for events that happen in Australia or which are perpetrated by Australians, neither of which circumstance applied in the cold fusion case.

Ed

## Lourdes

Colin Weekes requested information about Lourdes 'miracles'. Being very ancient (sorry, chronologically disadvantaged), even to the extent of having built steam driven radios a la Harry Edwards, I have been around for a very long time and have seen the demise of at least five Popes. I might even make six, the present one is looking a little wobbly.

In all that time I have never heard of one of them going to Lourdes when they were really crook. Neither have I heard of an Archbishop seeking the miracle cure, although hundreds of them must have carked it in my lifetime. Which leads one to think that they might doubt their own miracle factory.

When Pope Pius XI, a very close friend of Franco, Mussolini and von Ribbentrop, was getting the death rattles, medical specialists were flown in from the USA, or wherever they happened to be, no doubt at enormous expense. This seems to be a waste of money with Lourdes only two whistle stops from the Vatican.

When Gabriel was giving Pius XII the 'Come on up' he also neglected the HH<sub>2</sub>O (Holy Water) of Lourdes, as did John ("The Good") XXIII.

I do not count John Paul I as he was not given the chance to go anywhere as he died suddenly, just as he was going to blow the whistle on a couple of Cardinals for touching the till of the Banco Ambrosiano (God's Bank). As did the civilian head of the bank who took off to London, and was found hanging from Black Friars Bridge. He had committed suicide by climbing fifteen feet up the dirty bridge and hanging himself. Without getting his hands dirty.

To get to the point Col, and answer your question. I don't doubt that there have been some cures (I was once instantly cured of TB, simply by being told that I didn't have it!). But the only miracle about Lourdes is that people don't die from the sewage polluted water.

**Clive Robbins  
Cromer NSW**

## Hey Jude I

I am rushing, as requested, to fill the yawning gap in your hagiological knowledge. According to my trusty Encyc Brit, St Jude is better known as St Judas, one of the disciples of Christ. He is, of course, not to be confused with the decidedly unsaintly Judas Iscariot, and to this end is mentioned in John's Gospel as "Judas, son of James". In some translations he is also known as St Thaddaeus.

The cult of St Jude as the patron saint of desperate causes arose in Germany and France in the late eighteenth century. Perhaps it is linked to the confusion of his character with that of Judas Iscariot. It is probably in this role that he has been adopted by the originators of the St Jude chain letters. I recently received one of the good Saint's epistles, which I enclose for your amusement. As you will see, one thing we can say about St Jude is that his command of English leaves much to be desired.

**Geoff Saunders  
McMasters Beach NSW**

We won't reprint the letter thanks Geoff. We have covered it in several past issues and it would be surprising if most of our readers have not seen a copy. One point of interest is that the letter claims it has been "around the world nine times", which is how many times were claimed for it several years ago. Isn't it about time it completed its tenth circumnavigation? Has anyone seen a copy during its eighth run?

## Hey Jude II

St Jude: Source - The Oxford Dictionary of Saints

1st Century apostle and martyr (clubbed to death in Persia where he preached with Simon, hence symbol of club associated with him in religious art). One of the 'brethren of the Lord' and author of the epistle of St Jude. (Or chain epistle perhaps? Ed) Little known

of his life after the Pentecost. Relics of Simon and Jude were taken to St Peter's in the 7th-8th Century (he must have been well pickled to last 600 years).

In recent times known as the 'patron Saint of hopeless cases'. This patronage is said to have originated because nobody invoked him for anything, since his name so closely resembled that of Judas, who betrayed Jesus. This has to be the thinnest claim to patronage I have ever heard of. Perhaps he could be entered for the Guinness Book of Records. His Feast day is June 19.

I think the ABC series The Damnation of Harvey McHugh had the last word on St Jude!

**Marc Grunseit  
Waverley NSW**

## Numerical Superstition

I received my copies of *the Skeptic* today in the mail (and a fine trio of magazines they appear to be). Saved! I have something to read over the weekend.

