

THE SKEPTIC

Vol. 29, No 4. December 2009

NONE

UFOs

GURUS

EMPTY

EVIDENCE what evidence?

AVN

NO

NOPE

CHIRO





Skeptical Groups in Australia

Australian Skeptics Inc – Eran Segev

www.skeptics.com.au
PO Box 262, Roseville, NSW 2069
Tel: 02 8094 1894; Mob: 0432 713 195; Fax: (02) 8088 4735
president@skeptics.com.au

Sydney Skeptics in the Pub – 6pm first Thursday of each month at the Crown Hotel, corner of Goulburn & Elizabeth Streets in the city (meeting upstairs)

Dinner meetings are held on a regular basis approximately every quarter at the Chatswood Club – bookings from editor@skeptics.com.au

Hunter Skeptics Inc – John Turner

Tel: (02) 4959 6286 johnturner@westnet.com.au

We produce a 4-page e-newsletter six times a year; contact the newsletter editor (kevinmcdonald@hotmail.net.au) to add your email address to receive the e-newsletter.

Meetings are held upstairs at The Beaumont Exchange Hotel, Hamilton on the first Monday of each even-numbered month, commencing 7.30pm, with a guest speaker on an interesting topic.

Australian Skeptics (Vic) Inc – Terry Kelly

GPO Box 5166, Melbourne VIC 3001
Tel: 1 800 666 996 vic@skeptics.com.au

Skeptics' Café – Third Monday of every month, with guest speaker. La Notte, 140 Lygon St. Meal from 6pm, speaker at 8pm sharp.

21 December – End-of-year social

More details on our web site www.skeptics.com.au/vic

Borderline Skeptics – Russell Kelly

PO Box 17, Mitta Mitta, Victoria 3701
Tel: (02) 6072 3632 skeptics@wombatgully.com.au

Meetings are held quarterly on second Tuesday at Albury/Wodonga on pre-announced dates and venues.

Queensland Skeptics Association Inc – Bob Bruce

PO Box 1388 Coorparoo DC 4151
Tel: (07) 3255 0499 qskeptic@uq.net.au

Meeting with guest speaker on the last Monday of every month at the Red Brick Hotel, 81 Annerly Road, South Brisbane. Meal from 6pm, speaker at 7.30pm. See our web site for details: www.qldskeptics.com

Gold Coast Skeptics – Lilian Derrick

PO Box 8348, GCMC Bundall, QLD 9726
Tel: (07) 5593 1882; Fax: (07) 5593 2776
lderrick@bigpond.net.au
Contact Lilian to find out news of more events.

Canberra Skeptics – Pierre Le Count

PO Box 555, Civic Square, ACT 2608
Tel: (02) 6121 4483 act1@skeptics.com.au

Monthly talks usually take place at the Innovations Theatre at the ANU. Dates and topics are subject to change. For up-to-date details, visit our web site at: <http://finch.customer.netspace.net.au/skeptics/>

Skeptics SA – Laurie Eddie

52B Miller St Unley, SA 5061
Tel: (08) 8272 5881 laurieeddie@adam.com.au

Thinking and Drinking - Skeptics in the Pub, on the third Friday of every month. Contact nigeldk@adam.com.au
www.meetup.com/Thinking-and-Drinking-Skeptics-in-the-Pub/calendar/10205558 or <http://tinyurl.com/loqdr>

WA Skeptics – Dr John Happs

PO Box 466, Subiaco, WA 6904
Tel: (08) 9448 8458 info@undeceivingourselves.com

All meetings start at 7:30 pm at Grace Vaughan House, 227 Stubbs Terrace, Shenton Park

Further details of all our meetings and speakers are on our website at www.undeceivingourselves.com

Australian Skeptics in Tasmania – Leyon Parker

PO Box 582, North Hobart TAS 7002
Tel: 03 6238 2834 BH, 0418 128713 parkerley@yahoo.com.au

Darwin Skeptics – Brian de Kretser

Brian de Kretser
Tel: (08) 8927 4533 brer23@swiftdsl.com.au



THE SKEPTIC

Volume 29 • No 4 • December '09

Contents

NEWS

- Events calendar** 2
Around the Traps 5

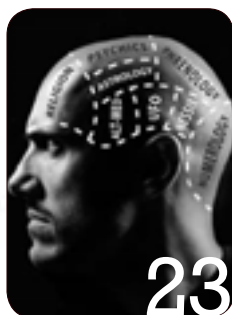
REPORTS

- TAM London** 8
 Jessica Singer
Briskepton awards 9
 Tim Mendham
Report from Nigeria 10
 Leo Igwe
Mind Body Wallet 11
 Joanne Benhamu



FEATURES

- Anti-vax update** 12
 Tim Mendham
Vaccination influences 14
 Julie Leask
Chiropractic complaint 18
 Eran Segev
Psychology of belief 23
 Krissy Wilson
Valentich disappearance 26
 Geoff Cowan



ARTICLES

- The oyster solution** 31
 Tony Heyes
Death of a quack 32
 David Gorski
The future of skepticism 34
 Martin Bridgstock
Education and ethics 38
 John Turner
UFO visitations 41
 Paul DesOrmeaux



FORUM

- Global Warming** 52
Religion 54



REGULARS

- Editorial** 4
Puzzles page 17
Book reviews 44
Astrology column 51
Letters 58



Here we go again ...

The recent case of the 'boy in the balloon' incident is interesting, and not just because of the immediate issues involved in a highly-successful hoax (successful, that is, in terms of raising publicity). Where the TV audience followed live reports of the boy supposedly flying at his peril over Colorado in a UFO-shaped balloon, much coverage has also been given to the father, Richard Heene, and his interesting(?) preoccupations. Apart from describing himself as a meteorologist, scientist and storm chaser, he also is reported to believe "that aliens are humanity's ancestors, and that one spoke to him while he was at a fast-food restaurant". They probably asked him to pass the salt.

But for this writer, however, the real interest of the hoax lies more in the reaction of others. Though scepticism about the balloon-riding son was rife from the start (it's reported that Heene had contacted the media before calling 911), the local County Sheriff Jim Alderton said it was inconceivable that the event was a hoax.

"We were convinced yesterday after talking to the parents and having investigators on scene during the duration of this event that the parents were being honest with us," an ABC/AFP report said. Alderton went on to affirm "They appropriately expressed statements, non-verbal communication, body language, and the emotions during this event that were entirely consistent with the events that were taking place." And apparently also consistent with being hoaxers, until they blew it by going on TV for more publicity, and their son spilled the beans.

How many times have we heard police and other such authority figures cited as reliable witnesses for UFO, bigfoot or a range of other paranormal sightings. If you can't trust a policeman's judgement, who can you trust?

That's exactly the problem. We are surrounded by claims of paranormal experiences – ghost and UFO sightings,

psychic visions, crop circles, strange coincidences, and various forms of prediction.

While many of these are fraudulent, in most cases our role as Skeptics is not just to doubt that the 'event' occurred, but to find an explanation for it. And many times that explanation lies within the observer's mind rather than in the external 'real' world.

More fundamental is to study why people believe one form of the paranormal or another. Not just a single event, but a whole history and whole genres of weird and wonderful (and sometimes worrisome) claims. And also to study why those same believers can readily switch to another set of beliefs when their previous ones become passé or prove to be unfounded.

Obviously, there is a propensity to believe that is not linked to any specific field, a mindset that is strong and resilient and will hop from one area to the next with enthusiasm and with barely a guilty or nostalgic look back. This attitude applies equally to followers of pseudoscience, such as pyramid power and crystal healing, energy polarisers, and many areas of alternative medicine.

This makes it difficult for skeptics, for fundamentally we are dealing with a psychology and a culture of belief instead of more explicable event-oriented investigations. I think there should be more emphasis on this area of study – the propensity to believe – and possibly as much emphasis as there is on investigating specific events or claims. I believe it will prove fruitful and valuable to broader studies of paranormal claims, as it underpins all paranormal belief and can be used to both understand and deal with the panoply of paranormal and pseudoscientific claims we see every day.

Then again, we should always keep half a mind out for the other explanation – it was a hoax, and none of the claimants believed it in the first place. ■

- Tim Mendham, editor

THE SKEPTIC

ISSN 0726-9897
Quarterly Organ of
Australian Skeptics Inc
(ABN 90 613 095 379)

Editor
Tim Mendham

Editorial Board
Eran Segev
Steve Roberts
Barry Williams
Michael Wolloghan

Design Services
Nova Consulting P/L

All correspondence to:
Australian Skeptics Inc
PO Box 262
Roseville NSW 2069
Australia

Contact details
Tel: +61 (0)2 8094 1894
Mob: +61 (0)432 713 195
Fax: +61 (0)2 8088 4735

editor@skeptics.com.au
www.skeptics.com.au

The Skeptic is published four times per year by Australian Skeptics Inc.
Views and opinions expressed in articles and letters in The Skeptic are those of the authors, and are not necessarily those of Australian Skeptics Inc.
Articles may be reprinted with permission and with due acknowledgement to The Skeptic.

Editorial submission deadlines
January 15, 2010
April 15, 2010
July 15, 2010
October 15, 2010



Around the traps...

Ethics instead of scripture

For the first time in more than 100 years, the NSW government has approved the teaching of ethics in NSW schools as an alternative to religious education.

The current system did not allow for educational classes for children who do not participate in scripture. In fact, children whose parents made a conscientious decision to have them opt out of special religious education (SRE – scripture classes) were prohibited from any form of instruction during this period.

NSW Department of Education policy provided for the supervision of these children, but specified they were not to have access to “ethics, values, civics or general religious education”. While some schools do use the time – one hour per week – to teach some form of non-religious or comparative religion courses, children in other schools pass their time with videos, board games or homework.

Announcing the decision on November 25, NSW Premier Nathan Rees said “There is real concern that students not attending religious scripture classes are missing an opportunity to learn. Approving ethics classes means a simple addition to classes without diminishing the importance of religion for other families.”

There will be a trial of the system in ten NSW primary schools over two terms next year. This will be in consultation with the St James Ethics Centre, which has been campaigning for some time on this issue.

The President of the Federation of Parents and Citizens Associations, Di Giblin, said she was extremely pleased with the decision, which would bring NSW education into the 21st century.

A 2004 survey by the P&C revealed that 59 per cent of parents thought it was important or very important that their child be given the option of attending a secular, ethics-based course.

But the move had been opposed by the NSW government’s religious education advisory panel, the Inter-Church Commission on Religious Education in Schools. (There seems to be no atheist equivalent.)

Sweat lodge tragedy

The potential dangers of self-help programs are regularly raised, with reports of physical and financial abuse, and suicides. The events at the Angel Valley Retreat Center near Sedona were in a category all of their own.

Police authorities in Yavapai County, Arizona, say 55 to 65 people attended a self-help program run by ‘self-improvement guru’ James Ray, the son of an Oklahoma preacher. The participants were crowded into a 415-square-foot, crudely-built sweat lodge during a two-hour period. That’s approximately six-and-a-half square feet per person – 2.5 feet by 3 feet. They paid between US\$9,000 and \$10,000 for the retreat. They had fasted for 36 hours as part of a personal and spiritual quest in the wilderness, then on October 8 had a breakfast buffet before entering the sweat lodge around 3 pm. A 911 call two hours later said two people weren’t breathing. Two died upon arrival at a local hospital, and a third died a week

later. Eighteen others were hospitalised.

Supporters reportedly said that Ray teaches money and spiritual strategies that have “improved their finances and relationships”: “I have really grown tremendously outside of who I was,” Hermia Nelson, a New York businesswoman who attended retreats near Sedona in 2007 and 2008, told *USA Today*. “I don’t think [James Ray] is a reckless person or the organisation was negligent. They take very seriously these types of events.”

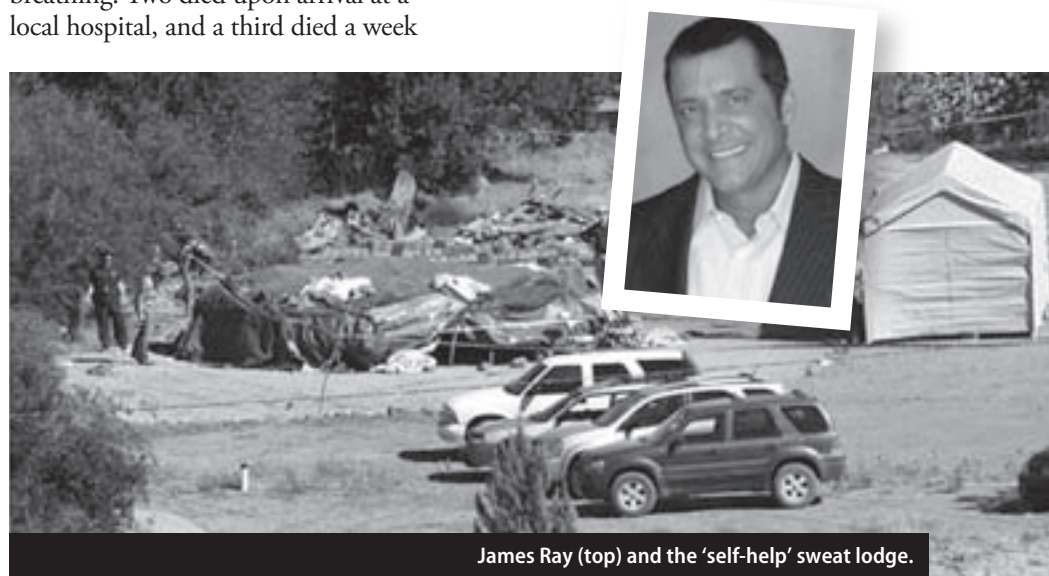
A few days following the Sedona retreat, Ray spoke during a seminar in Marina del Rey, near Los Angeles. “This is the most difficult time I’ve ever faced,” he told a crowd of about 200. “I don’t know how to deal with it, really.”

Soon after the retreat, Ray was accused of deleting “potentially incriminating tweets” he had published during the event, including one that read “The Spiritual Warrior has conquered death and therefore has no enemies, and no fear, in this life or the next.”

In 2006, Ray appeared in *The Secret*, a highly lucrative documentary in which he and others promoted the philosophy that positive thinking makes good things happen. He also appeared on the *Oprah* television show. Last year, according to his company, James Ray International corporate revenue hit US\$9.4 million.

According to research firm Marketdata, the total self-improvement industry generated US\$11.3 billion last year.

(Source: *USA Today*, *The Age*)



James Ray (top) and the ‘self-help’ sweat lodge.

Dragon*Con news

Richard Saunders attended the Dragon*Con Science Fiction and Fantasy Convention in Atlanta, Georgia over the US Labor Day weekend in September, accompanied by skeptics Dr Rachael Dunlop, Dr Steve Roberts, Dr Martin Bridgstock and Kylie Sturgess. He comments that "It's very pleasing to see that Australians are highly regarded at international conventions such as Dragon*Con. We're second only to the USA in representation, an amazing fact given that we must travel so far to take part."

"Indeed, the general feeling among the international skeptical community is that Australians are punching well above our weight when it comes to commitment and activity. Our effort in attending such conventions is greatly appreciated."

As Saunders reports, "Dragon*Con is in fact about 40 conventions (or 'tracks') held simultaneously in four 'mega' hotels in downtown Atlanta, attracting more than 30,000 attendees."

"Being part of Dragon*Con is to really bite off more than you can chew and then chew like crazy. The full Skeptic Track program is more than enough to keep you busy, but as soon as you step outside the conference room, you are swept up in the never-ending

passing parade of costumes, celebrities, all night parties, meetings, merchandise and getting hopelessly lost in the bowels of the mega hotels as you try and find your next engagement and on it goes. Being jetlagged really doesn't help."

The hotels in Atlanta started taking bookings for Dragon*Con 2010 a week after the 2009 convention ended, he says. "By all reports, they're already booked out."

A bad few months for Scientology

According to wide reports, the last few months have been particularly bad for the Church of Scientology's public relations. A French court convicted it of defrauding vulnerable members and fined it \$1 million; a former top executive went public with damning accounts including claims of violence by world leader David Miscavige; Oscar-winning film director Paul Haggis resigned with some withering criticisms; a Queensland inquest found that a soldier had killed himself after spending \$25,000 on a month of Scientology courses; and online encyclopaedia Wikipedia banned the church and people associated with it from editing entries.

Recently, Federal Senator Nick Xenophon denounced Scientology under the protection of Parliamentary privilege, with accusations of forced labour, forced abortions and child abuse. And NSW Education Minister Verity Firth has discovered that an organisation called Youth for Human Rights, funded by the Church of Scientology, has been distributing information on the United Nations Declaration of Human Rights to year six primary school students. According to the ABC, a spokesman for Scientology accused the Minister of spreading misinformation about Youth For Human Rights, which he described as 'secular'.

"This promotes the United Nations Declaration of Human Rights," he said. "This is not information from us." The fact that the information included

the name of founder L Ron Hubbard among its list of "famous human rights leaders" puts that in question. The spokesman defended the inclusion of Hubbard in the material, claiming the Scientology founder's views are as valid as those of others quoted, including Mahatma Gandhi, Martin Luther King and the Dalai Lama.

Meanwhile, Leo Igwe reports that Scientology is making inroads in Africa. He says it has already infiltrated South Africa, Zimbabwe, Nairobi, Tanzania, Kenya, Nigeria and, in February this year, set up a school in Ghana. "It seems to have arrived in Africa without controversy," he says.

This is despite founder Hubbard's views, as expressed in *Scientology: The Fundamentals of Thought* (first published in 1956), that "the African tribesman, with his complete contempt for truth and his emphasis on brutality and savagery for others but not for himself, is a no-civilization".

(Source: *The Age*, *ABC online*, and Leo Igwe)

Psychics' problems

A Sydney-based spiritualist group has been rocked by accusations of embezzlement, vandalism, computer hacking, abuse and a takeover by bikies, splitting the organisation into opposing factions.

The Enmore Spiritualist Church has about 50 members, and was run for 30 years by "Rev" Patricia Cleary until February, when Cleary lost the position of treasurer to Carol Terelinck, who reportedly found irregularities in the church's accounts, including expenditure of \$45,000 without receipts. Secretary Symn Waters said Cleary claimed "a spirit must have taken the money".

The Sydney Morning Herald quoted Terelinck: "I know we're meant to be psychics, but none of us saw this coming."

Neither did Janet Lee, the self-proclaimed "foremost psychic in New England", who alleged she was the victim of an assault by rival psychics outside her store in Greenwich, Connecticut. However, she was arrested several weeks later by Greenwich police after detectives said she had lied about the attack. She was



Rachael Dunlop & Richard Saunders get directions at Dragon*Con

charged with falsely reporting an incident, interfering with an officer and providing a false statement after turning herself in to police on an arrest warrant. While she may not have predicted her assault (with good reason) more seriously for her she probably also didn't predict her arrest.

(Source: *NewsTimes.com*)

Raising the dead

The Titanic Endeavor Tour, a project being undertaken by the Society of the DEAD (Direct Evidence After Death) plans to bring back the first recorded 'electronic voice phenomena' from the location where the *RMS Titanic* sank. The expedition is due to take place on April 14-15, 2010.

While no details of exactly what electronic voice phenomena are, the organisers assure us that "An expedition to this location for the purpose of paranormal research has never been done, or even attempted."

The organisers admit that "Generating the funding for this project is slow going but it is coming together though. We are currently in negotiations to sell the film rights for the documentary that we will be filming during this investigation entitled *Titanic ... You Know Their History ... Now Hear Their Voices*".

But they fear this may not be enough to ensure the needed funds to "will this project into reality", so they are asking for sponsors. This could include purchasing one of the 1533 white roses they plan to place in the water prior to leaving - one for each of the Titanic's victims. Each rose will cost five dollars. Otherwise, straight donations are welcome.

"We are going to make paranormal history," the organisers say.

There seems to be no website for the endeavour - just a blog on a MySpace site. The team leader of the Society of the DEAD is Matthew Sandman Kelley, whose email address is sandman_the_ghost_hunter. The address for donations is 524 Race Street, Apt. #1, Connellsville, Pennsylvania 15425.

Apartment #1? Somehow this doesn't seem like a major undertaking.

(Source: *Planetparanormal.com*)



Does God exist

A recent online survey by the Alpha organisation, which runs multi-week sessions to "explore the Christian faith in a relaxed setting", revealed some surprising results.

The Alpha course is designed primarily for people who aren't churchgoers and each course is open to everyone who would like to attend. The organisation says it runs such courses "in tens of thousands of churches of all denominations across the world".

At last count, the survey found that, when asked whether God existed, the respondents indicated that they were not as positive as the Alpha group may have hoped:

- Yes, God exists: 4%
- No, God doesn't: 95%
- Probably does: 1%

The results have been published on Alpha's website, indicating they feel they are genuine, if perhaps disappointing. We suspect there might have been a little external pushing of the result by savvy net users. Nonetheless, these are not encouraging results for believers. Lucky for them there was no "probably not" category, or it might have been worse.

A word about renewals

Many readers will need to renew their subscriptions for next year. For those who do, the renewal form is on the back of the mailer that came with this issue. If in doubt, call the editor on (02) 8094 1894.

Skeptics news

Congratulations to the winners of the Skeptics' inaugural Thornett Award for the Promotion of Reason. Winners were Toni and David McCaffery, who won the award for their relentless and brave campaign to bring correct information about the dangers of non-vaccination to the community.

The annual Bent Spoon award went to the other side of the coin - Meryl Dorey of the AntiVaccination Network for spreading misinformation and panic.

The vote by committee members of Skeptical groups from around Australia was unanimous on both counts.

• • •

The Young Australian Skeptics group has inaugurated a Skeptic Blog Anthology, which will bring together the skeptical content of blog sites and showcase some of the "range and diversity of the 'blogosphere'".

Kylie Burgess, who originally proposed the project, says the anthology is "the very first internet-driven collection of [blog-based] skeptical articles. It aims to provide printed, text-based resources to secondary and tertiary classes, as well as general readers."

Blog entries were collected during the year, with entries either self-nominated or proposed by readers.

The final tally of nearly two hundred blog posts will be whittled down to fifty for the final book. Both printed and digital versions will be available for purchase via Lulu.com, with an estimated release date of early 2010.

• • •

We were saddened to hear that noted Indian Skeptic, B. Premanand, died in October, aged 79. Premanand was a prolific investigator and author of skeptical tracts, and visited Australia in the early 1990s, where he told a Sydney audience "I think I will die without seeing a genuine miracle."

• • •

Australian Skeptics has implemented a new landline number - 02 8094 1894 - in addition to the mobile number 0432 713 195.

Randi goats and woos

Roving reporter Jessica Singer reports on a sold-out Amaz!ng meeting.

The first Amaz!ng Meeting London took place on October 3-4, 2009 at the Mermaid Conference Centre (ironically located across the road from the Scientology HQ). It was described by the Londonist website as “a complete success, without reference to any metrics or measurable evidence”.

I was fortunate to score a last minute ticket, having missed out first time round when tickets famously sold out in less than one hour – an unprecedented occurrence for an Amaz!ng Meeting. Skepticism is certainly alive and well on that side of the Atlantic, not only in the UK, but all over Europe.

Unlike the meetings in Las Vegas, TAM London followed the more traditional conference format with auditorium seating. I am told that this, plus the fact that accommodation was off-site, gave it a slightly different ‘feel’ from the Las Vegas events, but audience enthusiasm was undiminished for all that.

Due to ongoing chemotherapy, James Randi had been advised not to travel and so could not attend in person. However, he was there in spirit through pre-recorded messages. On the afternoon of Day 1, he was also able to participate via Skype, answering questions from the audience as relayed by master of ceremonies, Richard Wiseman.

Proceedings kicked off with physicist Brian Cox talking about the importance of curiosity-driven science and his work on the ATLAS experiment using the Large Hadron Collider at CERN and its role in unravelling the “can of worms” which constitutes our universe.

Investigative journalist and documentary maker Jon Ronson shared some of his experiences in researching his second book *Them: Adventures with Extremists* and third

book *The Men Who Stare at Goats*, which has recently been adapted into a film.

Simon Singh received a standing ovation after his presentation in which he examined acupuncture studies and gave an update on his stoush with the British Chiropractic Association and the state of the libel law in Britain. Later in the day, Simon was awarded the first JREF Contribution to Skepticism Award UK.

Ariane Sherine described her wild ride on the Atheist Bus Campaign, which started with a casual comment on her blog about the hellfire-and-damnation religious advertising on London buses and ended up as an international phenomenon, raising £153,523 which outstripped the original fundraising target by 2791 per cent.

Dr Ben Goldacre of *Bad Science* fame (the *Guardian* column and now book) spoke forcefully on how the media promotes the misunderstanding of evidence in medical stories by the distortion of research results, falsification of data and reliance on unpublished, untested research.

Day 2 saw musical comedians George Hrab and Tim Minchin bring the house down with their acts. We were also treated to a screening of the animation of *Storm*, Tim Minchin’s beat poem cum diatribe against woo and the woolly-headed pretension that so often accompanies it.

Glenn Hill, the son of one of the Cottingley fairy hoaxers, gave a



All's well at the first Amaz!ng Meeting in London - Ariane Sherine and Phil Plait under the watchful eye of James Randi.

charming explanation as to the origins of the hoax. His mother, Elsie, cut out and photographed models of fairies as a joke to amuse her homesick young cousin from South Africa. Elsie’s mother showed the photographs to some Theosophists and the rest, as they say, is history. Glenn himself is the author of *Religion Explained in an Hour*.

The infectiously enthusiastic Adam Savage from *MythBusters* shared some behind-the-scenes insights on how the shows evolve from myth through the testing process to the final form of the show which eventually goes to air. Despite testing umpteen myths over many years, the unpredictability of the test results means that the show is still fun.

Last, but definitely not least, the esteemed president of the James Randi Educational Foundation Phil Plait spoke about the violent universe which we inhabit, as described in his second book *Death from the Skies*, plus the ever-fertile and hilarious topic of science flaws in Hollywood movies.

The first TAM London was a truly Amaz!ng experience and it won’t be the last – that’s a promise! ■

And the Winners are ...

Tim Mendham reports on the Skeptics Brisbane Convention's awards.

Obviously the winners were those who attended the Skeptics' 25th annual convention, held at the University of Queensland's St Lucia campus. Close to 200 people were witness to a wide range of presentations, from the humorous to the deadly serious. But a special highlight of the event, as always, was the announcement of the two main awards for the year's most outstanding activity.

First and foremost was the new Thornett Award for the Promotion of Reason. Named after the prominent and highly-respected Tasmanian Skeptic, Fred Thornett, who died earlier this year, the award goes to a member of the public or public figure who has made a significant contribution to educating or informing the public regarding issues of science and reason. The inaugural 'Fred' went to Toni and Dave McCaffery, whose unstinting and, it must be said, extremely brave efforts on behalf of children in the face of the anti-vaccination movement continues to be an inspiration to us all.

The event was tinged with sadness at the McCafferys' own loss – their daughter, Dana, who died of pertussis only four weeks after her birth – which informed them of the issues and inspired them to take action. Adding to the worthiness of the award was its presentation by Fred Thornett's widow, Luda – a combination that brought tears to many eyes.

On the other side of the coin was the 'presentation' of the annual Bent Spoon Award. This goes to the perpetrator of the most preposterous piffle of the year. Appropriately, this year's winner was Meryl Dorey and the anti-vaccination Australian Vaccination Network, though unfortunately they weren't present to acknowledge the honour. Considering the circumstances of the Thornett award, this award was supported warmly. That

followers of Dorey have cast aspersions on the McCafferys' parenting, in the very face of their loss, indicates that not only is that group guilty of spreading misinformation and fear through its dubious tactics, but it often does so without any real concern for the individuals involved – to them, it's the movement which is more important than the people.

Apart from the awards, the convention speakers ably acquitted themselves in front of the large audience.

Former Australian Skeptic of the Year, scientist, author and media identity Dr Karl Kruszelnicki kicked the program off on the Saturday, breathlessly taking us through various situations he has faced – popularity polls, climate issues and the hard life of baby penguins.

Saturday's program focused on the often bizarre world of alternative medicine and some of the weird things that people accept as being true in spite of what the evidence says. Another former Skeptic of the Year, Loretta Marron, described her experiences exposing cancer quacks. Peter Griffith spoke on the anti-vaccination 'cult', and Geraldine Moses on evidence-based medicine and the role of the Medicines Line. Other speakers included Rachael Dunlop, a '21st century Skeptic' involved in podcasting and online blogging, Peter Macinnis on Darwin's era, Jim Allen on the problems of dealing with other views over a polite dinner, and Barry Williams on a life in skepticism.

On the Sunday, the focus moved to why people believe things that just ain't necessarily so. Associate Professor Tony Taylor, author of *Denial History*

Betrayed, looked at recent perpetrators of pseudohistory, including Mel Gibson. Dr Krissy Wilson from the University of Tasmania gave a lively review of her investigations into humanity's seemingly limitless capacity for self-deception.

Other speakers include Peter Ellerton, the 2008 winner of the Australian Skeptics Prize for Critical Thinking, on teaching reasoning in education; Rosemary Aird on mental health and belief systems; Martin Bridgstock on the



David and Toni McCaffery with their plaque as inaugural winners of the Thornett Award, as presented to them by Luda Thornett (centre).

role of skepticism and the possibilities for future action; Bob Lingard on testing beliefs; David Gillespie describing his controversial theories of sugar and fat; and Theo Clark looking at ways to spot errors in reasoning.

We intend to publish a number of these presentations in *The Skeptic*.

Overall, the Queensland Skeptics are to be applauded for presenting such an interesting, often amusing, always enlightening and definitely successful event. The launch of Martin Bridgstock's new book (see *Reviews*) and a well-catered dinner rounded off the event.

Next year, back to Sydney in November for the highly anticipated TAM Australia – more details of this major conference will be released soon. ■

God, skepticism & African renewal

Leo Igwe makes an impassioned plea to get God out of Africa – for Africa's sake.

I have just returned from South Africa and Malawi where I attended conferences, met with freethinking individuals, groups and activists. The trip offered an opportunity to think and reflect on the African predicament. And I must tell you that I was overwhelmed by my experiences, and by the enormity of problems and challenges facing us on the black continent.

Travelling through Africa, I am always confronted with unimaginable situations of poverty, ignorance, misery, powerlessness, despair, desperation, resignation, stagnation, alienation, diseases, high mortality rate, deception, conflict, cruelty and criminality, social dysfunction and squalor ornamented with religious piety, hypocrisy and belief in God. During my trip, I came face to face with dire and dangerous situations. I found it difficult to make sense out of the harsh and difficult realities of the day to day life in Africa. And, as always, I asked myself questions -Why? Why is Africa trapped in this cycle of hopelessness and godliness? Why is the black continent disconnected from the rest of the world? Why is Africa dying and disappearing slowly while other continents are emerging and bubbling with life and hope.

I know some people say you cannot prove a negative. Well and good. But I make bold to say in this case you can. In fact, I think if anyone needs evidence - incontrovertible evidence - for God's non-existence, impotency and meaninglessness, they should come to Africa. Try and visit any of the countries in sub-Saharan Africa and you will really laugh at those wasting time, ink and words proving the existence of a benevolent deity.

The situation in Africa is a clear demonstration that God is a fiction, an alien and alienating figment of the human mind. The reality of life in Africa is such that you need no-one to tell you that God's attributes are meaningless verbiage signifying nothing or better signifying whatever we want them to signify. That humanity is damned and doomed if it keeps looking on God for help, hope or salvation. Hence, it aches me in the heart whenever I see Africans waste precious time venerating and worshipping this vacuous entity called God.

Of course, some people argue that the God idea gives some meaning and consolation to believers. Meaning and consolation indeed. So that's what God can afford?

My question is this - what meaning or consolation has the 'God-idea' given Africans amidst the tragic situation that prevails here? Is God in Somalia and in the Democratic Republic of Congo? Where has the God-idea taken African countries to - the bottom of the human development index? What have Africans to show for the consolation from above? If I should say, divine consolation has made Africans do nothing about situations they can change.

It has made Africans contented with living on the edge of life, waiting for divine intervention that will not come, and with begging for bread which they can bake. The divine meaning has caused Africans to sleep when they should be wide awake. It has made Africans keep praying and lazing about in churches, mosques and in all sorts of worship centres expecting manna from Heaven and miracles from above when they should be working, toiling and

sweating out their human and economic salvation and emancipation.

So of what use is this meaning which the God-idea gives or has given Africans? Most Africans still cling tenaciously to this primitive belief. They have refused to rethink and to exercise their will to doubt. Africans have refused to think freely and critically, particularly when it comes to matters concerning God and religion. Instead, they prefer to espouse blindly and thoughtlessly a supernatural view of reality. Africans prefer sacrificing this life, the only life they have, for an illusory one in the hereafter.

That is why all of us skeptics must intervene to salvage Africans and humankind as a whole from the tyranny of the gods, and of godmen and women.

To say the least, the theistic outlook has served Africa badly. Religion has become a liability to Africans. The tyranny of the gods has kept Africans on their knees. What Africa needs now is the skeptical outlook so that the people can stand up and take responsibility for their lives. Africans need to take their destiny in their hands. They need to understand that no deity will save us, that we will save ourselves.

Africans need skeptics to help open their eyes and minds so that they can see, know and experience the power, the enlightening power of reason and critical thinking. Africans need skepticism so that they can realise the liberating potentials of free thought. The minds of most people in Africa are chained and clogged with superstition, dogma and religious fanaticism. Hence the people cannot move, and the continent cannot grow.

But is this a call for an invasion and occupation of Africa by 'skeptical armies' like the empire builders, white missionaries or Arab jihadists of bygone years and nowadays? No, not at all. The situation simply requires the promotion of the values of common sense, critical thinking, free thought, free mind, open mind, and human rights. Africa needs skepticism for its growth, development and enlightenment. Africa needs skepticism for its recreation, rebirth and renewal. ■

The empty head

Joanne Benhamu reports on the festival where 'healing' rules and science runs for cover.

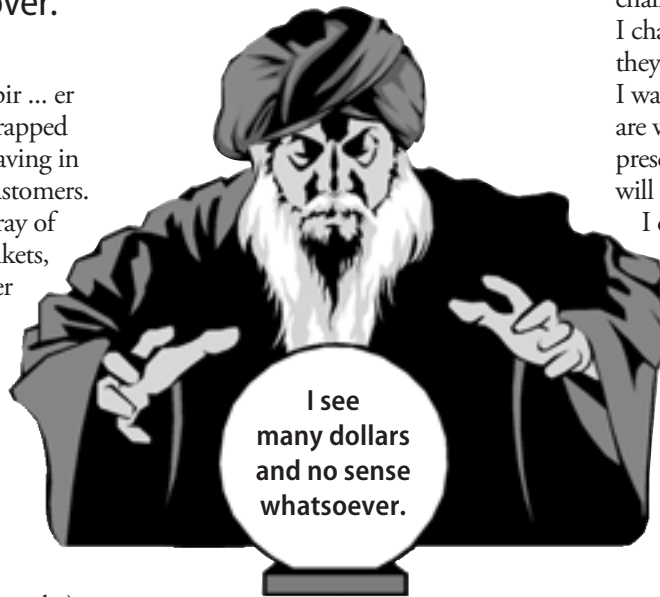
The biannual Mind, Body, Spir ... er Wallet Festival in Sydney wrapped up on November 8, no doubt leaving in its wake a plethora of satisfied customers. As usual, I noted the dizzying array of lotions, potions, crystals and trinkets, and the twang of sitars and flutter of hands waving over those eager to have their chakras aligned or meridians tweaked.

Many of the usual suspects were there: live blood analysis, chiropractors assessing spinal alignment, and of course a multitude of psychic readings (even a man who does wax art psychic readings, whatever that may be).

I turn a blind eye to the more innocuous offerings at these events, but some scream for attention not just because of their outlandishness, but because they leap over the boundaries of "harmless kooky fun".

I was drawn to a stall representing a dental practice in Sydney. Among other things, they remove mercury amalgams, claiming they cause mercury toxicity. They recommend chelation therapy to detoxify and refer to 'dental interference fields' which seems to be like reflexology for teeth. A little prodding for further information and the evidence for what they do resulted in my being evicted from the stall, to the repeated cries of "mercury is a neurotoxin" from the woman running the stall.

I spun around to see Australian Skeptics vice president Richard Saunders chatting to an amiable looking woman at the stall opposite. She animatedly described how, by waving her hands over your body, she can heal what ails you. "How does this incredible technique work?" we asked. They claim it goes beyond every other 'energy healing technique'. "We have become disconnected from the meridian lines which used to connect us to the entire



universe" say the brochures. "We connect to unique vibratory levels and frequencies causing reconnection of DNA strands and reintegration strings," it continues.

Oh, hell, just go watch that woman on YouTube explain the physics of homeopathy and you've got the picture.

They claim healings for cancer, paralysis, bone fractures, diabetes and more. Astounded at why they don't have a Nobel Prize for their incredible contribution to science, we asked to see the published research. "Oh, it's all in Russian journals. It's being translated." We offered the Australian Skeptics \$100,000 challenge. We explained a simple test was all that was needed. They were open to the idea. Her fellow healer asked "Why do a simple test for such a complex thing? You should do a very complicated test." I looked at Richard despairingly and we moved on.

Another stall was selling something called transfer factors, which they claim will improve your immune system by 437 per cent. Such a precise claim must be backed by data, I thought – never mind that "boosting your immune system" is a meaningless marketing term. Transfer factors, they claim, help the immune system recognise harmful

elements, change the immune response to suit the occasion, and support immune memory. The healthy immune system manages these functions without outside support. "Our immune system is incapable of responding to the challenges of everyday living", they say. I challenged them on these claims and they asked if I was a doctor. I told them I was a nurse to which they said "So are we." They told me that doctors will prescribe chemotherapy for patients but will not take it themselves. Interestingly,

I discovered that this product has been used in a bizarre combined measles vaccine autism 'cure' which Andrew Wakefield (he of the great MMR/autism debacle) apparently represented. But back to the nurses. They then claimed that the H1N1 vaccine was tainted and poisonous and that manufacturers knowingly allowed it to be used on the public. When challenged, they

responded with tired claims about big pharma and big money. As we continued, they became more and more hostile to our questions.