At a quick glance, in the Spring issue (Vol 14, No 3), re: the story on the bent spoon awards and the Brisbane City Council wanting to decree the number "4" *persona non grata* (or whatever the numerical equivalent is), to my knowledge it is the Japanese who consider the number 4 to be bad luck (phonetically the sound of the number is the same as the word for death).

Japanese children play a counting game where a group of kids take it in turns to count from 1 upwards, (ie child one recites one, child two recites two, etc) when the number 4 or any multiple comes up the child whose turn it is to recite the number must clap his or her hands. Reciting the actual number means that child loses and drops out of the game. The last person 'standing' wins.

The Chinese consider the number 8 to be particularly lucky, but I don't know if they have the same view of 4 as the Japanese. It would be a unusual if both

languages had the same coincidental link between the two words.

I remember hearing in 1988 that on the 8th of August that year, many Chinese women actually paid to have the birth of their child *in utero* induced on that date so that the child could be born 8/8/88. I also heard (no evidence for any of this though) that many planned the pregnancy 9 months earlier so that the birth would be imminent on the date.

**Glen Brady  
Belmont VIC**

We erred. You are dead right, Glen, it is the Japanese, and not a Chinese language in which '4' and 'death' are homonyms. We relied on incorrect information from an external source, and only became aware of our error after the last issue went to press. We apologise unreservedly to any Skeptics of Chinese extraction for our error.

We are now concerned that the Attorney General will use his new "Racial Hatred" Law to avenge his receipt of the Bent Spoon Award by throwing the editorial team into durance vile for the term of their natural lives.

**Ed**

## Snake Oil

The decision of the Australian Attorney General's Department to accept employees' sick leave certificates from naturopaths, herbalists, iridologists, chiropractors and, presumably, snake oil salesmen, in addition to - perhaps reluctantly - medical practitioners, has astounded many educated citizens.

However, this example of governmental asininity would not have astonished the 18th Century Skeptic-without-realising- it Dr Samuel Johnson, who wrote "It is impossible to criticise unresisting imbecility".

**Ben Bensley  
Normanhurst NSW**

## Greenhouse

Regarding the Greenhouse Theory, I believe that everyone has the plot wrong. If this is a scientific exercise, we should be able to ask these questions: Is there anywhere in the world where monitoring gas levels would be reliable and unaffected by volcanoes?

Is the suspected rise in carbon dioxide proven to be due to man's activities? Is the effect of carbon dioxide important compared to the much larger effect of water vapour and its massive capacity to cool the Earth?

Have we seen displayed a comparison of the infrared spectra of methane and the relative wave length and strength of the returning infrared waves?

The answers, I believe, are all No.

**L H Parnaby  
Blackburn VIC**

## In Spain

As a dedicated bushwalker (in Paddy Palin's definition of the term), I noted the behaviour of vines (liana) in sub-tropical rain forest. I did not find one that did not go up a tree clockwise (as you look up). However, I had not thought about doing a similar survey in the Northern Hemisphere.

As a surveyor I have kept a record for some time of inland willy-willies, both the large, slowly rotating ones and the small fast ones. I found them to be equally dispersed between clockwise and anti-clockwise. I have had experience of a few "big fellas" (mini-tornadoes) but noted the direction of only one, here at Bourke. It was clockwise, looking down.

**Bill Cameron  
Bourke NSW**

## Statistics

In *the Skeptic* (Vol 14, No 1), Vince Butler reviewed the results of a survey on peoples' belief in astrology, etc.

One of the main issues associated with these type of surveys is that they do not measure population parameters directly; they are means of estimating them. Associated with these estimates is some degree of measurement error. This can come from a variety of sources, including respondents emotional state, phase of their circadian rhythms, their gender as opposed to that of the interviewer, etc.

Although it is virtually impossible to know what the real value of a population parameter actually is, we can calculate limits between which the real value of a parameter is likely to fall. The smaller the distance between these limits, the more accurate the survey is. If the distance is great, we may well doubt whether or not the results are worth taking any notice of. This paper presents one of several methods of calculating a 95% confidence interval; that is, the real value of a population parameter is 95% likely to be between the calculated limits. The first thing to do is to find the standard deviation ( $\sigma$ ) by using the following formula:

$$\sigma = \sqrt{\frac{a_i (A - a_i)}{A^2 (A + 1)}}$$

$a_i$  = the number of respondents in a category.