Once again, I came away from the Mind Body Wallet Festival, troubled by what I saw being peddled to the public. The NSW Health Department Code of Conduct for Unregistered Health Practitioners was published in September 2008 and states that "a healthcare practitioner must display a copy ... at all premises where the ... practitioner carries on his or her practice". I did not see a single one on display. Where are the authorities, I wondered. How is it that these people can continue to promote and sell unproven, disproven or potentially harmful products and therapies? How is it that a man can claim to be able to heal cancer and HIV, or sell pendants which can turn water into sunscreen? How can a dentist needlessly remove fillings from people's teeth and subject them to a potentially dangerous and unnecessary intervention? How can these same individuals not be held accountable by the authorities for deceiving vulnerable people?

I fear that on my next visit to the festival in six months time, nothing will have changed. ■

The anti-vaccination

AN UPDATE

Tim Mendham reviews recent activities challenging the AVN and other purveyors of fear, panic and pseudoscience.

It has been argued that, by confronting groups like the misnamed Australian Vaccination Network, either directly or indirectly, we are merely giving such organisations fuel to continue delivering their message.

It is true to say that the AVN has probably received more widespread publicity than it has in the past, but much of that publicity has been negative and highly critical. The suggestion that if you leave them alone, the AVN will just wither on the vine is difficult to substantiate. Certainly the AVN has been active for some time, and much of its publicity-seeking activities have been directed not at those who criticise it, but at concerned (and therefore vulnerable) parents – people it approaches with exaggeration, misrepresentation and fear-mongering.

Can we hope that such actions will just eventually disappear?

A pertinent view – often attributed to the 18th century philosopher, Edmund Burke – says: “All that is necessary for the triumph of evil is that good men do nothing”. And there are many good men and women who are doing something to counterbalance the AVN and its ilk, and the claims they make. This article looks at what some of those people are doing, and the reasons they are doing it.

HCCC COMPLAINT

Ken McLeod is the author of a now famous complaint to the NSW Health Care Complaints Commission regarding the activities of the Australian Vaccination Network and its president, Meryl Dorey. (See *The Skeptic*, 29:3, p12.) McLeod says his complaint “establishes beyond doubt that the AVN and its president Meryl Dorey (despite their claim to issue balanced information), issue statements

and advice that are clearly wrong, selective, baseless, misleading, deceptive, dishonest, biased, and a danger to public health, while engaging in bizarre conspiracy theories, fear campaigns, and invasions of privacy.”

He affirms that “Nowhere in all my research into the AVN did I find any statement from the AVN supporting vaccination in any way.”

McLeod says that he was inspired by the negative results he witnessed during his time as a national manager of Search And Rescue and Australian representative on two United Nations committees. “I had to deal with many people like Meryl Dorey; they were often crackpot inventors who could never accept that we knew what we were doing and that their inventions really were inferior to our existing equipment.

“Some of them were formidable lobbyists. The usual tactic we adopted (and by ‘we’ I mean managers, the executive, and our Ministers) was to be awfully nice and say as little as possible, but usually giving in to them in the end just to make them go away. That never worked. The result was that we were lumbered with dangerous inferior equipment and all we had achieved was to encourage them (and waste taxpayer dollars).”

He says he now sees State and Federal Health Departments and politicians adopting the same failed strategy “that we used back then, and it is not working. By accident or design, politicians and health bureaucrats are ignoring Meryl Dorey in the hope that if they can keep this up for long enough, she will shut up and go away. But she won’t. She will be just as much a fanatic as she ever was, and as time goes on, she and her bizarre theories will find more audiences in the general public and in the media.”

DOREY AND THE MEDIA

And that seems to be just what has happened. Meryl Dorey is often the default ‘talking head’ whenever the media want to run a piece on vaccination, and present an ‘alternative’ view. The media regard her as credible – or at least the only spokesperson they can get – in their determination to provide ‘balance’. As anti-vaxers go, Dorey is relatively articulate and literate. She presents as well-informed. However, what she disseminates is riddled with error.

Nonetheless, by giving her airtime, the media have built up her reputation, and apart from a few individuals like McLeod, Dr Sue Page, Professor Peter McIntyre, Dr Chris Ingoll, Daniel Raffaele (founder of Stop the AVN) and the Skeptics, she goes unchallenged.

More than those who object to the views of the antivaccination brigade, the media continue to give them air and fuel. On September 19 (and updated on September 21) the ABC online news service published a news item headed: “Lobby group urges more swine flu vaccine tests”. The item began with the statement that “The Australian Vaccination Network lobby group says more testing of the swine flu vaccine needs to be done before it is given to the public.” It continued later, quoting Dorey that “the H1N1 vaccine could prove more dangerous than the disease itself”.

A number of complaints were made to the ABC. McLeod received a response from Kirsten McLeod (no relation) of the ABC’s Audience & Consumer Affairs: “The ABC acknowledges that, as with any contentious issue, there will be strong feelings on both sides. The views of the AVN were not presented as an authority but one of a range of views on the issue, none of which were endorsed



movement

by the ABC.” The story did recount the Australian Skeptics campaign against the AVN, specifically its advertisement in *The Australian* newspaper. But the fact that the item led with the AVN’s claims, unchallenged by any specific response to the AVN, indicates that the ABC might have been promoting (albeit unwittingly) the AVN as an authority. It is understood that Norman Swan, producer and presenter of the ABC’s *Health Report*, instigated an internal review of how the story came to be written. The results of that review are not known.

It is this sort of situation that encouraged McLeod to take his action with the HCCC complaint. “I saw that Meryl Dorey was not being challenged or even corrected, and so I joined the Stop the AVN organisation. I must point out that it is not our responsibility to stop the AVN; it is the responsibility of governments to set the record straight. We have only stepped into the vacuum.”

AVN RESPONSE

On September 7, the AVN (as is their right) responded to McLeod’s HCCC complaint.

In that response, Dorey said “I and the AVN strenuously request that the contents of the attached response be dealt with by the HCCC on a strictly confidential basis and not be provided to Mr McLeod until a final decision has been reached.” That the AVN then promptly published its response on its website, despite asking that the response be kept confidential, is only indicative of its double standards. (At time of writing, the response was available at http://avn.org.au/library/images/pdfs/hccc_reply.pdf.)

The main argument of Dorey and the AVN was: “The AVN accepts that the definition of ‘health service’ under Section 4 to include ‘health education services’ may be broad enough to cover the information-giving activities of the AVN, thereby making the AVN a ‘health

service provider’ for the purposes of the Act.” (This admission is in stark contrast to her public responses immediately she was notified of the HCCC complaint. Then she claimed the AVN could not be the subject of a complaint because it wasn’t a health service provider.) The AVN response then proceeded to claim a ‘health service provider’ needed to be one that “affects the clinical management or care of an individual client” for the HCCC to have jurisdiction to examine it.

Interestingly, we have been informed that Dorey is (or has been) a lecturer on immunisation to natural therapies students at Southern Cross University, and that she also reportedly supplies immunisation advice to at least one privately-run antenatal/mothers’ group at Byron Bay. It has been reported to us by a consumer attending this Byron Bay group prior to giving birth that she was horrified that no pro-immunisation information was given out. “At no time did Meryl advise vaccination, and her whole talk was on the dangers of vaccination,” they said. When the consumer asked about this, she says she was told that she could go to another group if she wanted that information. Although this is anecdotal evidence, and it awaits confirmation, if true then the AVN’s role – or at least that of Dorey, who for all intents and purposes is the AVN – would seem to fit the description of one that “affects the clinical management or care of an individual client”.

Dorey always stresses that the AVN’s activities are educational, and are not anti-vaccination but ‘pro-choice’. One of the AVN’s key beliefs, according to its website, is that: “Both sides of every health issue should be freely available for anyone who is trying to make a decision.” She has said on radio that the AVN’s

slogan “Never inject them” is just that – a slogan on a T-shirt. The fact that this same statement is published widely on her website and elsewhere is an indication that that stance is not true. The AVN is nothing if not deeply and zealously committed to one view, and one view only. Nonetheless she continues to claim a fair and balanced educational view.

Her language, though, is not always as tempered or as fair and balanced as she claims. In her submission to the HCCC, she went on to say that: “Please also be advised that Mr McLeod has made numerous direct communications to the AVN and myself via email communication over the last few years, and such communications have been very

rude and aggressive in tone and intimidating in nature, particularly towards myself. I can give no explanation for the ferocity with which he pursues both myself and the AVN as we are just a small, not-for-profit

organisation that seeks to provide families and individuals with information relating to vaccination and other health issues. However, the threat that he poses and continues to pose to me and my family is very real.”

McLeod has denied any communication that could be described in those terms, and asked the AVN that that response be taken down. On October 30, McLeod said he had “posted a new complaint to the HCCC against Meryl Dorey, this time saying that her defamatory allegations regarding me are demonstrably untrue and saying that she should be charged pursuant to S35 (d) of the Health Care Complaints Act 1993. I also recommend that the matter should be handed over to the police.” His rebuttal can be seen at <http://www.antivaxxers.com/?p=977>.

Nowhere in the response does Dorey go on to describe what McLeod has done by way of posing this “very real” threat, and as at the time of going to press, she had not substantiated any of her accusations either to McLeod or to her online audience.

“I ask Skeptics everywhere to challenge Meryl Dorey every time she issues an incorrect statement. - Ken McLeod”

The anti-vax movement

Continued...



Despite Dorey's defence – and its self-described and pathetic positioning as “just a small, not-for-profit organisation” – the HCCC Commissioner has determined that the AVN is subject to the Health Care Complaints Act, and that the matters raised are serious enough to warrant a full investigation. McLeod says that “Many complaints fall at this barrier, but ours are to proceed. In short, we have passed a ‘triage’ test.”

STRANGE COMPANY

But the situation re the AVN goes beyond its ‘education’ role. Dorey has often quoted or been associated with others who apparently share a range of views, from the antagonistic to extreme.

For instance, Michael Jensen, a naturopath from the NSW south coast town of Ulladulla, says: “And why, after 200 years of drugging, is there a fundamental state of sickness across all spectrums of society?” (www.sacredchild.com.au/welcome.htm)

That statement is mild compared to others apparently endorsed by the AVN.

Dorey has cited the following statement on her website in reference to

“a fully-fledged fascist dictatorship” that represents “a global jackboot of sheer, undiluted evil”:

“The word ‘evil’ is much overused and I don’t say it lightly; but we are dealing with evil in the sense that the word is the reverse of ‘live’. Those behind the conspiracy to cull the human population and turn the rest into little more than computer terminals are anti-life. They have no respect for it and no empathy with those who suffer the consequences of their actions, no matter how appalling.”

In this, she is quoting from – and linking to – a posting from *The Pakistan News Agency*, July 26, 2009, covering an article in *The Pakistan Daily*, itself

WHY DID I DO IT?

Julie Leask looks at the different influences, fears and attitudes that are instrumental in many people’s decisions about vaccination.

People tend to think about health risks in different ways, depending on the nature of that risk. The following are some typical ways we tend to think about health risks. Psychologists call these ‘heuristics’, rules of thumb or mental shortcuts that people make to deal with complex information when they are trying to come to a decision.

Are you influenced by the following?

1 “It will happen to me” (availability heuristic)

We tend to overestimate our chances of getting diseases or conditions that are easily imagined, subject to graphic images or widely reported in the media. This can be regardless of the actual probability of experiencing the disease. This can apply to people’s demand for vaccination; for example, meningococcal disease, which is relatively uncommon but subject to distressing stories and images. The availability heuristic can also apply to the rejection of vaccination under the

belief that it causes brain inflammation. Despite the lack of evidence for a connection between brain inflammation and vaccination, we can easily imagine a brain-damaged child.

2 “It won’t happen to me” (optimism bias)

The tendency to be overly optimistic about a particular health risk applies to some groups more than others. For example, young men tend to be overly optimistic about their risks of being involved in a car accident. In immunisation, adults may believe that they won’t get the flu and therefore don’t get vaccinated.

3 “I don’t want to cause harm by my actions” (omission bias)

People are more likely to avoid risks flowing from an action than from inaction even if inaction is more hazardous. This is because we tend to feel a greater sense of responsibility for our actions than our inactions. This ‘omission bias’ can make parents

reluctant to subject their children to vaccination, regardless of it being the safer path. This is because if something went wrong, they would feel more responsible than if their child passively developed an infectious disease that the vaccine could have prevented.

4 “I could never forgive myself if something bad happened” (anticipatory regret)

Our potential to regret a decision is also influential. We might anticipate feeling dreadful if something happened as a result of vaccinating our child. On the other hand, we might anticipate feeling terrible if our child had a disease that could’ve been prevented if we had had them vaccinated.

5 “There is too much uncertainty” (ambiguity aversion)

The degree of uncertainty about a health risk can influence our decisions. We tend to be less welcoming of an intervention if there is a lot of uncertainty about the level of risk it

republishing an article by David Icke. This article – called “Flu is not the biggest danger it’s the vaccine” – in turn (such is the web of misinformation) quotes Austrian journalist Jane Bürgermeister, who makes some amazing claims: “There is evidence that an international corporate criminal syndicate, which has annexed high government office at Federal and State level, is intent on carrying out a mass genocide against the people of the United States by using an artificial (genetic) flu pandemic virus and forced vaccine program to cause mass death and injury and depopulate America in order to transfer control of the United States to the United Nations and affiliated security

forces (UN troops from countries such as China, Canada, the UK and Mexico).

“There is proof many organisations – World Health Organisation, UN as well as vaccine companies such as Baxter and Novartis – are part of a single system under the control of a core criminal group, who give the strategic leadership, and who have also funded the development, manufacturing and release of artificial viruses in order to justify mass vaccinations with a bioweapon substance in order to eliminate the people of the USA, and so gain control of the assets, resources etc of North America.”

Icke adds that “A cabal of interbreeding families is seeking to impose a global fascist

dictatorship of total human control. ... Those on the inner levels of this structure are collectively known as the ‘Illuminati’.”

Another on the extreme side of the ledger is Bob Livingston, who claims (www.personalliberty.com): “Vaccinations stimulate and maintain individuals in a state of fear. In fact, we do not die of a disease, but from fear and exhaustion. The fear of microbes and illness knocks people out and vaccines finish them off.

“The long-term ploy of the global elite is to reduce the world population to 500 million. Liquid crystals and nano-sized microchips may have been included into the vaccines to facilitate mind control at a distance.

poses, even if the estimate of that risk is very low. When parents believe there to be expert dissent about risk from a particular vaccine, this apparent ambiguity may make them avoid vaccinating their children.

6 “I prefer to go along with the crowd” (*bandwagoning*)

We are social beings and are influenced by what we believe others are doing. This ‘bandwagoning’ phenomenon has influenced the adoption of many preventive behaviours, from wearing seatbelts to quitting smoking. We can be more likely to vaccinate if we believe the majority of others are doing so. Bandwagoning can also work the other way: if our social networks include lots of people who don’t vaccinate, we may feel more hesitant about it.

7 “I don’t need to vaccinate because other people are” (*free-riding*)

Our decision to vaccinate our child can depend on how prevalent we think the disease is. We may think our child is at low risk of a disease because it is not around anymore or because it is just not very common to begin with. Polio and diphtheria are examples of diseases which were common but have been controlled by vaccination and are rare in developed countries like Australia. Those who decide to not vaccinate for well-controlled diseases may choose to ‘free-ride’ off the

immunity of others provided by high immunisation rates.

8 “I want to protect others” (*altruism*)

Some people may be concerned to not just protect their own child’s health but the health of others who are too young to be fully vaccinated or cannot be vaccinated for medical reasons.

This altruism may also affect our desire to maintain high levels of ‘herd’ immunity so diseases like polio do not return. This can make us vaccinate even if we think the disease risk for our own child is low.

Other influences

9 “Who is giving me this information?” (*trust*)

Trust in the person giving the health risk information is one of the most important influences on our decisions. When we hear conflicting information and have trouble making a decision, it is often the credentials of the person or organisation giving the information that tips us one way or the other. People tend to be more trusting of doctors but this is not always the case. Some people may feel more affinity with conveyors of alternative therapies and want to avoid medical means of disease prevention. Most people have a lack of

trust about health information from private industry because they believe the information is not neutral but influenced by financial interests. Trust in government organisations can vary – while some regard the government’s motives with suspicion, others will say that the government does not seek to intentionally cause harm.

10 “How are the risks being presented?” (*framing*)

Depending on how it is presented, information about health risks can swing us in different directions. Many studies have found that risks from a medicine put in a positive way are more acceptable than those framed negatively. For example, if it is said about a vaccine that “90 per cent of children do not develop side effects”, people are more likely to adopt vaccination than if it is said that “10 per cent of children will develop side effects”. This phenomenon is called ‘gain frame’.

These influences – whether individually or together – should be taken into consideration when presenting arguments pro or anti any particular stance. ■

About the author

Dr Leask is a senior research fellow with the National Centre for Immunisation Research and Surveillance, University of Sydney.



The anti-vax movement

Continued...

"Vaccination is not a medical but a political decision. Its purpose is global population control. Vaccines can be used to eliminate undesirable individuals by repetitively weakening their health or by brutally killing them. Because of their neurotoxic effects, vaccines produce psychopaths, generating social violence and crime. This situation causes political unrest and the reinforcement of military and police control. It opens the door to the full implementation of an already legalized martial law."

And so on, and on ...

THE BOUNTY BAG DEBACLE

Recently, Dorey and the AVN have once more been pulled up for making unsubstantiated claims.

On its website where it calls for donations (<http://www.avn.org.au/donation.html>), the AVN describes "What your donation will go towards". Among the beneficiaries is "the ability to offer our services and our magazine in the Bounty Bag which is given to every woman who births in hospital." This claim has apparently appeared on the site since at least November 16, 2006.

But in response to inquiries from Dr Kerwyn Foo, staff specialist oncologist at the South Eastern Sydney and Illawarra Area Health Service, the hospitals manager for Bounty Services/ACP Parenting Group, Megan Baker, has denied this. Her reply (November 9, 2009) says: "Bounty has worked hard over the years to comply with the National Health and Medical Research Council guidelines and WHO guidelines for the protection and promotion of Breastfeeding. The Bounty Bags only contain information in support of immunisation. ... We were extremely concerned to note the reference to Bounty on this [AVN's] website as we have no dealings with this organisation and would never endorse any group which sought to defy NH&MRC recommendations. We have no knowledge of the AVN magazine or the information contained on their website."

[Their emphasis.] This was confirmed to McLeod by Baker: "Please be assured that Bounty and ACP magazines do not distribute information on behalf of the AVN and have no intention of distributing information on behalf of the AVN."

Are these actions by the AVN those of an organisation that can be left to run its own course without someone standing up to it, limiting any unquestioning exposure? An organisation that not only spreads misinformation and fear under the guise of education, but is reportedly involved in giving clinical advice based on this premise to parents and mothers-to-be. An organisation that is linked to many unproven medical practices, not to mention the most extreme political views. And an organisation that makes claims of relations with at least one charitable organisation that, according to the organisation itself, are simply not true – claims made not only to the Australian public but even to its own donors.

As McLeod says, "There has been much exchanging of information, and complaining

among ourselves. But is that achieving much? No, I think we could be much more effective in challenging the AVN and Meryl Dorey."

Which is what he and others, such as the SAVN group, the Skeptics, and many individuals, have set out to do.

McLeod asks for help: "I ask Skeptics everywhere, because this is your campaign also, to challenge Meryl Dorey every time she issues an incorrect statement. Send a detailed complaint to the media outlet that she used. Eventually, the media and the public will wake up to her, and turn to (we hope) more reliable sources of information. I recognise that if Meryl Dorey and the AVN were to magically disappear overnight, their places would be taken by some other crackpots. The

strategy I [have undertaken and suggested to others] should be used on them also." ■

About the author

Tim Mendham is editor and executive officer of Australian Skeptics. He has been a science and business journalist for more than 30 years.



WAKEFIELD & MMR - UPDATE

Meanwhile, on a more global level, the case against Dr Andrew Wakefield continues. Wakefield was the lead author of a controversial 1998 research study that claimed a link between the MMR vaccine and autism. The section of the paper setting out these conclusions was subsequently retracted by ten out of the paper's twelve co-authors. There have been many studies refuting his claims.

Recently, one such study, by the UK NHS Information Centre (quoted on *BBC Online*, September 22), found that one in every hundred adults living in England has autism, which is identical to the rate in children. If the vaccine were to blame, autism rates among children should be higher because the MMR has only been available since the early 1990s, the centre says.

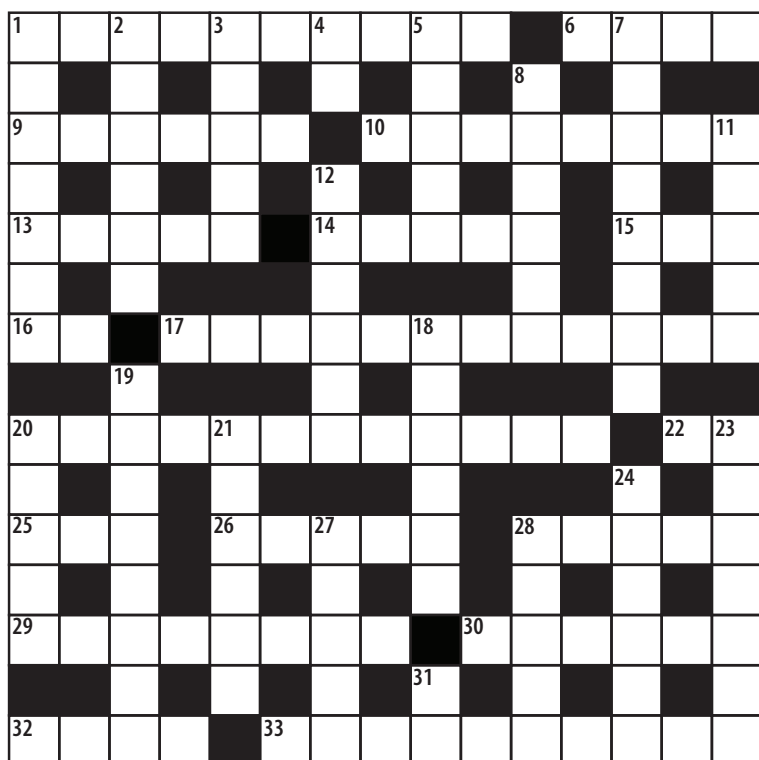
Tim Straughan, chief executive of the NHS Information Centre, was reported: "This landmark report is the first major study into the prevalence of autism spectrum disorders among adults to be carried out anywhere in the world. While the sample size was small and any conclusions need to be tempered with caution, the report suggests that, despite popular perceptions, rates of autism are not increasing, with prevalence among adults in line with that among children. ... The findings do not support suggestions of a link between the MMR vaccine and the development of this condition."

The Investigation Officer of the British General Medical Council, which is looking into Wakefield and his practices, says that the investigation is continuing but may have a result soon. The officer told Ken McLeod in correspondence: "At this time the [BGMC's] Fitness to Practise Panel are in-camera deliberating on the findings of fact. We have not at this stage been given any indication as to when they might return with their conclusions. I can confirm that the Panel will be reconvening in-camera on the 19 November through to the 23 December 2009."



Brain testers

CRYPTIC CROSSWORD no 5



Tim Mendham + Steve Roberts

CODE BREAKERS

1. Think Sartre

Kut rtbctqtn cf fgmucfo; gfbx utj
kvthmceckd vthm utj yjgd rtcfo af
amutckm.

2. Easier than it looks:

Jbi8lrokb, yz-y1 J7o9e zxyx: 7 mi7drb
lc 7qebfpqp!

3. And an extra puzzler

Suppose that you are standing - never mind why - on the desolate Arctic ice and, to your intense dismay, a hungry polar bear comes charging towards you. Which way should you run?

Answers on page 62

ACROSS

- 1&9. A gathering of people like us in the republic. (8,2,3,3)
6. Upsets Mac's con-job. (4)
10. Nativity scene - do it again for a passé trend. (8)
13. Ironical that the orgone man fled the German empire. (5)
14. Article in a pig sty is right for a lecherous one. (5)
15. Also known as an Egyptian spirit. (1-1-1)
16. Thus a needle pulling thread? (2)
17. Extremely ordinary, or out of the ordinary? (12)
20. A tender faith arranged for the timid. (12)
22. Seems a long long way to go for nothing. (2)
25. Bristle at article giving directions. (3)
26. Pillages the old bags. (5)
28. As fun is a disaster, so it begins. (5)
29. One who tallies plays the best role in a conversation. (8)
30. Circus man who tallied the appearances of ones. (6)
32. The actors are plastered! (4)
33. He's not so hot a lecturer or a forecaster. (10)

DOWN

1. Jokey criticisms of one who posed and angers. (6)
2. Designed to make you chuck mice with 31 down, and turn it around. (6)
3. Time for Ruth to fess up. (5)
4. In the company of carbon monoxide. (2)
5. A fool is one turning to his subconscious. (5)
7. I'm buried in tea period, but it's not true. (8)
8. What garbage to stir. (3,3)
11. Gravity-fed transport for a mythical vessel? (5)
12. Mystic directions. (6)
18. Is that for the wicked's problem - to work stone about right? (2,4)
19. God of the Belmonts knows why and almost works it out. (8)
20. The French sicken and are weak. (5)
21. Don't detest those who are proven. (6)
23. A bottom sea to the French is a bad thing, man. (1,6)
24. A pub joint fight? (6)
27. I believe in the coder. (5)
28. Big time actors are quite stellar. (5)
31. And the French alien told to go home. (2)

The Chiropractic Complaint Saga

Eran Segev recounts the story of a chiropractor's reaction to the Skeptics' republishing Simon Singh's 'controversial' article on chiropractic: his complaint to the HCCC, our responses, and the outcome.

In August 2009, the Australian Skeptics republished an article by Simon Singh which criticised chiropractic practice. As originally published in the UK *Guardian* newspaper, the article was controversial primarily because the British Chiropractic Association, rather than asking for the right of reply, instituted libel proceedings against Singh. At the time of going to press, these proceedings are still in court.

Singh's article was published on the Skeptics' website verbatim, with the exception of the one short statement that was the cause of the BCA's ire. This action was repeated by many other skeptical organisations and individuals around the world. But the Australian Skeptics were unique (so far) in being blessed with a response – nay, an official complaint.

Chiropractor Joseph Ierano wrote a letter to the organisation with a detailed if somewhat rambling rebuff of the article. Being an organisation of volunteers, we thought a detailed response by Australian Skeptics within three weeks was a good effort, but two weeks after responding we received a letter from the NSW Health Care Complaints Commission (HCCC) indicating Ierano had lodged a complaint against Australian Skeptics. The letter attached to the complaint was the same one that Australian Skeptics had received and responded to.

We note that this is at least the

second time that a chiropractor prefers to pursue legal avenues to disagree with criticism of the profession over the option of providing supporting evidence. That this should happen in response to the publication of Simon's article, a step clearly aimed at highlighting the issue of free and open scientific debate, is all the more ironic.

Australian Skeptics saw this complaint as lacking any merit even if some factual errors (eg the claim that a British court had ruled that Simon's article was biased) are ignored. Nonetheless, we prepared a detailed response to the HCCC, defending our right to publish articles relating to any scientific issue, as long as they are backed by scientific evidence.

On October 23, we received a letter from the HCCC stating that it had dismissed the complaint. The Commission had determined that Australian Skeptics Inc is not a "health services provider" as defined in the legislation and therefore does not fall under the jurisdiction of the complaints procedure.

You may be surprised to know that in one sense we were disappointed with this result. While we appreciate the Commission's heavy workload, we had hoped for the HCCC to investigate any merits of Ierano's claims about chiropractic generally, rather than to dismiss it on what is primarily a technicality. In fact, we have been collecting information that may lead

to future action against Ierano and other chiropractors for providing and promoting unproven health services.

In the interests of ensuring that our readers are informed of the issues in this debate, following is Ierano's original letter, and our responses to his claims interspersed, as presented in our letter. The full text of the complaint, our response, and associated documentation are also available on our website, www.skeptics.com.au. Apart from the deletion of the references in Ierano's letter (available on the website version), and some minor punctuation and spelling corrections, the text of his letter has been kept unmodified, as are our comments where relevant (the Skeptics' responses are interspersed throughout the letter).

IERANO: Dear Skeptics [sic] Disturbingly, on your web page you state: "Nevertheless, conventional therapy is still preferable because of the serious dangers associated with chiropractic."

1. Could you please explain why (and state your evidence) physiotherapy treatments are preferable to chiropractic? Please supply your evidence that physio is safer compared to chiropractic care? Do physios not manipulate the spine also and offer a one year postgraduate degree or are you not aware of this? Is their manipulation safer? If not are you going to suggest that

European medical manipulators like Maigne, Biedermann, Lewit, Figar, Rychlikova, Gutzeit Kameith, Siefert Metz, Novotny and Hulse – especially those who manipulate in relation to paediatric and visceral conditions.

SKEPTICS: To find out why Professor Ernst hasn't attacked someone specific, you may wish to ask him rather than us.

IERANO: If not, why are you focusing exclusively on 'chiropractic manipulation'?

SKEPTICS: We are focusing on chiropractic for several reasons – particularly because the BCA has sued Simon Singh before entering into a scientific discussion. Also, many chiropractors believe that there is a 'life force' or that many diseases are caused by subluxations of the spine. This distinguishes chiropractic.

IERANO: "If spinal manipulation were a drug with such serious adverse effects and so little demonstrable benefit, then it would almost certainly have been taken off the market."

2. Have the sceptics questioned-in fervent sceptic manner beyond the opinions of one Simon Singh:
 - a) the state health department authorities
 - b) private health fund providers like HCF, MBF, etc
 - c) the public federal Medicare allied health plan system
 - d) three government-funded, reputable health care university systems in this country
 - e) the Department of Veterans Affairs

SKEPTICS: The article does not entirely condemn chiropractic, but raises concerns over the treatment of childhood conditions. Very few respected institutions would disagree with Singh's position. In any case you are heading in a completely wrong direction, but one which is typical

of alternatives to medicine. The only places we need to go to are, for example, PubMed, the Cochrane Collaboration, and relevant scientific publications. All of the organisations you mentioned consider a lot more than just science (eg the health funds base their decisions on demand). Note that the emphasis is on the lack of benefit. If chiropractic could demonstrate some benefits in the areas of concern it might have been worth the risk.

IERANO: [Have the sceptics questioned] on why chiropractic has not been 'taken off the market', why it is regulated, and is part of all above schemes. Have they records of lethal outcomes? Have you contacted the respective universities (scientific places that have been known to encourage scepticism) to ask why they teach 'lethal' health care? Or is your scepticism apparently satisfied with stopping at Simon Singh's opinion?

SKEPTICS: I hope you will understand that as an organisation of volunteers, we do not go and investigate every single claim someone makes. We especially trust claims backed up by research, such as that done by Professor Ernst. However, it is interesting to note that many chiropractors in the UK have withdrawn their claims since Singh's article was published concerning childhood conditions.

IERANO: If vaccine manufacturers pay millions in compensation (and they do), does that mean they should stop administering them? If no, why should chiropractic throw its benefits out for a small percentage of risk? Do sceptics think that the known risk of heart failure for Vioxx® warrants its banning? Or is your logic exclusive to chiropractic care? Do you think that all drugs which have a capacity to kill have been withdrawn to date, before killing anybody? Do you want a list of the drugs that can kill or seriously harm you that have *not* been withdrawn? Did you know that NSAIDs are known to kill people on a daily basis and have never been withdrawn *en masse*? 'Oh but they have benefits', you say. Really, have you

physios should not manipulate and thus dictate their treatment protocol (medical advice)? Does this go for osteopaths? Does this hold for the manipulating members of the Australian Association of Musculoskeletal Medicine?

SKEPTICS' RESPONSE: I think you can do much worse than read [Simon Singh and Edzard Ernst's] "Trick or Treatment" for an answer to this question. Note that the book's key concern with chiropractic is the manipulation of the neck, a hallmark technique which seems likely to carry risks.

IERANO: It would seem significant that Ernst has not attacked any of his medical colleagues, particularly

The Chiropractic Complaint Saga *Continued...*

seen *all* the studies? Or did you miss the one that showed chiropractic was safer? Now all we have to prove is some efficacy.

SKEPTICS: Most of what you wrote is difficult to follow, but I liked the last sentence. "Now all we have to prove is some efficacy". Indeed you do.

IERANO: Have you done your own literature search on chiropractic benefits, or are you relying on Ernst's and Singh's?

SKEPTICS: We are definitely relying on research done by other people. Don't you? Even if we were an organisation of working scientists, which we are not, science does not work by every person doing everything from scratch. Reliance on work of others is the driving force of scientific progress.

IERANO: "This should be a major concern for health officials, particularly as under-reporting will mean that the actual number of cases is much higher."
3. Should it be? Why? Do you think under-reporting goes on elsewhere in medicine? Have you asked the health department how many complaints chiropractors get per capita compared with medicine? Are all vaccine reactions reported? Are all patients receiving vaccines given legal informed consent as our chiropractic association recommends?

SKEPTICS: I suspect under reporting goes on elsewhere too. How does that change the claim that chiropractic is probably even more dangerous than direct evidence shows? Also, from "Trick or Treatment" – "This problem was highlighted in 2001, when a team of researchers, including Edzard Ernst, asked members of the Association of British Neurologists to report cases of neurological complications referred to them that had occurred within twenty-

four hours of neck manipulation. They identified thirty-five cases, which included nine strokes, over the course of one year. Ernst and his colleagues were shocked to find that none of these cases had hitherto attracted any attention, inasmuch as they had not been reported in the medical literature or anywhere else."

IERANO: "Some practitioners claim it is a cure-all, but the research suggests chiropractic therapy has mixed results - and can even be lethal, says Simon Singh." How is chiropractic therapy "lethal"...what is your evidence? Simon's assertion good enough for the sceptics is it? Or are you not quite as sceptical as I? Do you realise he is giving medical advice and he is not a qualified health care practitioner?

SKEPTICS: I note that you again ignore the claim of no efficacy. If you read Simon's book you'll also become aware of the evidence for lethal treatments. And please don't say you are sceptical. If you were, you wouldn't be practicing a modality that has magic for foundations and no evidence of efficacy for most conditions it aims to treat.

IERANO: Is chiropractic 'lethal' in an absolute sense or in the legal sense that practitioner error was at play? Should aircraft be rid of pilots if they are a known contributor to air crashes? Or does an air-crash usually involve a set of individual circumstances worthy of individual merit and investigation without bringing the whole airline industry into disrepute? It would be shameful logic to condemn an entire profession.

SKEPTICS: I think if you read the book you'll be aware that the claim is that in certain situations chiropractic neck manipulation is dangerous pure and simple, not due to malpractice. Note again that some risk is acceptable when there are benefits, but since there are no demonstrable benefits, the risk becomes unacceptable.

IERANO: You also state: "not only in the UK but also across the globe."

4. Do you think chiropractic is a problem in Australia in this same way?

SKEPTICS: Yes we do. Chiropractic is a problem because there is no evidence that it is efficacious, beyond some marginal effect on back pain.

IERANO: Do any medical doctors you've ever come across ever harm patients? "But doctors help people" you cry. Yes and they know virtually nothing about back treatment, a fact that can be supported with evidence from the literature. Not satisfied that this is the case in Australia? Consider this article from *The Australian* newspaper by journalist Adam Cresswell on January 6 2007 where he writes: "ANATOMY tuition in medical schools has been cut back so much trainee physiotherapists and chiropractors spend a far greater proportion of their courses studying how the body works than do future doctors." He quotes academic lecturer Amanda Neill, who has taught anatomy at a number of universities to students from all three disciplines, said "trainee physiotherapists and chiropractors spent 20 per cent of their course learning anatomy. However, the study of the body's structures now took up just 5 per cent of many medical students' courses."

SKEPTICS: The entire reason for Simon's article was the chiropractors routinely claim to treat conditions such as colic in babies. If there were evidence that it works, we wouldn't have a problem with it. I don't know enough to judge whether what you are saying regarding the amount of anatomy taught in various disciplines is true, but I suspect that medical students know a lot more than just anatomy. They also train for much longer than either chiropractors or physios, so any comparison is probably invalid.

IERANO: "The fundamentalists argue that they can cure anything, including helping treat children with colic, sleeping and feeding problems, frequent ear infections, asthma and prolonged crying - even though there is not a jot of evidence."

5. Please supply evidence that there

is 'not a jot of evidence' to this. This statement is false. You wrote: "...not a jot..."? Are you sure? Or are you influenced by Singh's assertions without a trace of scepticism?

SKEPTICS: Would you like to repeat that? We need to provide evidence that there is no evidence? How about you just provide evidence and save us the use of double negatives? We now know how true this statement is because the BCA put together their best case for showing that chiropractic works for things other than mild back pain. What they came up with, despite obvious cherry picking, was well short of what would be considered evidence for any treatment, let alone one that is based on magic.

IERANO: Please let me know if you wish to reconsider your notions as they are not entirely true, and worthy of examination by a relevant government body. Even a case study is still a significant piece in the hierarchy of evidence, mind you. It is scientifically true that if one case study of death or medical harm is written up, reported and seen as significant, then equally one observation of success must be treated with equal merit, without emotional attachment you display to the 'negative' reports.

SKEPTICS: Even if you were right in what you say about positive and negative case studies, you would still have to show that results of the case studies are measured correctly. The reason you are wrong about case studies is because a negative case study that shows a direct effect of the treatment (ie the mechanism is explained) is much more powerful than a positive case study where the measurement is subjective and the mechanism is either unclear or based on magic.

IERANO: Can you choose, as so-called 'sceptics', to ignore one benefit on one patient published in a journal and make a bold sweeping statement because world-wide a few people have died in extenuating circumstances? Chiropractic does not kill. It is people that kill and people succumb to what we commonly call human error. Same as going to a hospital won't kill you. But death occurs there at an alarming rate due to 'human error'.



SKEPTICS: I answered that already. Please read the book.

IERANO: In this case, your views are quite extremist. You want to throw out the baby with the bathwater, it seems.

SKEPTICS: You don't know what our views are – or at least you did not until now. You are quoting from a Simon Singh article, yet you continue to treat it as if someone from Australian Skeptics wrote it. Well, the long and short of it is that our views are that there is no evidence that what you practice is a valid form of treatment for most conditions, if at all. You may call that extremist, but you'd be wrong, because there is no

evidence that this very murky bathwater has ever had a baby in it.

IERANO: Consider: Of Spinal Manipulation, prominent Orthopaedic Surgeon and Honorary Professor, Centre for Psychosocial and Disability Research, University of Cardiff, Dr G Waddell stated: "What matters is the balance of the effectiveness versus risk, and that is strongly in favour of manipulation"

Is this man deluded? Or has he just not read Singh's book yet?