$A$  = the total number of respondents.

Next, we multiply the standard deviation by 1.96, and then by 100 to convert into a percentage. Finally, we add the result to the reported percentage to get the upper limit, and subtract it to get the lower limit. We can then be 95% confident that the real population parameter is somewhere between these two limits.

Example

150 people are surveyed and asked whether or not they believe reports that

a Yowie is living in Centennial Park. The results are reported below: Percent of People Who Believe that a Yowie is Living in Centennial Park

Yes	No	Don't Know
37	55	8

Although the frequency of responses for each category are not usually reported, they can be estimated from the percentages if the total number of respondents is available. In this case the frequencies are: Number of People Who Believe that a Yowie is Living in Centennial Park

Yes	No	Don't Know
56	82	12

Using the above formula, for the Yes response, we get:

$$\begin{aligned} \delta &= \sqrt{\frac{56(150-56)}{150^2(150+1)}} \\ &= \sqrt{\frac{56*94}{22500*151}} \\ &= \sqrt{\frac{5264}{3397500}} = 0.039 \end{aligned}$$

$1.96 \times 0.039 = 0.076$ ,  
and  $0.076 \times 100 = 7.6\%$

so the 95% confidence interval on 37% is:

$37\% - 7.6\%$  to  $37\% + 7.6\%$   
 $= 29.4\%$  to  $44.6\%$ .

On these results, we can be 95% confident that the real population parameter for the YES response is somewhere between 29.4% and 44.6%. Using the same formula for the NO response, the 95% confidence interval is 47.1% to 62.9%, and As we can see, the results in this example tell us little about the real population parameters, except that most people are likely to have an opinion on the subject of Yowies living in Centennial Park. This method can be applied to any survey results, provided that each respondent appears in only one of the categories, and the number of respondents is reported. In any case, it will allow anyone interested to be able to better assess the accuracy of surveys, whether

they involve paranormal phenomenon or any other subject.

**Michael Morris**  
**Ashfield NSW.**

## The Pedantry is Revolting

I write in regard to an article in this very issue, which I intercepted via an as-yet undocumented psychic means, on the Psychic's Association.

I refer in particular to the footnotes. While I am the first to heap scorn on those ignorant psychic souls who would dismember our fine English language by the blatant misuse of the apostrophe, (note 1) it is appropriate that we who live in glass houses should not lob igneous or sedimentary (note 2).

Is your author implying that the AMA members may be improving their mumbo-jumbo activities by repetitive trials (practise) or does he simply mean that they are performing this pseudoscience (practice)?

Yours linguistically

**(Dr) P Dant, D Div**  
**Melbourne VIC**

Well, Dr Dant, it is our practice (noun) here at the Skeptic to practise (verb) the correct use of English whenever practicable. If you practise the art of visual acuity on the footnotes in question, you will notice (my joke) that we have put this practice into practice. Unless of course you are an American, then you will probably not practise the word practise at all, but will use practice practically all the time. And if you must be P Dantic about it, you will find that it is the practice of people with doctorates to sign themselves either Dr J Blow or J Blow, D Div, but seldom both at once (unless of course you are a creationist divine, in which case you need all the help you can get).

Ed

### References

The Shorter Oxford English Dictionary  
Collins English Dictionary

The Macquarie English Dictionary  
Webster's American Dictionary  
Oxford English, ICB Dear  
Usage and Abusage, Eric Partridge  
(Do you want me to go on?)

## Well I'll be Rugged

*the Skeptic* (Vol 14, No 3), News and Views (p 5, col 3). Referring to the "Earth Alignment Day" experiment conducted at London's Wembley Stadium. It is just possible that the Earth at Wembley *did* move. Of course the ten thousand people gathered at the "famous home of Rugby Union", *Twickenham* may not have been aware of this.