SKEPTICS: I have no reason to suspect he is deluded, but have you considered that he could be wrong without being deluded? Please note that Singh's article is most critical about chiropractic in relation to childhood conditions unrelated to back pain. Does Dr Waddell support this?

IERANO: The most recent article examining the risks of stroke and chiropractic stated clearly: "VBA [vertebro-basilar-arterial] stroke is a very rare event in the population. The increased risks of VBA stroke associated with chiropractic and PCP

[medical care] visits is likely due to patients with headache and neck pain from VBA dissection seeking care before their stroke. We found no evidence of excess risk of VBA stroke associated chiropractic care compared to primary care."

Would even the Sceptic's society negate an article published in the prestigious Spine journal? Why did this one elude you?

SKEPTICS: It could very well be that in the end that article could prove to be correct, but one article is not enough. In science, the totality of evidence (and the totality of published literature) needs to be considered. In any case, I note that you avoided the question of efficacy,

The Chiropractic Complaint Saga *Continued...*

again. You may be interested in the critical assessment of this paper at: www.sciencebasedmedicine.org

IERANO: "Because there is usually a delay between the vertebral dissection and the blockage of blood to the brain, the link between chiropractic and strokes went unnoticed for many years. Recently, however, it has been possible to identify cases where spinal manipulation has certainly been the cause of vertebral dissection."

Now, my being a self-professed genuine sceptic, I would judge that the reason is not that it went 'unnoticed' – how do you not notice a stroke after a manipulation? Can you give us the proof that it has 'certainly been the cause'?

SKEPTICS: Simon did not say the stroke goes unnoticed – straw men are a poor choice of argument technique when debating real sceptics who can spot logical fallacies. As a "self-professed genuine sceptic" you should be able to do that too, but I believe I have already commented that your claim to scepticism is damaged somewhat by practicing unproven treatments based on magic.

IERANO: Undeniably, with vastly increased utilisation of chiropractic, a litigious society and better medical imaging there has been created a combined effect of seeing greater numbers of harm, just as it has for more extensive medical prevention programs. So should we stop vaccination? If vaccinated communities still exhibit outbreaks of the diseases they were highly vaccinated for, should we curb vaccination programs? 'No', say I, and most probably you. So your opinion is as valid as mine, and each as worthy of equal scepticism.

SKEPTICS: Thank you for raising the issue of vaccinations. Vaccinations have

side effects; in some rare cases those effects are serious; but they are tolerated because vaccines are one of the most effective treatments ever developed by medical science. The number of lives saved by vaccines is measured in millions. Per year. Chiropractic may have some marginal effect on the back of geeks like me who sit down for too long. Are you sure you want to keep that comparison?

IERANO: The fact is that the patient may walk into the chiropractors office *with* the dissection, and it is triggered by either the following recorded, evidence-based forces:

- turning the head to back out of the driveway (gentle cervical rotation)
- getting a hair wash on a salon sink basin
- forceful cervical rotation

And if you want the facts on which profession causes strokes you can find that in the reported literature, a study by Wenbanxvi found that, astoundingly "The largest group of providers, 18/36 (50%), linked to injury through their use of SMT (spinal manipulative therapy), were orthopaedic surgeons." Orthopaedic surgeons! This echoes previous data from Professor Terrett, world renowned authority on the subject, that chiropractors are commonly blamed for all manipulation that goes wrong. Did the sceptics source that article?

SKEPTICS: These are not "facts". This is one article, which does not even report on original research; rather, it is a literature review. And your choice of quote is rather suspect as the review clearly focused on finding cases where an injury reported as due to chiropractic may have been so reported in error. The statement you quoted is almost incidental and is not a main conclusion of the study. In any case, of course, that study may be correct, but orthopaedic surgeons also help a lot more people with very serious conditions - not just back pain. Once again, efficacy is a good enough reason to allow some risk, but chiropractic offers nothing in the way of efficacy, so is not worth any risk.

IERANO: Now the only defence left for your article is that there are little or no benefits and that chiropractic is 'lethal'. These assertions do you very little credibility as you discredit a whole profession for the few that tout benefits they cannot deliver. And these should rightly be reported to your local health care complaints commissioner.

SKEPTICS: Once again, this is not "our" article, but in any case your statement that there are "few that tout benefits they cannot deliver" is misleading on two counts: one is that the basis of chiropractic is that spinal subluxations cause all disease, so the essence of your profession is problematic to say the least and it is up to you to show that the majority of chiropractors have moved away from it. My experience is that all but one chiropractor I ever spoke to believe they can do a lot more than treat back pain, and chiropractors feature heavily in the anti-vaccination movement. The second is that the evidence for any efficacy of chiropractic is limited to back pain, where non-magical treatments such as physiotherapy are just as effective or better. I therefore see no justification to withdrawing any criticism of the chiropractic profession, even if there are some well meaning, well educated professionals (like you, no doubt) who object to making spurious claims and make sure they remain within the realm of true evidence based treatment.

IERANO: Yours in Science,
Joseph J. Ierano BSc DC B CAO
MACC
Doctor of Chiropractic
Board Certified Atlas Orthogonist
(Sweat Institute, USA)
Member Australasian College of
Chiropractors
Member Chiropractors Association of
Australia ■



About the author:
Eran Segev is the president of Australian Skeptics Inc.



Reasons to Believe

Krissy Wilson looks at the psychology of belief – why some of us pursue the paranormal, and whether that's not such a bad thing.

Consistent and ubiquitous belief in the paranormal is a striking and noteworthy facet of the human condition. Belief in phenomena that contradict known scientific laws and principles is a common feature of all western societies, and there is little evidence to suggest that widespread paranormal beliefs are on the wane. Indeed, recent polls tend to suggest that such commonly held beliefs are in fact on the increase.

In America, for example, polls typically report increases in popular beliefs such as ghosts, witches, psychic healing and telepathy (Karr, 2001). A similar pattern emerges when examining the results of a survey conducted in the UK. A recent *Reader's Digest* nationwide survey (Hemelryk, 2006) revealed that 52 per cent of the respondents claim to have had a precognitive dream, 20 per cent claim to have seen a ghost, and around 68 per cent claim to be able to 'sense' that someone is looking at them. Yet, there remains little, if any, evidence to suggest that any of these claims support known, provable phenomena.

However, the continued fascination for such topics is not the result of critical reflection, carefully weighing up the evidence, but based upon belief: a proposition or view that is believed to be true despite inconclusive evidence. But where does that belief come from? Are we somehow pre-programmed to believe? Are some of us more likely to believe

compared to others?

Mainstream psychology has largely neglected the area of human belief until relatively recently. Parapsychology, on the other hand, has spent the last 100 years or so, somewhat unsuccessfully, attempting to prove that psychic forces (or psi) exist. With newly emerging interest in the field of anomalistic psychology, however, researchers are exploring a more sceptical approach. Not primarily interested in proving or disproving the existence of these phenomena, anomalistic psychology is concerned with psychological and in some cases physiological reasons to explain why so many of us believe in weird and wonderful things that lack any significant scientific basis (French, 2001).

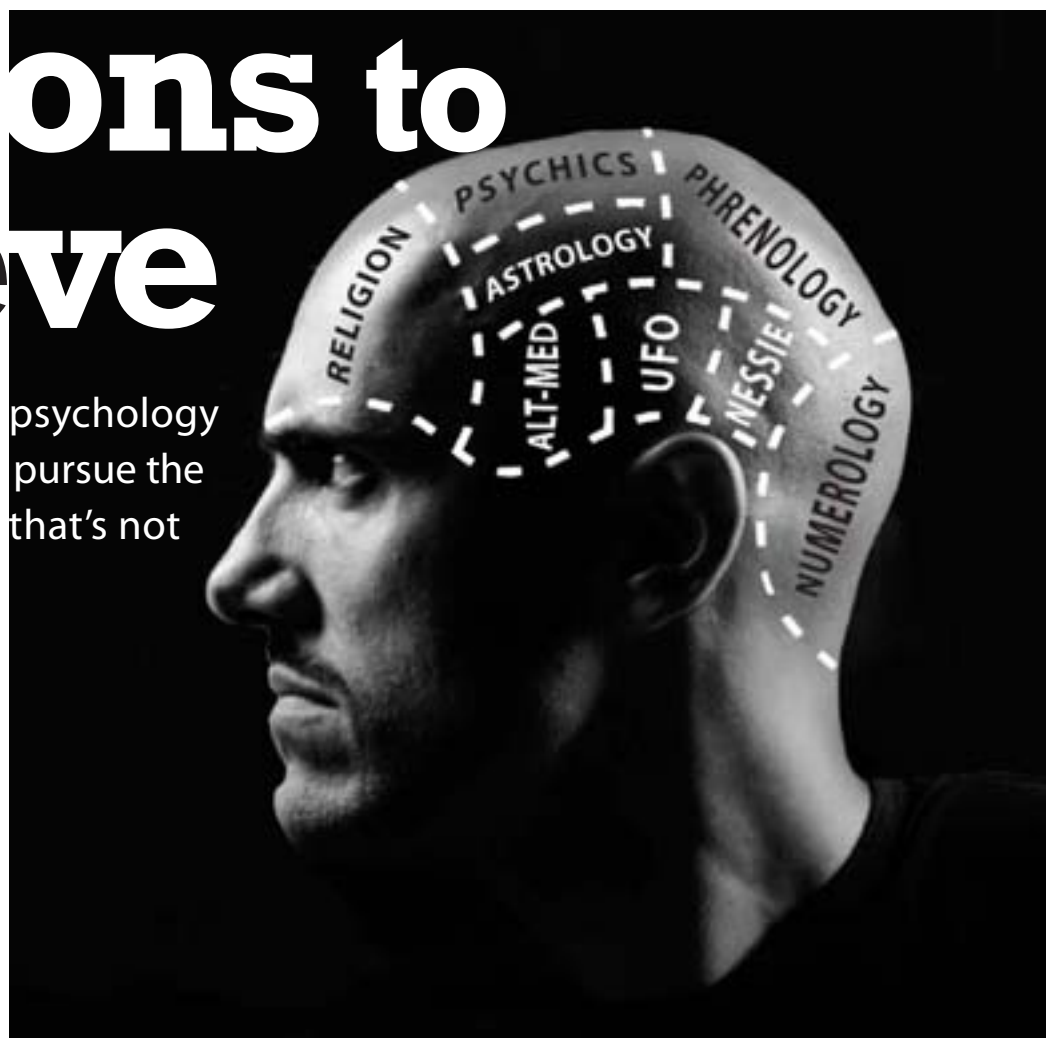
So what can psychology tell us about the complex and mysterious issue of human belief? Well, if this were a psychology lecture 101, then it would

be pointed out that for every facet of the human condition there are likely to be a multitude of theoretical explanations to account for the aetiology of a particular phenomena. Most psychologists would suggest that there are biological, cognitive and environmental influences in all facets of human behaviour. So let's apply those to the study of belief.

BIOLOGY AND BELIEF

Can biology give us any clues? All first-year psychology students know that psychobiology means neurotransmitters. Step up the usual suspects: serotonin and dopamine. Oh, what joy it would be to discover that dopamine is highly overactive in believers compared to non-believers, or that alien abductees have heightened levels of serotonin in their brain chemistry. Take a pill and the belief would go away.

In extreme cases, such as those with psychotic delusions, then biology is



Reasons to Believe

Continued...

clearly a major factor. Antipsychotic drugs have been helping those with delusions, for example, since the 1950s. The exact mechanism whereby the drugs work is still not known, but clearly they affect brain chemistry with accelerated or decreased levels of dopamine and serotonin being the likely cause.

But we are not talking about schizophrenics or the clinically deluded. Alien abductees are not delusional psychotics, neither are psychics or housewives who 'see dead people' suffering from schizotypy-like personality disorders. On the contrary, there is nothing 'abnormal' about belief.

So what other clues can biology give us? A considerable amount of research has looked at personality correlates and paranormal belief. Could there be a belief personality? Someone who is particularly susceptible to paranormal beliefs?

The general pattern of results is fairly mixed but some tentative conclusions can be drawn from the research to date. Researchers have typically looked at factors such as dissociation, fantasy-proneness and suggestibility, and their relationship to belief in the paranormal.

Dissociativity describes a tendency to drift in and out of conscious awareness. In extreme cases, patients may develop severe schizotypal symptoms and are, as a result, unable to function normally. But in most cases, and those that are explored in the laboratory, dissociation is a common occurrence of a brief disconnection from full self-awareness, of time and of external circumstances, and has been shown to correlate with belief in the paranormal in a number of studies (eg Irwin, 1994; Wolfradt, 1997). Furthermore, dissociation has been shown to correlate with suggestibility (Eisen, Morgan, & Meakes, 2002).

A similar pattern emerges when looking at fantasy-proneness. Like dissociation, fantasy proneness exists on a continuum from mild examples to clinical cases where patients have an

inability to distinguish fantasy from reality. They may report vivid childhood memories, show elevated levels of hypnotic suggestibility, and claim to have psychic abilities (eg Nickell, 1996).

In a series of studies conducted at The University of Tasmania over the last two years involving over 1000 participants - both student and non-student samples - believers in the paranormal consistently scored higher on measures of fantasy proneness compared to non-believers. Interestingly, fantasy proneness has also been consistently shown to correlate with the tendency to report false memories (see French, 2003, for a review).

So far the above review is inherently negative in its view of belief, the inference being that belief is a bad thing. Indeed, this could be said for much of the previous work that has looked into qualitative and quantitative differences between believers and non-believers.

However, a new line of exploration is questioning that view and taking the approach that belief, in various forms, might be beneficial. In related studies to those mentioned above, belief in the paranormal has been linked with high levels of self-esteem, collective (or group) self-esteem, and with emotional intelligence.

Although this line of enquiry is in its early stages, preliminary findings are suggesting that belief may have an adaptive function, ie it may act as a coping mechanism for modern humanity to deal with the rigours of life. Support for such a theory might lead to the contention that belief is an innate human property - that we are pre-programmed to believe in order to feel stronger and safer and thus aid survival.

THE ROLE OF COGNITION

Personally, I blame the cognitive revolution of the 1950s and 60s for the commonly-held fallacy that our brains are analogous to computers - the notion that information is reliably stored, processed and accessed whenever we

need it. Unfortunately, this is simply not the case. This is especially true with the way that we view memory.

Memory does not function like a computer program, reliably and accurately replaying the same memory over again with perfect clarity. Indeed, few of us realise that our cognitive abilities constantly and consistently let us down. We see what we have not seen, hear what we have not heard, and indeed recall events that never even took place. The role of cognition and in particular of cognitive biases is especially significant in understanding the origin and maintenance of certain beliefs (French & Wilson, 2007).

Findings have emerged over the last

twenty years that have explored the role of cognitive biases and their relationship to belief in the paranormal and the reporting of ostensibly paranormal events. Once

“ Attempts to define believers as gullible, foolish or unable to think critically have proved unsuccessful. ”

again, the picture that emerges is somewhat mixed.

Attempts to define believers as gullible, foolish or unable to think critically have proved unsuccessful. We are all susceptible to faulty thinking, poor reasoning ability and memory distortions. In an early review of the topic, French (1992) examined factors related to cognitive distortions or biases that might potentially lead people to believe that they have experienced the paranormal when in fact they have not. Although believers and non-believers do not seem to differ reliably in terms of critical thinking, many of French's postulated cognitive biases do seem to be reliably related to paranormal belief and experience.

For example, believers in the paranormal tend to be poorer at syllogistic reasoning, have a more distorted concept of randomness leading them to see meaning where there is none, are more susceptible to experiencing anomalous sensations and are, in certain circumstances, more suggestible (French & Wilson, 2007).

ENVIRONMENTAL/CULTURAL FACTORS

Unfortunately, the media love the paranormal. Typically, claims of the paranormal and reports of all manner of anomalous events and experiences are treated largely uncritically in popular media. On any given evening on television in the UK, America and Australia, there is likely to be a program or film devoted to a 'psychic' phenomenon. These programs are likely to have a powerful influence over a largely uncritical audience.

Commercial successes such as *The X Files*, *The Mentalist*, and *Medium* present a seductive view that certain individuals can talk to the dead and foresee the future. It is rare that these types of programs provide a critical or skeptical approach. Psychics in films, in particular, are portrayed in a very sympathetic light, often as innocent victims, ridiculed and misunderstood by society and narrow minded skeptics, whose 'gift' is ultimately proven to be real.

The sheer volume of such influences creates an atmosphere of acceptance that paranormal phenomena are for real. Furthermore, it is fun to believe in this stuff. We believe because we want to. One of the most popular programs on television, shown in approximately 80 countries worldwide, is *Deal Or No Deal*. Contestants use their 'intuition' to find a suitcase (numbered between 1 and 26) that contains a large sum of money (\$200,000 in Australia, and £1,000,000 in the UK version). Despite the 'game show' nature of the program, in effect it is 25 minutes of the purest example of human belief in action. "I've got a really strong feeling about number 18, Andrew", a contestant will say to the host. Number 18 will be opened only to find \$1 as opposed to the \$100,000 that they 'believed' was there. Never mind – almost immediately number 18 is forgotten and the contestant will now have a 'spooky feeling' about number 8! On any given evening the average number of cases correctly guessed by contestants is six.

Interestingly, some years ago in an attempt to boost ratings, the producers ran a psychics-only show. However, despite their extraordinary 'gifts', the psychics actually performed less

successfully than the usual contestants. It is an education in the psychology of belief. I urge all my students to at least watch one episode, in the interests of science, of course!

CONCLUSIONS

Clearly, there are a multitude of reasons why we believe. Biology, cognition, and popular culture are all factors that increase our susceptibility to belief and allow us to misinterpret events as paranormal. This review has touched on some of the recent findings from the psychological literature that may go some way to explain our continued fascination with all things paranormal.

However, I wonder if we are approaching this issue from the wrong perspective?

As previously suggested, belief may not be the enemy but may have beneficial properties that help us cope with the awful possibility that life is brutal, meaningless, and worse – short. Skeptics such as Richard Dawkins appear to be leading an almost political crusade against the perils of unfounded beliefs, in particular of religious belief. But in my view, belief is a powerful symptom of the human condition. We all believe, whether we realise it or not. Skepticism itself is a belief. Imagine a world without it? The need to believe is as strong as our need for shelter, intimacy and accomplishment. ■

REFERENCES

- Eisen, M L, Morgan, DY, & Mickes, L (2002). Individual differences in eyewitness memory and suggestibility: Examining relations between acquiescence, dissociation and resistance to misleading information. *Personality and Individual Differences*, 33, 553-571.
- French, CC (1992). Factors underlying belief in the paranormal: Do sheep and goats think differently? *The Psychologist*, 5, 295-299.
- French, CC (2001). *Paranormal perception? A critical evaluation*. Institute for Cultural Research, London. Monograph Series, No. 42.

- French, CC (2003). Fantastic memories: The relevance of research into eyewitness testimony and false memories for reports of anomalous experiences. *Journal of Consciousness Studies*, 10, 153-74.
- French, CC, & Wilson, K (2007). Cognitive factors underlying paranormal beliefs and experiences. In S. Della Sala (Ed.), *Tall tales: Popular myths about the mind and brain* (Chapter 1, pp 3-22). Oxford: Oxford University Press.
- Hemelryk, S (2006). Are you normal – or psychic? *Reader's Digest* (UK edition), June 2006, 84-90.
- Irwin, HJ (1994). Paranormal belief and proneness to dissociation. *Psychological Reports*, 75, 1344-1346.
- Karr, B (2001). Gallup: Paranormal belief increase since 1990. Available from: www.csicop.org/list/listarchive/msg00227.html [Accessed 26 February 2005]
- Nickell, J (1997). A study of fantasy-proneness in the thirteen cases of alleged encounters in John Mack's abduction. In Frazier, K, Karr, B, and Nickell, J (Eds.) *The UFO invasion: the Roswell incident, alien abductions, and government cover-ups*. Amherst, NJ: Prometheus, 207-209.
- Wolfradt, U (1997). Dissociative experiences, trait anxiety and paranormal beliefs. *Personality and Individual Differences*, 23, 15-19.

Acknowledgements

Prof Chris French, for his early guidance, supervision and continued pioneering work in the field. For more information see www.gold.ac.uk/apru. To all my Honours students for their contributions to this review: Anna Todd, Anna Wilson, Laura Davis, Caitlin Brain and Daniel Moser.



This article is a version of a presentation given to the Australian Skeptics' 2009 Convention in Brisbane.

About the author:

Dr Krissy Wilson is a lecturer in the School of Psychology, University of Tasmania.

The last flight of Frederick



The Valentich affair is probably the most famous 'UFO' related event in Australia's history. Much myth and misinterpretation has abounded. In this first part of a two part review, Geoff Cowan retells what we know of the event.

Just over 30 years ago, a young pilot named Frederick Valentich disappeared on a flight over the Bass Strait. I have a connection to this matter because at the time, I was a young teenager in the RAAF Air Training Corps (now known as the Australian Air Force Cadets) and undertook some flight training as a trainee pilot to solo stage. One of my instructors was a very eager and motivated young airman called Aircraftsman Frederick Valentich, the same pilot who was lost in this incident.

As a young 15-year-old teenager, I was shocked to see on the October 22, 1978, on the front page of every Sydney newspaper, this young instructor who taught me my aviation ground subjects. As a young (trainee) skeptic, I was amazed that the papers stated that Valentich was "taken" by a UFO.

As with most things, after a number of months, memories fade, life as a young cadet in the ATC went on and not much more was really said about the matter. I must be honest - I cannot even remember the subsequent enquiry being reported in Sydney papers in 1982. At the time, I had enlisted in the RAAF

Reserve and cannot recall any interest or gossip in relation to the matter.

Subsequently, many UFO and conspiracy buffs have proceeded to enshrine Valentich in Australian UFO culture as the most significant UFO sighting in Australian history¹. As a result, much speculation has no doubt contributed to the more than 49,000 entries on the internet (Google search Nov 8, 2009) all of which are on paranormal and conspiracy type websites.

The main aspect of the case that underpins the belief that Valentich was abducted by aliens is the radio transmission that he made between his aircraft and Melbourne Air Traffic Control that night. Essentially, Valentich states that he saw a number of lights about 1000 feet above him. The supposed UFO was described in 'detail' and the last transmission from the aircraft indicated the object was above him, followed by a metallic sound. A seven-day SAR (search & rescue) by the RAAF operation failed to locate any trace of the aircraft or Valentich.

In October 2008, a number of websites and newspaper articles surfaced

celebrating the 30th anniversary of the incident and my memories were again stirred about the young airman that I knew. But this was different - as a fully fledged skeptic I felt that it was about time that I took a closer look at the matter and research what actually happened that night in 1978, because I did know this young man, albeit only for a short time, but feel that perhaps I could contribute to laying some ghosts to rest.

The aim of this article is to review the matter from available open source intelligence and research and put down the facts from both official and not-so-official sources. From that, I will attempt to create a possible scenario that looks at all the evidence. I will address all the scenarios that have been developed in the last 30 years from these sources and look at the most likely possibility. The aim is to address this incident only, to make the best conclusion on what happened to Valentich, not to look at overall alleged UFO activity in Australia.

As a footnote to the 30th anniversary, one UFO website actually put forward a poll on what happened to Valentich. An incredible 57 per cent



Valentich

Part 1: What happened?

thought that he was abducted by aliens, 14 per cent said he became disoriented and crashed, 6 per cent thought that it was hoax and he is still alive, and a further 6 per cent thought it was a military experiment gone wrong. 18 per cent stated “don’t know”². But this was on a UFO web site; I suspect a different result if it were a sceptics website.

But in an article dated 2000, UFO investigators Haines and Norman have drawn a number of new conclusions from so-called new evidence. I will review that ‘evidence’ in the discussion of this matter. [See Part 2 to be published next issue.]

But to commence some hard thinking on this matter. This incident would no doubt be treated as any other normal general aviation fatality that occurs on a regular basis in Australia except for one aspect, the radio transmissions made prior to the disappearance of the aircraft. These radio transmissions make the mystery and subsequently the evolution of the conspiracy culture that has spawned from it.

The Skeptic previously reported on the Valentich incident in a two part article written by James Gerrand (*The*

Skeptic, 2:1 and 2:2, and republished in *The Great Australian Skeptic CD*, pp 141-143). I will refer to Gerrand’s article throughout this article.

WHO WAS FREDERICK VALENTICH?

As the author knew the man in question, I would like to create a profile of who this man was, but little information exists in regards to his personal life; most information centres on the incident. Much of the available information on Valentich has been extracted from interviews with his father Guido. The elder Valentich tended to state that he held out hope that his son may still be alive and no doubt held onto

that belief up to his death in 2000.

Frederick Valentich was 20 years old at the time of his disappearance. He lived at home with his parents in Avondale, a

suburb of Melbourne. He was soon to be engaged to 16-year-old Rhonda Ruston, having placed a deposit on a ring just weeks earlier.

He was a keen aviator and was in the process of gaining hours for a commercial pilot’s licence. At the time, Valentich only held a standard pilot’s licence and had only 150 hours flying

time. In May 1978 he had been issued with a Class Four Instrument Rating, which means that he was able to fly “on instruments” and fly at night using VMC (visual meteorological conditions). He only held this qualification for a short time and the night of his disappearance was to be his first night flight as such.

He was a volunteer airman instructor in the RAAF Air Training Corps (all photos of him in the media show him in his RAAF uniform). It should be noted that Valentich was a cadet instructor and had no involvement in the RAAF Permanent or Reserve elements or other aspect of the military, thus precluding him from access to classified documents, material, aircraft or other technology (including alien autopsies).

One noteworthy aspect of his life is that he had a keen interest in UFOs. The ufoexperience.blogspot.com reports that Valentich’s father said Frederick had been interested in UFOs for a number of years and that approximately 8 to 10 months before his disappearance, Frederick had reported one³. (I was unable to find any further information in regards to this previous UFO sighting.) Another source stated that Valentich used information he had gained from the RAAF in his study of UFOs and this had been a hobby for a number of years². One author¹¹ states that Guido Valentich said his son had seen top secret UFO files at RAAF Base Sale.

THE AIRCRAFT

The aircraft he was flying in October 1978 was registered to the Southern Air Services with registration VH DSJ (Delta Sierra Juliet). The aircraft itself was a blue and white Cessna 182L Skylane, single-engine high-wing monoplane. The 182L had a cruising speed of 256km/h, fuel for approximately 800km or 300 minutes. This aircraft was manufactured and registered for airworthiness on February 14, 1968, and was thus about 10.5 years old at the time of the incident¹⁰. The value of the aircraft was placed at \$43,000.

The 182L had a Continental O-470R engine, which pilot friends have informed me had a number of issues, including cutting out in flight when

“ One noteworthy aspect of his life was a keen interest in UFOs, and before his disappearance he had reported a sighting.”

The last flight of Frederick Valentich *Continued...*

undertaking negative-G forced flying such as diving or making tight turns.

A former engineer who used to service these aircraft stated that the aircraft engine had a high maintenance requirement and was “temperamental” with dirty fuel or when it was due for service.

THE FLIGHT PLAN

The flight was of a routine nature and Valentich had undertaken it a number of times⁹. Essentially 69 minutes flying time, the route was from Moorabbin Airport, Melbourne, to King Island, north-west of Tasmania and approximately two-thirds of the way across Bass Strait from Victoria.

The flight plan was lodged at 1723 hrs on October 21, 1978, at the Moorabbin Briefing Office and he received a Met briefing at the same time. The plan required him to fly from the airport to King Island and return, giving him the opportunity to gain approximately two hours flying time for his log. According to Bill Chalker⁵, in addition to this Valentich was to pick up four friends at King Island and return them to Melbourne. Four additional life vests were stowed on the aircraft for this purpose by the aircraft operator. However, according to Watson⁶, Valentich was collecting crayfish for a family reunion. This was confirmed by a Melbourne reporter Mark Russell⁷. Valentich was the only person on board the aircraft at take off.

The intended route was to take the Cessna from Moorabbin Airport to Cape Otway, 41 minutes flying time, and then to King Island, another 28 minutes. The cruising height was to be 5000 feet. No arrangement had been made for the runway at King Island to be illuminated. At Cape Otway, the air was clear to 5000 feet with stratocumulus cloud extending from 5000 to 7000 feet and cirrus cloud at 30,000 feet⁸. After refuelling at 1810, the aircraft departed at 1819hrs. There was meteor activity at the time and Venus was very bright (Gerrand).

Below Frederick Valentich's father Guido with the only known photo of his son. Guido reportedly said his son had an interest in UFOs for some years.



THE INCIDENT

At 1906 local time, after 47 minutes flying time, Valentich contacted Melbourne ATC and spoke to Flight Services officer Steve Robey for approximately seven minutes. The initial enquiry by Valentich was in relation to other aircraft in his vicinity. Robey stated there were none. Valentich described an aircraft with four lights at his altitude, but then passed above him at 1000 feet at very high speed. Valentich could not offer a description at the time. A few minutes later, the object/aircraft appeared again that passed alongside him and it had a green light, was metallic and shiny. Valentich stated that the aircraft appeared to be playing a game with him, flying over him at high speeds, before the object vanished.

At 1912, the object reappeared and Valentich stated it was flying over his aircraft. The microphone was left open for approximately 17 seconds and a number of unidentifiable sounds were audible before the microphone went dead. Prior to this, Valentich did state that the aircraft was suffering problems with the engine.

A number of websites contain the full transcript of the conversation between Valentich and Robey and a number of blogs indicate that the tape was used for training purposes. But my enquiries

with both official and unofficial sources failed to locate any copies or any person that has actually heard the tape.

The official version of the tape transcript is thus:

19:06:14

DSJ [Valentich]: Melbourne, this is Delta Sierra Juliet. Is there any known traffic below five thousand?

FS [Flight Services; Robey]: Delta Sierra Juliet, no known traffic.

DSJ: Delta Sierra Juliet, I am, seems to be a large aircraft below five thousand.

19:06:44

FS: Delta Sierra Juliet, What type of aircraft is it?

DSJ: Delta Sierra Juliet, I cannot affirm, it is four bright, and it seems to me like landing lights.

FS: Delta Sierra Juliet.

19:07:31

DSJ: Melbourne, this is Delta Sierra Juliet, the aircraft has just passed over me at least a thousand feet above.

FS: Delta Sierra Juliet, roger, and it is a large aircraft, confirmed?

DSJ: Er ... unknown, due to the speed it's traveling, is there any air force aircraft in the vicinity?

FS: Delta Sierra Juliet, no known aircraft in the vicinity.

19:08:18

DSJ: Melbourne, it's approaching now from due east towards me.

FS: Delta Sierra Juliet.

19:08:41

DSJ: [open microphone for two seconds]

19:08:48

DSJ: Delta Sierra Juliet, it seems to me that he's playing some sort of game, he's flying over me two, three times at speeds I could not identify.

FS: Delta Sierra Juliet, roger, what is your actual level?

DSJ: My level is four and a half thousand, four five zero zero.

FS: Delta Sierra Juliet and you confirm you cannot identify the aircraft?

DSJ: Affirmative.

FS: Delta Sierra Juliet, roger, stand by.

19:09:27

DSJ: Melbourne, Delta Sierra Juliet, it's not an aircraft it is [open microphone for two seconds].

19:09:42

FS: Delta Sierra Juliet, can you describe the ... er ... aircraft?

DSJ: Delta Sierra Juliet, as it's flying past it's a long shape [open microphone for three seconds] cannot identify more than it has such speed [open microphone for three seconds]. It's before me right now Melbourne.

19:10:00

FS: Delta Sierra Juliet, roger and how large would the ... er ... object be?

19:10:19

DSJ: Delta Sierra Juliet, Melbourne, it seems like it's stationary. What I'm doing right now is orbiting and the thing is just orbiting on top of me also. It's got a green light and sort of metallic like, it's all shiny on the outside.

FS: Delta Sierra Juliet.

19:10:46

DSJ: Delta Sierra Juliet [open microphone for three seconds] It's just vanished.

FS: Delta Sierra Juliet.

19:11:00

DSJ: Melbourne, would you know what kind of aircraft I've got? Is it a military aircraft?

FS: Delta Sierra Juliet, Confirm the ... er ... aircraft just vanished.

DSJ: Say again.

FS: Delta Sierra Juliet, is the aircraft still with you?

DSJ: Delta Sierra Juliet; it's [open microphone for two seconds] now approaching from the south-west.

FS: Delta Sierra Juliet.

19:11:50

DSJ: Delta Sierra Juliet, the engine is rough-idling. I've got it set at twenty three twenty-four and the thing is coughing.

FS: Delta Sierra Juliet, roger, what are your intentions?

DSJ: My intentions are ... ah ... to go to King Island ... ah ... Melbourne. That strange aircraft is hovering on top of me again [open microphone for two seconds]. It is hovering and it's not an aircraft.

FS: Delta Sierra Juliet.

19:12:28

DSJ: Delta Sierra Juliet. Melbourne [open microphone for seventeen seconds].

[An unexplained sound abruptly terminated the voice communications.]

I have included the complete conversation so that all the information is included. All official sources confirm this conversation and it was released the day after the incident by the Department of Transport. So much for an alleged cover up - why release the tapes?

Gerrand reports that at the time of the incident, Melbourne Radar conducted a sweep of the area and failed to locate the UFO. But taking into consideration the position described by Valentich, the UFO could have been below the radar. Also, due to temperature inversion as a result of the Met conditions that night, some of the radar scans of the area where Valentich was located were not correct.

THE SEARCH

At 1912hrs, an alert was issued and at 1918hrs a distress was issued when the aircraft failed to arrive at King Island. A subsequent seven-day search was conducted by the RAAF via a PC3 Orion as well as civil aircraft. The Orion is, for want of a better description, a flying integrated circuit with the capability of listening and searching for any object the size of a water bottle in the sea. With both an airborne and sea-searching capability it can find submarines or any objects on the surface. No doubt this aircraft would have been dispatched from RAAF Base Edinburgh, home of 10 and 11 Squadrons who maintain this aircraft.

The aircraft, with other civil aircraft and surface ships, searched the Bass Strait and Cape Otway areas. The only indication found was the appearance of a slick near the route of the flight plan, but according to UFO investigators, analysis revealed it was not avgas⁹. The search ceased on the October 25, 1978.

At the time of writing, 30 years after the incident, no wreckage or the body of the pilot has ever been located.

The media coverage of the incident

was national with great speculation on the cause of the loss when the Department of Transport released the tape of the conversation between the pilot and the FSO.

“ Further research could not locate any information in regard to these sightings outside of the usual UFO websites.”

ASSOCIATED WITNESSES & ALLEGED UFO SIGHTINGS

Official reports do not reference additional witnesses outside of Steve Robey, the FSO. But the Victorian UFO Research Society states that witnesses to the incident do exist with evidence.

Roy Manifold, a plumber and amateur photographer, had set up his camera in the general direction of the incident from Cape Otway to take photos of the setting sun. These photos were shot 20 minutes before the incident occurred. In two of six photos - detected after development

The last flight of Frederick Valentich *Continued...*

- a fast moving object was captured. The fourth photo showed a dense black lump in the water and the sixth photo showed a strange mass over the same section, but nothing in the fifth photo.

I have attempted to track down these photos both via the internet and through the Victorian UFO Research Society but to no avail. It appears that they exist, but no-one appears to know where they are located or who currently possesses them. An 'official' from the organisation stated to me via phone, during research for this article, that the matter was still under investigation by them and that the photos form part of that investigation.

Other witnesses stated they saw UFOs in the area of the night of the incident and the Victoria UFO Investigation group stated that 15 of the sightings are probably related to this incident. Again, further research could not locate any information in regard to these sightings outside of the usual UFO websites or organisations. One witness from Queensland said he saw a long object with four lights that evening in the Bass Strait area². But, in my research, corroborating information from official sources is non-existent in regards to witnesses. It appears that the only people that the witnesses have spoken to are investigators from UFO organisations.

Another witness, who provided information to UFO 'investigators' in 2000, 22 years after the incident,

provided additional information that has since been used to provide a possible conclusion for where Valentich crashed. This will be discussed in Part 2 of this article as this 'evidence' tends to support the conclusion that Valentich crashed into Bass Strait.

Outside of the official witness (Robey), no evidence or witnesses have been interviewed by Commonwealth authorities. The Victorian UFO Society refused to provide further information other than what was in their official newsletter. ■

In part two of this article, to be published next issue, Geoff Cowan looks at the investigation of the incident, theories (including conspiracy theories) put around at the time and later, his own analysis and theory as to what really happened.

Bibliography

Internet & Open Source Intelligence:

1. www.militaryairshows.com.uk/unex12.html - accessed 08 Jan 2009
2. <http://vote.pollit.com/webpoll2?ID=494562> - accessed 22 Oct 2008
3. www.lightstation.com newsletter Summer 2008/2009 - accessed 08 Jan 2009
4. <http://ufoexperiences.blogspot.com/2005/10/frederick-valentich-update.html> - accessed Oct 22 2008
5. Chalker (2002) 25 Years ago Frederick Valentich vanished <http://ufos.about.com/od/bestufocasefiles/p/valentich.htm> - accessed 22 Oct 2008
6. Watson (2008) <http://www.abc.net.au/local/stories/2008/10/06/2383131/htm> - accessed 22 Oct 2008
7. Russell (2008) www.democraticunderground.com/discuss/duboard.php?az=view_viewall&address199x2622 - accessed 22 Oct 2008
8. www.check-six.com/lib/Famous_Missing/Valentich.htm - accessed 08 Jan 2009
9. www.nationmaster.com/encyclopedia/Valentich-Disappearance - accessed 08 Jan 2009
10. www.wikisource.org/wiki/Aircraft_Accident_Investigation_Summary Ref No V116/783/1047 - accessed 08 Jan 2009
11. <http://au.geocities.com/psyberplasmic/ccS1-1.html> - accessed 15 Jan 2009
12. <http://members.iimetro.com.au/~hubbca/omega.htm> - accessed 15 Jan 2009

Articles & Investigations

- Haines, R & Norman, P (2000) "Valentich Disappearance: New evidence & a new conclusion", *Journal of Scientific Exploration*, Vol 14 No 1 pp 19-33, 2000.
- Gerrard, J. (1982), "The Valentich Mystery" parts 1 and 2, *The Skeptic* 2:1 and 2:2, as republished in *In the Beginning: The First Five Years of the Sceptic*. Williams, B. ed, (pp 141-143).

About the author:

Geoff Cowan is a skeptic, atheist and would rather be riding his horse.