**AH Rhodes**  
**Hoppers Crossing VIC**

Ouch! As if it is not enough to have made a glaring error (Wembley is where the *Soccer* FA Cup Final is played), to add insult to injury, this had to be pointed out by a reader (not even a subscriber) with a *Victorian* address. I will never be able to hold up my head in Rugged circles again. Sackcloth and ashes make such a fashion statement, don't you think?

Ed

**Travelling on the  
Astral Plane? Don't  
forget to remind us  
of your ultimate  
destination. We're  
not psychic you  
know!**

## Demonic Definitions

Thanks to Dr Tony Wheeler of Mackay, Qld for sending us a list of definitions he culled from Ambrose Bierce's Devil's Dictionary (1842 - 1914). We find some of them to be most apposite.

**Clairvoyant**, n. A person, commonly a woman, who has the power of seeing that which is invisible to her patron - namely, that he is a blockhead.

**Deluge**, n. A notable first experiment in baptism which washed away the sins (and sinners) of the world.

**Mesmerism**, n. Hypnotism before it wore good clothes, kept a carriage and asked Incredulity to dinner.

**Palmistry**, n. The 947th method (according to Mimbleshaw's classification) of obtaining money by false pretenses. It consists in 'reading the character' in the wrinkles made by closing the hand. The pretence is not altogether false; character can really be read very accurately in this way, for the wrinkles in every hand submitted plainly spell the word "dupe". The imposture consists in not reading it aloud.

**Phrenology**, n. The science of picking the pocket through the scalp. It consists in locating and exploiting that which one is a dupe with.

**Physiognomy**, n. The art of determining the character of another by the resemblances and differences between his face and our own, which is the standard of excellence.

**Rhadomancer**, n. One who uses a divining rod in prospecting for precious metals in the pocket of a fool.

**Rafe Champion**, a freelance writer and member of the National Committee is a champion of Sir Karl Popper. He is currently researching and writing a book on boxing champion, Les Darcy.

**Steve Colebrook** is a member of the Victorian Committee, and is a professional musician and accomplished cartoonist. His cover cartoon captures the essential Harry Edwards that photographs only hint at.

**Charles Dickens** is a dead author.

**Harry Edwards**, of whom the least said the better, is the Hon Sec and Chief Investigator of the National Committee. We don't know what we would do without him.

**James Gerrard** is a Life Member and a member of the Victorian Committee. He is an engineer who has a long standing interest in the effects of low frequency electromagnetic radiation on the human body.

**Peter Johnson's** cartoons have graced our pages for several years. His eye for the absurd in ordinary situations is unsurpassed. He resides in a palindrome near Adelaide which, he claims, is not a matter for coarse jest.

**Adam Joseph**, President of the Victorian Committee, and host of the Liars' Club radio programme, is a professional broadcaster. He possesses one of those 'dark brown' voices which fits him well for that profession.

**David Miller** is President of the Victorian Atheist and Existentialist Societies. As far as we can ascertain, he does not drive a Mazda.

**Dr Steve Roberts**, member of the Victorian Committee, physicist, computer security expert and great lover (this is a paid commercial), spends a lot of his time at strange meetings. He will probably receive his reward in Heaven.

**Geoffrey Sherrington** is a scientist from Melbourne. In the only biographical information he supplied, he said he was "known to Ian Plimer". Despite this we have printed his interesting article.

**Sir Jim R Wallaby** is being considered as Leader by the Federal Liberal Party, which just goes to show how desperate they are.

**Paul Ward-Harvey** is a Sydney solicitor. As such, we will not make any disparaging remarks about his personality, other than that he is well known to the Editor -in- Chief. Litigation is imminent.

**Barry Williams** would like readers to know that his house extensions are almost complete. He also requests that if any Skeptic overhears him suggesting further extensions, they call for the men in the white coats.

**Prof Joe Wolfe** may work for the University of New South Wales but he is not sure whether that institution has been created yet. If it has, he works in the School of Physics, for which fact the School of Theology is very grateful.