The Skeptics' Guide to the Universe

is a weekly Science podcast talkshow discussing the latest news and topics from the world of the paranormal, fringe science, and controversial claims from a scientific point of view.

www.the.skepticsguide.org





Oysters don't Grow on trees



Tony Heyes discovers a tasty solution to carbon footprints.

Having just read Professor David MacKay's wonderful book, *Sustainable Energy – without the hot air*, in which MacKay not only performs all manner of green calculations but provides the reader with the tools to perform calculations of their own, I was inspired.

MacKay's book is essentially about how we might live without burning fossil fuels but he does devote a few pages to carbon dioxide sequestration. In that context, I am sure that most of us are familiar with the suggestion that one can offset one's carbon dioxide emissions by growing trees.

The best plants in Europe - where MacKay is based - capture some 15 tons of CO₂ per hectare per year. Given that the CO₂ footprint for each person in the UK is approximately 11 tons per year, we can calculate that they require an area of 7500m² per person in order to grow the required number of trees. The problem is that if one divides the total land area of the UK by the population one finds that the available area per person is only 4000m² square metres. Whoops!

In Australia we are, of course much better off. With our small population and large land area we have some 374,400m² per person. Why then should we worry that our per capita footprint is the largest in the world? To offset our 26 tons of

CO₂ per person per year all we need to do is to grow trees over an area equal to 5 per cent of our country. Even with our arid climate, this seems feasible. But there is a snag; a seriously big snag.

What are we going to do with all the timber? We can't burn it. We can't leave it around to rot. How can we get rid of each person's personal accretion of 18 tons of timber per year. Neither MacKay nor I have bothered to calculate the energy cost associated with burying it deeply underground or even of shooting it off into space!

With a twinkle in his eye, Emeritus Professor Adrian Horridge of the Australian National University has suggested an alternative: eating oysters. Oysters are splendid sequestrators of carbon dioxide. They turn carbon dioxide into shell - almost pure calcium carbonate. Calcium carbonate is limestone, one of nature's most stable compounds. It can simply be dumped at sea.

Let us do the calculation: calcium carbonate - CaCO₃ - contains 44 per cent CO₂ by weight. One dozen - somewhat puny - English oysters weigh 840g. In order to sequestrate the English footprint of 11

tons of CO₂ per person per year, every member of the population should consume 81.5 dozen oysters a day!

In Australia we are fortunate, our oysters are bigger - they weigh approximately 1.1kg per dozen. However, our carbon footprint is larger. In order to sequestrate our massive 26 tons of CO₂ per person per year, every member of the population should eat a mere 94.5 dozen oysters each day!

The more astute among you will have realised that one does not actually have to eat them; one can feed them to animals or even throw them away. Simply growing them is the important thing.

The next time you guzzle a dozen oysters, you can believe you are doing something for the planet. However, to really do your bit, you should repeat your order 93 times. ■

References

Horridge, Adrian. Private communication.

MacKay, David JC. *Sustainable Energy – without the hot air*, UIT Cambridge, 2008. Available free online from www.withouthotair.com

About the author

Tony Heyes is a retired physicist living in Melbourne - Tony.Heyes@physics.org



Death of a Quack

David Gorski investigates the passing of 'cancer curer' Hulda Clark, and discovers the possibility of karma.

Several months ago I posted a blog on my website (scienceblogs.com/insolence) having learnt of the death of über-quack Hulda Clark, the woman who said that she had the *Cure for All Cancers*. She had died on September 3, 2009, and I was criticised for titling my post Requiem for a Quack. But given how Clark's quackery had, I felt, contributed to the suffering of an unknown number of cancer patients, I didn't really feel too bad about it, although I do realise that the taboo about speaking ill of the recently dead is a strong one.

I was curious as to what the cause of Dr* Clark's death was. It seemed rather mysterious, being described at the time as the result of a "spinal injury", with no further description. Then, a reader sent me a scan of Clark's death certificate, and this is what it listed as a significant condition contributing to death: "Multiple myeloma". In other words, cancer of plasma cells, a form of lymphoma.

Even Hulda Clark's own website admits that she had multiple myeloma:

"Dr Clark helped many people get well, but she couldn't help herself. Her first symptom was excruciating pain in her arms. Pain medicines were ineffective. It would turn out she had deterioration in her neck vertebrae which was pinching those nerves. Her hands stopped functioning. It would turn out later she had carpal tunnel syndrome. So as soon as Dr Clark knew there was something wrong, she physically could not use her Syncrometer techniques to investigate it because her hands and arms did not work well

enough. Her health deterioration was a mystery."

Well, not really. The cause of her health deterioration, while perhaps a mystery initially, is quite clear now. She had multiple myeloma. It's also a pretty lame excuse. I mean, come on! Clark 'trained' dozens of acolytes

to use her Syncrometer. Are they really saying that not a single one of them could use her device, which she claimed as part of the "cure for all cancers", to cure her own cancer? Not that it would have done any more good for Clark than it did for any of the cancer patients who misplaced their faith by putting it in her, but the excuse used to explain why Clark died of cancer when she had spent so many years claiming that she could cure it is ironic in the extreme. Surely there must have been someone who could have operated the Syncrometer for her!

In any case, this is how Hulda Clark's site describes what happened next:

"Dr Clark could see from her blood tests that she was anemic. She got a transfusion but was uncertain if the anemia was significant because she had occasional anemia all her life. She also saw reduced kidney function. She spent a lot of time trying to figure that out but unbeknownst to her, chasing that clue would not lead anywhere. She stopped being able to walk without severe pain. Dr Clark lived with months of severe



hip pain before two hip replacement surgeries and three months of rehabilitation let her walk again. Dr Clark lived with unrelenting nerve pain for over six

months before finding a medication that worked. She suffered more than she should have because she wanted to solve her problems herself, even in the face of her severe physical limitations."

In other words, like her patients, Hulda Clark suffered because she eschewed conventional therapy longer than she should have: "Dr Clark was scheduled for a procedure to fix the vertebrae in her neck. While doing routine blood tests in preparation for the operation, high calcium levels were noted. The surgery was cancelled and the hypercalcemia was treated. Her doctors evaluated all of Dr Clark's symptoms and decided multiple myeloma was the best explanation. That is a blood and bone cancer. No biopsy was performed, so it was not one hundred percent certain, but that didn't matter because the treatment would be the same in any case (monitor calcium and anemia).

"Ironically [it goes on to say], Dr Clark documented helping a multiple myeloma sufferer in *The Cure For All Advanced Cancers*. Perhaps if she had

known what to look for earlier she could have better helped herself. But it was too late. In her last few months, Clark was physically unable to function well. Her family took care of her and was with her when she died peacefully one evening.”

Ironical indeed. But it is simply not true that there is no “conventional” treatment for multiple myeloma other than monitoring anaemia and hypocalcaemia. For patients under 65, the treatment is often high-dose chemotherapy with hematopoietic stem-cell transplantation. Hulda Clark, of course, was 80, and thus almost certainly too old for such a harsh regimen to benefit her. However, for such patients, there is a more mild treatment, namely chemotherapy:

“If you’re not considered a candidate for stem cell transplantation, your initial therapy is likely to be a combination of melphalan, prednisone and thalidomide - often called MPT - or melphalan, prednisone and bortezomib (Velcade) - often called (MPV). If the side effects are intolerable, melphalan plus prednisone (MP) or lenalidomide plus low-dose dexamethasone are additional options. This type of therapy is typically given for about 12 to 18 months.” (www.mayoclinic.com/health/multiple-myeloma).

Also, ironically enough, thalidomide has fairly recently been shown to be an effective treatment for multiple myeloma. Either Hulda Clark was so debilitated that she couldn’t handle even the standard therapy of thalidomide, which is a pretty mild drug (unless you’re a reproductive-age woman who becomes pregnant and whose child suffers the birth defects thalidomide causes, which Clark clearly was not), or she chose not to have any science-based therapies. Not surprisingly, I suspect the latter.

After all, let’s review the titles of some of her books, shall we? There are:

- *The Cure for All Advanced Cancers* - It sounds as though Clark’s cancer was advanced. Why couldn’t her methods cure it? After all, her book says she has the cure for all advanced cancers. Of course, that makes me wonder if maybe she didn’t have the cure for early stage cancers.
- *The Cure for All Cancers* - Never mind

that last comment. Clark suffered from a cancer, period. Why couldn’t she cure it if she really did have the cure for all cancers?

- *The Cure for All Diseases* - This is my favourite of all; I mean, shouldn’t we ‘allopathic’ doctors, other than trauma and orthopaedic surgeons, be out of business if Clark really had the cure for all diseases?

It also occurs to me that Hulda Clark’s death teaches us something important about quackery. Specifically, it tells us that many of the practitioners are just as deluded and misguided as those whom they lure away from scientific medicine and towards ineffective and even harmful quackery.

There are two kinds of alt-med quacks.

First, there are the ones who, like Kevin Trudeau, don’t believe at all, ones who are basically con men. [In 1990, Trudeau pleaded guilty to larceny in a Massachusetts state court in connection with \$80,000 in worthless cheques he had deposited at a bank while posing as a doctor to increase his credibility. Among many run-ins with authorities over his TV infomercials and books, in 2005 the New York

State Consumer Protection Board issued a warning that Trudeau’s book,

Natural Cures They Don’t Want You to Know About, (published in 2004) “does not contain the ‘natural cures’ for cancer and other diseases that Trudeau is promising”. It asserted that “Trudeau is not only misrepresenting the contents of his self-published book, he is also using false endorsements to encourage consumers to buy the book.” - Ed]

Unlike Trudeau, though just as damaging, there are the ones like Hulda Clark, ones who really believe. While the former can do major harm, I fear the latter more. Because they believe, they are the more persuasive for it, and in the case of Hulda Clark, it is clear from her reaction to her deteriorating health that she almost certainly really believed in her pseudoscience.

Of course, its lucrative nature probably didn’t hurt

either, but at her core I suspect that Hulda Clark really did believe that she had the cure for all cancers, even though it was clear from her own end that she didn’t have a clue about cancer.

How could she maintain that belief in the absence of any evidence that her woo did anything, in the absence of a single truly ‘cured’ patient? Whatever her motivation, in the end, by rejecting science-based medicine in favour of her own quackery, Clark blew her best chance at treating her cancer and maintaining her quality of life for as long as possible.

I realise that the universe is not fair in any sense. All too often, bad people prosper and good people suffer horrible fates. However, in the case of Hulda Clark, if I believed in divine justice or some sort of karma, I’d have to believe that her end was completely fitting. The woman whose quackery caused so much suffering among cancer patients during her life ultimately succumbed to the very disease she claimed to be able to cure. Having recently watched a loved one succumb to stage IV breast cancer, I wouldn’t wish such a fate on anyone - not even Hulda Clark. However, now

that it’s happened to her, it’s hard not to feel that, just this once, there might be a certain symmetry

and justice in the universe. Maybe there is such a thing as karma after all. ■

“ Maybe there is such a thing as karma after all.”

**Clark received a doctorate degree in 1958 from the University of Minnesota. Her own biographical sketch states that her degree was in physiology, but the Graduate School’s Register of PhD degrees conferred by the University of Minnesota July 1956-June 1966 states that she received a PhD in 1958 with a major in zoology and a minor in botany, with a thesis entitled “A study of the ion balance of crayfish muscle; evidence for two compartments of cellular potassium.”*



About the author

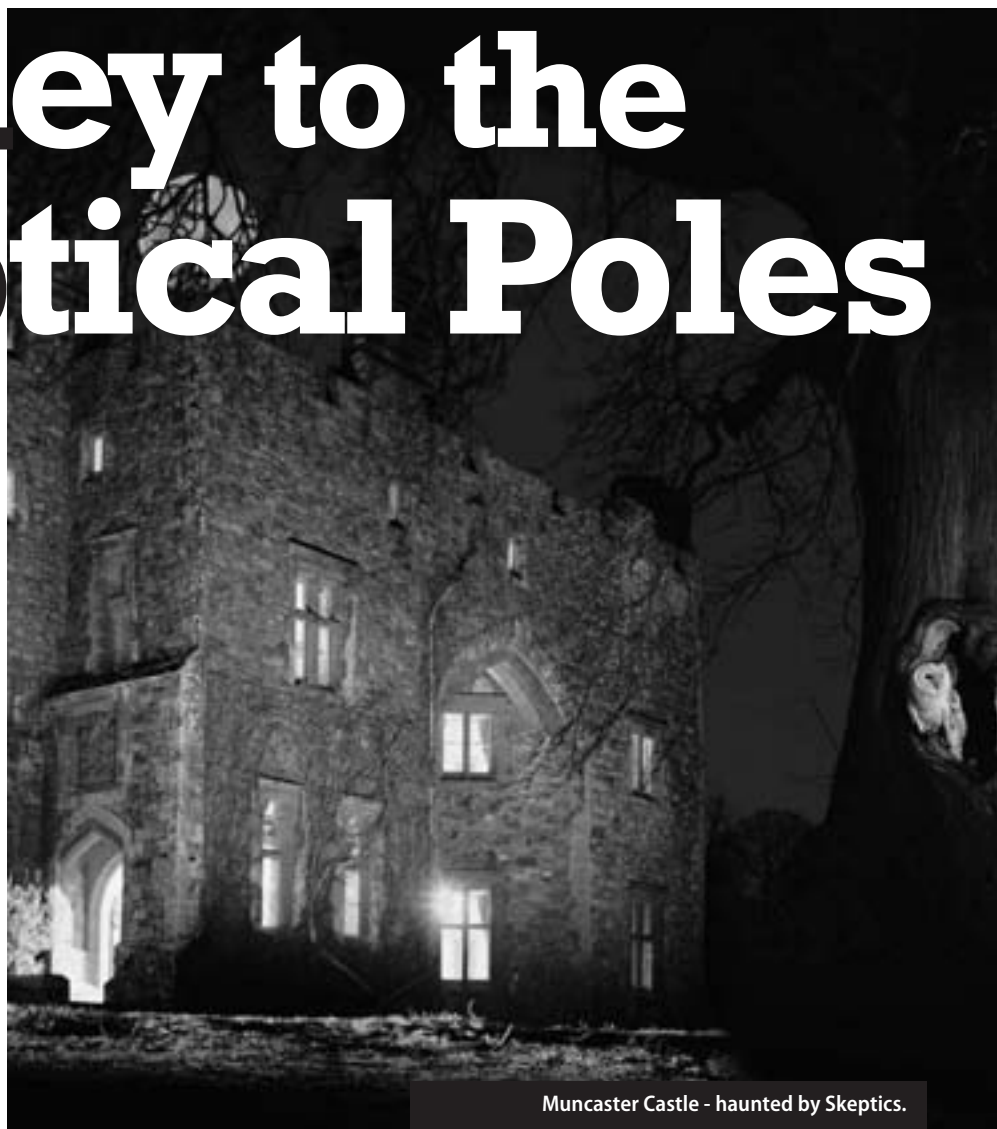
David Gorski is the author of *Respectful Insolence*, a blog on the website www.scienceblogs.com. He is also a surgeon and scientist.

Journey to the Skeptical Poles

Martin Bridgstock visits two radically different skeptical events, and finds lessons for the worldwide movement.

Remember the stories of the brave polar explorers, Scott, Amundsen, Shackleton and Oates? They risked their lives – and in some cases lost them – exploring the polar regions of our planet. I feel a little like those explorers, though without the personal risk. I've been to two events which are about as different as skeptical events can be. I'm convinced that big, big changes are happening to skepticism, and we should all be aware of them.

My first stop was Dragon*Con in downtown Atlanta, Georgia. This is the world's largest science fiction and fantasy convention, held during early September. Imagine the centre of this large city. It has four big hotels close together, in some cases linked by walkways. Now, for one weekend, add about 45,000 science fiction and fantasy fans, set free to celebrate their fantasies in the company of others. Many of them dress up. I saw Hagrid and Dumbledore in the Hyatt-Regency. A troop of Spartan warriors, naked to the waist, turned up in the Hilton lobby and did military drill. The monster from *Alien* came to a skeptical panel, and sat quietly in the audience. A young woman, wearing green body-paint and not much else, queued to see her heroes from *Star Trek*. (Some displays are rather revealing in another sense. A young



Muncaster Castle - haunted by Skeptics.

woman wore a tee-shirt which said 'I do live in a world of my own. People like me there.' And the more you think about that, the sadder it is.)

There are formal events, of course. Leonard Nimoy and William Shatner turned up to talk about *Star Trek* and (for a price) sign photos. There were competitions, displays and panels. A crowded dealers' room sold memorabilia from films, TV shows and fantasy gaming. Another huge room featured 'celebrities' who signed photos for a modest fee. I spotted the Iron Sheikh from World Wrestling, but most were unknown to me. I noticed a large picture of a young woman about to mount a horse. If she rides dressed like *that*, she will be comprehensively saddle-sore. The possessor of the threatened rear sat at a desk, ready to

sign autographs. Presumably, she hadn't tried to ride the horse recently.

The joyful craziness of Dragon*Con rampages all over downtown Atlanta. I saw a group of Klingons storming down Peachtree Avenue. Two Albus Dumbledores met behind the Hyatt Regency. They were polite and shook hands. Wherever I looked in the city centre, I could see police or security people quietly watching. Atlanta values its convention business, and wants to keep guests safe.

If you're intolerant of other people's fantasies, Dragon*Con isn't the place for you. On the other hand, once you abandon judgment and go along with it, the entire event is amazingly friendly. If you are stuck in a queue, you simply begin chatting with the people around you, and it's like being with old friends.

CYCLONES ARE STRIKING SKEPTICISM

What has all this to do with skepticism? Well, over the last couple of years a skeptical track has been introduced into Dragon*Con. It began small, but has grown amazingly. Let's be clear that as far as most Dragon*Con attendees are concerned, the skeptical track is a sideshow. Thousands and thousands of people turned up to hear Shatner and Nimoy. By contrast, the largest skeptrack event had about three hundred listening to Joe Nickell, Phil Plait and Seth Shostak talk about UFOs. About a hundred and forty turned up to hear Kylie Sturgess, Barbara Drescher (California State University and www.criticalteaching.org) and myself talk about luck and coincidences. For skeptics, though, these are very substantial numbers indeed. What's more,

as Kylie pointed out to me, the audience are not all skeptics. We are not simply preaching to the converted, but to a whole range of people, some of whom have never heard the message before.

Sometimes the results are bizarre. Ben Radford and Joe Nickell, two of the world's foremost skeptical investigators,

discussed the alleged haunting of a theatre¹. They traced all the hauntings to the confused 'memories' of one man. A woman in the audience became tearful and abusive, screaming "You can't know! You can't know!" Well, maybe you can't *know*, but you can reasonably infer, given the evidence, that the natural explanation is likely to be true.

Within the happy nuttiness of Dragon*Con, it became clear that big and important things are happening to skepticism. They are good developments – mostly – but they present problems that the existing leadership is going to have to face. So far, some skeptics are

tackling the issues and some are not.

What sort of issues? Well, one is demographic. Skepticism is growing and changing. Large numbers of young people,

and a substantial minority of women, are entering the movement. One distinguished skeptic estimated that maybe 30 per cent of skeptics are now female, and they are mostly part of a surging mass of youngsters who are happy to question the wild claims they see all around them.

“ As the presentations went on, I was awed by the intellectual firepower that British skepticism has. ”

Clearly, this is great news, but it places a big responsibility on existing skeptics. We must make the newcomers welcome, and also understand that their outlook and experiences may be different from those of existing skeptics. For the most part they are comfortable with blogging and Facebook and Twitter. On the other hand, many of the young women don't appreciate jokes and comments which are probably inevitable in an older, male-dominated skeptical culture. I heard about a few examples, and I cringed.

There are probably two main problems associated with this. One is that the older skepticism – which has accomplished so much – is mostly unaware of these new developments. Older skeptics may be bewildered by the new technology and at a loss to understand why their jokes and comments are deemed offensive. They may also feel threatened by the tide of youngsters. Younger skeptics might be turned off completely by the older culture, or at least deterred from learning exactly what has been accomplished.

Another problem is one of quality control. At its best, skepticism can produce tough, lucid discussions of ideas and evidence. At base, that's what it's all about. However, this new wave comes from a generation where tough intellectual effort is often less understood. Extended analysis in magazines does not appeal to them. So they may regard themselves as 'skeptics' without really understanding what is involved.

These problems are clearly not insoluble. Skepticism has never been a monolithic movement, and it should be possible to make sure all skeptics have a broadly similar idea of what we are about.

A problem faced by North American skepticism in particular is that there have been sharp rifts and disagreements. These are nowhere near as severe as the savage wars that have split the creationist movement, but they have certainly inhibited cooperation and perhaps prevented skeptical organisations from adapting to the other changes. "You Australians don't have these problems, do you?" said one American skeptic to me,



Dragon*Con - haunted by aliens.

Journey to the Skeptical Poles

Continued...

wistfully. The encouraging news was that people from the three main organisations - CSI, JREF and the Skeptics Society - were going to talk informally at Dragon*Con to see about greater cooperation. I hope they made progress.²

Then there is atheism. The atheists had a number of speakers, of varying quality. I found David Silverman, spokesman for the American Atheists, to be quite awesome and probably the best speaker I heard during my trip. However, a number of other skeptics did voice unease at the facile equation of skepticism and atheism. While there is no doubt that the two movements have a good deal in common, it's clear that there have been atheists who were not skeptics and there are skeptics who are not atheists (Stalin and Martin Gardner, for example), so the exact relationship needs to be worked out.

MUNCASTER - HOW GHOSTS SAVED THE CASTLE

As Dragon*Con wound down, I travelled on to the UK. About ten days after Dragon*Con the British Skeptics were organising a conference in Muncaster, in the Lake District. Muncaster is an awesome old castle, parts of which were built in the 1100s. It is the family seat of the Pennington family. I talked to Peter Frost-Pennington, a former vet who has married into the family.

Apparently, only a few years ago, the castle was on the verge of destruction. The fabric was succumbing to the elements, and large debts were attached to the estate. At one stage experts said that in a very few years the castle would be uninhabitable. When it rained, Peter had to put out one hundred and seventy buckets to catch the drips. Yet the Pennington family has saved Muncaster. I heard the family patriarch, Patrick Pennington, say with satisfaction "We don't owe anybody anything." How did they do it?

Muncaster has many sources of



The future of skepticism? British Skeptics at Muncaster Castle, and hardly a beard in sight.

income. You can pay to tour the historic rooms, wander in the beautiful grounds and visit the owl sanctuary. There is a gift shop and a tea shop. Conferences are held in the converted stables, and guests can stay in the old coachman's quarters. All yield valuable revenue.

And there are the ghosts. Yes, Muncaster has some claim to being the most haunted castle in England. Psychic researchers pay to spend nights in haunted bedrooms with their recorders and their EMF meters. At night, a collection of ghosts and skeletons is projected against the castle walls, to the accompaniment of Phil Collins. Apparently children love it.

Frost-Pennington stresses that he has never told a lie about the ghosts, and I believe him. Even so, it seems fairly easy to create a ghost legend. Of the hundreds of people who troop through the castle, some will have ghostly experiences, or at least report something weird. Then castle representatives can simply repeat these tales and add at the end "But I'm not telling you what to believe. You can make up your own mind." Frost-Pennington has a delightfully enigmatic smile as he says this. I think he knows that still more tales will follow, and that the ghost-hunters will come running, with money.

Obviously, there are questions in all this. As a Scottish skeptic pointed out to me, Muncaster could have been given

to the National Trust, who would have saved it and made it part of the public domain. Is it especially desirable to have Muncaster as a private family home, with aristocratic family ensconced? That depends on your personal values. Again, if the cost of saving Muncaster is to install a few ghosts - even if you don't actually claim they exist - is that an acceptable price? These strike me as arguable questions. Personally, I am now a fan of Muncaster, and of the Pennington family.

BRITISH SKEPTICISM - COMING OUT OF THE IVORY TOWER

Compared to the rampaging scale of Dragon*Con, Muncaster was a small affair. Attendance was limited to 80, and most sessions had less. The great majority of speakers were academics, and some of these were awesome. Dr Jason Braithwaite, from the University of Birmingham, stunned me with his outline of how constantly close the brain is to seizure, and the production of grossly misleading findings, all the time. Compared to his examples, the bizarre accounts of UFO abductees and near-death experiences seem tame.

What examples? Well, there is Cotard's syndrome, where people believe they are dead. Jason talked about drinking tea with people who casually confirm "Yes, I'm dead." Then there are syndromes when people close to the

sufferer are no longer believed to be that person. You want more? Oliver Sacks's book *The Man Who Mistook his Wife for a Hat* has many such.

As the presentations went on, I was awed at the intellectual firepower that British skepticism has. Speaker after speaker showed how investigation is locating so-called psychic experiences in particular parts of the brain, and beginning to explain them.

There were a couple of pro-paranormal speakers, who were courteously treated. Nick Pope gave a good description of how the Ministry of Defence treats UFO reports, but made no strong claims himself. Dr Chris Roe, from the University of Northampton, showed evidence of experiments claiming that Psi is a subconscious precognitive ability, and that the crucial experiments had been replicated. When I questioned him he agreed that the evidence was not strong enough to establish the claim yet. Still, part of skepticism involves keeping an open mind, and we should watch this research.

Partway through the conference, I was on the verge of concluding that British skepticism has a powerful academic wing – based mainly in the psychological and brain sciences – but nothing like the Aussie popular following. It turns out that this is incorrect. Across the nation, skeptics-in-the-pub meetings are erupting. In London, you can attend only by booking after 250 people started turning up unannounced. A branch was recently founded in Liverpool and 75 people turned up to the first meeting. There is a UK skeptics society – two, in fact – and we should stay in touch with them. It's been a long wait.

CONCLUSIONS

My first impression is that skepticism across the world is flourishing and growing, but often in such unexpected ways that we cannot see it. Magazine subscriptions may not be increasing, for example, but thousands of new skeptics are tuning in to blogs and websites. This creates wonderful opportunities, but



also means that we have major problems holding the movement together so that being a skeptic means roughly the same thing to all people.

Second, different countries are developing in different ways. Australia has long had a popular skeptical movement, but has made little impression on institutions of higher education. This is in direct contrast to Britain, where skepticism is intellectually powerful but – until recently – has not spread beyond academia. My own view is that both bases are valuable. An academic wing generates new research and new explanations for paranormal claims. A popular wing propagates the skeptical view in the larger community, and actually confronts the paranormalists. In North America, both of these wings exist, but the movement has been riddled by internal problems that are still being resolved. In addition, all skeptical movements have to face the generation gap, whereby large numbers of younger people are attracted to skepticism through electronic media. And the issue of the relationship between skepticism and atheism has yet to be resolved.

In short, whatever is happening in our own corner of skepticism is by no means the whole picture. The movement is changing and mutating at almost unbelievable speed, and it will take a real effort to keep up with what is happening. ■

NOTES

1. Ben Radford 'Ghosts, Doughnuts and a Christmas Carol,' *Skeptical Inquirer*, 33.3 May-June 2009 45-50
2. See the *Skeptical Inquirer* Nov-Dec 2009 for indications this might very well be happening.

Author's note: *I am grateful to Kylie Sturgess for checking this paper and eliminating some absurd errors. Any errors that remain are, of course, my fault.*

About the author:

Martin Bridgstock is a senior lecturer in the School of Biomolecular and Physical Sciences at Griffith University. He is a Life Member of the Australian Skeptics, and author of the recent book *Beyond Belief*.

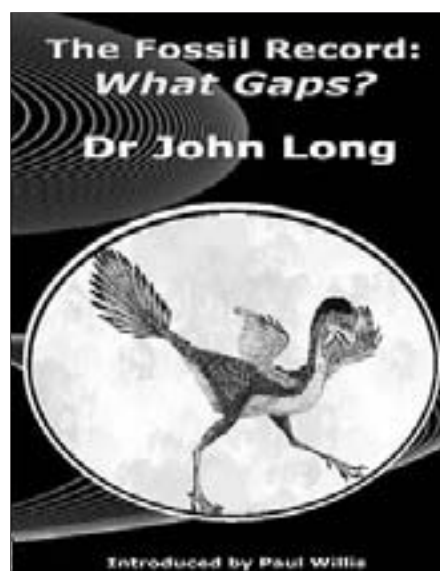


Science by email mecu

CSIRO's Science by email is FREE each week!

Every issue includes an activity to try at home or in the classroom, latest science news, useful weblinks, event updates, a quiz, environmental tips and heaps more science fun!

Subscribe now!
www.csiro.au/sciencemail



The Fossil Record: What Gaps?
Dr John Long

Introduced by Paul Willis

In this DVD **Dr Long**
(Palaeontologist & Museum of Melbourne's
Head of Science)

reviews recent remarkable
evidence from China to trace
the evolution of birds
from dinosaurs
and tetrapods from fish.

\$12

from: **Australian Skeptics**
PO Box 5166 Melbourne 3001
or: **Freecall in Australia**
1800 666 996

Teach your Children

John Turner looks at the questions of when to start teaching and what to teach - critical issues for the future of the world's peoples.

Education is a major part of the route out of poverty for the underprivileged. And education is the key to a fulfilling life for all. Nice motherhood statements all, but they are more than that. They represent the starting point of an important rethinking of our approach to education and how we provide our children with the tools to face all aspects of an increasingly complex life.

The authors of this article [see "About the authors"] are a group of three retired tertiary-educated friends in the Hunter Valley of NSW. We have been meeting intermittently for many months, talking over what we see as problems for our grandchildren and their children. Education has been well to the fore in these discussions.

Our view is that the ability to think clearly and critically is essential to the wellbeing of individuals and the future of any society. Other essential outcomes of all education are an ability to use language and mathematics effectively, an understanding of basic science and recognition of the importance of science, economics, politics and ethics, and their effects on our daily lives.

While he was in Australia promoting a book during 2007, Stephen Law, a UK philosophy lecturer, published an article and gave several radio broadcasts that alerted us to instances of success in teaching clear and critical thinking and the possibilities for achieving this more widely. Further reading

of books, including Law's, other articles and information on websites have shown that the curriculum changes which led to these successes should be adopted by all education administrations. Some administrations are already taking appropriate steps in that direction, but others seem disinterested.

Under what is proposed, children will continue to learn their reading, writing and arithmetic skills, etc, but they will also learn, as a special discipline, to think about issues and to discuss them. They will find the things they think and talk about interesting, so that boredom becomes less of a classroom problem, and they will learn to think in a way that will help each of them, and their future partners and children, throughout the whole of life.

The proposed curriculum changes introduce a relatively new and very effective method to improve the intellectual capacity of students. As secondary effects, there are substantial improvements in communication between students and teachers - in both directions - and in the behaviour of all students, particularly those likely to become disruptive and antisocial, especially those who live in dysfunctional families. Any improvement in behaviour is an important benefit, as poor behaviour affects not only those who engage in it but also those around them.

Other problems arise when streaming brighter students into separate selective schools or where the



WELL

student community is divided into separate schools according to cultural or religious groupings. This cannot help but mean that children miss out on interacting in the educational environment with children from different religious, ethnic and social backgrounds (a shortcoming likely to result in future problems in any country with a large migrant intake). This is to the disadvantage of them all and, ultimately, to society itself.

There is a second, greater, disadvantage in the streaming of students according to background, because some of these separate schools are determined to limit each child's thinking skills and yet in some places these schools are subsidised by the state. We are thinking here particularly of schools whose intake and educational attitude is based on religious belief.

Attributed to Thomas Huxley is the aphorism, "Scepticism is the highest of duties, and blind faith is the one unpardonable sin." We would rewrite that as: "Scepticism is the highest of duties, and blind faith and indoctrination of children are two unpardonable sins."

What is proposed should reduce this drift to social streaming and may make selective public high schools less necessary or desired. It will also help achieve the desirable outcomes as stated earlier.

What Stephen Law and others have advocated both now and earlier is the introduction of a basic philosophical discussion course where children at an early age are led to discuss ethical and societal questions of their own choosing and to give reasons for the positions they take. The children are expected to discover the open-ended

questions raised by a story or play and then select which questions they wish to discuss.

Dr Gilbert Burgh at the University of Queensland has commented: "Rather than learning about philosophers or the history of philosophy, philosophy in schools is more about getting children to think for themselves, both critically and creatively."

The teacher's role in the discussion time is mainly to promote mutual respect between students and equal opportunity to contribute. Occasionally, though, it may be necessary to stimulate the discussion or ensure that points raised are relevant.

In 2001, many schools in Clackmannanshire in Scotland, in conjunction with Professor Keith Topping, professor of educational and social research at the University of Dundee, and a senior psychologist, conducted a controlled experiment using just such a program. That trial resulted in an increase of 6.5 units in measured IQ for the philosophy classes compared with control classes, as well as significant behavioural benefits.

Two years after the end of the trial, the philosophy class students and the control class students had further diverged despite no further philosophical class discussion (ie no reinforcement). Clackmannanshire has taken the lead in the UK to introduce this program in primary school education and intends introducing the program to preschool children aged about three, as it is believed this will help overcome the problems of children in dysfunctional families. That is, in effect, early intervention.

Law describes the success that this approach has had at Buranda State School in Queensland since 1997. Staff members at Buranda are satisfied that there has been a substantial improvement in the intellectual abilities of the students in their

program and that bullying and other bad or thoughtless behaviour has ceased to cause significant problems. Similar behavioural improvements were noted in the Clackmannan trial.

Comparative tests have confirmed that Buranda students are now performing at or near the top of the state of Queensland. From being a school with falling enrolments, mediocre test results and only 40 or so pupils, there is now a full complement of students (190+), and families have moved to the area so that their children can enrol.

The program only requires about one hour of school time each week, but from what we have found in our research that time and any cost probably gives a better return in educational outcomes than any other current curricular item.

To adopt such a program, the participating teachers at each school - and preferably all teachers - would need to read a few articles and maybe one or two books, do some internet research and attend a one or two-day in-service training course. The required reading materials and teacher aids are already available at reasonable

cost, with some available free on websites.

The required one hour per week need not be entirely at the cost of other subjects.

The proposed new subject can be used

to cover some of the subject matter of strands such as social studies, personal development and science.

The discussions envisaged would also significantly improve the students' language skills, as has been reported in the trials, and the general reduction in behavioural problems, as achieved in the early trials, will make each teaching hour more effective.

In Scotland, the proposed subject is introduced midway through the P1 year (students aged six) for one hour a week, replacing half an hour of language and half an hour of personal development. It then

“ Scepticism is the highest of duties and blind faith and indoctrination of children are two unpardonable sins.”

Teach your Children WELL

Continued...

continues throughout the primary school years. We believe it axiomatic that an ability to argue rationally in support of a position will improve a student's language ability and be of major assistance in his or her personal development.

The proposed change could easily be introduced.

For a school with, for example, nine or ten classes in Years 1 to 7, about ten hours of teacher class time are required each week. Train one or two competent and experienced teachers in each school in the new method and have them 'double up' in class for the one hour of such discussions. Their other classes would be taken

by a casual relief teacher for two days a week, at a cost which would be incurred only until the students become experienced with the new method and the normal class teachers have both experience and training.

We also see other benefits, such as the possibility of reduced drug addiction and criminality as children learn to help and co-operate with one another, to develop their own ethical concepts and philosophy of life and to apply and react to a different style of peer pressure.

This difference in peer pressure would be due to the increased influence in the classroom and the school of the more competent and clearer thinking students.

Finally, there are additional long-term economic and societal cohesion advantages available to any country from improved educational outcomes for school students and probably political credit advantages to any government

that introduced the program.

It is time for politicians, curricula committees, teachers and enlightened parents to push for the introduction of this discussion strand in all early childhood education, at least up until the end of primary school. The benefits are immediate and will have a positive influence forever. ■

John Turner would like to credit Kevin McDonald and Peter Williams, who worked in conjunction with him to produce this article. It is based on an article initially published at On Line Opinion in Australia. The original article can be found at

www.onlineopinion.com.au/view.asp?article=7030



About the authors

John Turner has a degree in applied science; Kevin McDonald a Masters in education (among other degrees) and Peter Williams a BA in philosophy. All have been involved in teaching in one way or another.



Get your science news straight from the scientists themselves. No hype, no spin, no bull: just the facts.

Australia's most inspiring scientists choose to write about their world-class discoveries in **Australasian Science**, Australia's only monthly science magazine.

Australasian Science is the only magazine dedicated to Australian and New Zealand science, providing a unique local perspective on scientific developments and issues that other science magazines can't match.

Australasian Science boasts Australia's most experienced team of science journalists, and its Patrons are Nobel Laureate Prof Peter Doherty and renowned science broadcaster Robyn Williams, representing excellence in science and its communication.

See australasianscience.com.au to sample previous editions or to subscribe online.

australasianscience.com.au

Too snooty to stop?

Paul DesOrmeaux wonders, with all the 'evidence' of visitation by aliens, how come they haven't stopped for a chat?

UFOs hold a special place in the public's imagination. Since the beginning of time and even earlier, alien space people have been interacting with whatever has existed on Earth. Even today hundreds of unidentifiable flying machines buzz the planet each month. We know this because they've been identified by solid, trustworthy citizens, such as airline pilots, police officers and former actress Shirley MacLaine. In fact, most of the evidence of space visitors from other planets is gathered from 'eyewitness accounts' which, unfortunately, are generally as reliable as an Elvis sighting.

Then again, other kinds of indisputable proof cannot be as readily dismissed. For example: the numerous alien abductions, which result in strange body-probe markings and achy orifices; fuzzy, hazy, and out-of-focus photos of alien spacecraft (which does not include the occasional bogus 'flying-saucer' with Wham-O printed on them); documented photos of immodestly naked, humorless yet cute alien beings, with no visual sex organs; foreign debris and bodies recovered from crash sites (the crashes being due to alien-pilot exhaustion after traveling millions of miles) that are secretly stored in government meat lockers and shoe boxes; and strange, radioactive burn marks on the ground that in one famous case spelled out the message "Earthlings suck," which was additional proof since even the typical clueless teenage earthling knows how to spell "suck".

Then there's the indisputable Drake equation, which is a highly adjustable

mathematical formula that proves the likelihood that there's intelligent life on other planets, especially after factoring in the variable that there's so little of it here.

Faced with the overflowing landfill of evidence that extraterrestrial invaders are as fascinated with us as we are with ourselves, it takes someone like a mentally challenged skeptic to ignore the centuries upon centuries of overwhelming evidence that we're being visited by extraterrestrial beings, who apparently are klutzy enough to get caught green-handed buzzing our airspace time and time again yet clever enough not to leave behind hard, concrete scientific evidence of the third kind, like a ray gun or something.

But following are three chunks of irrefutable evidence that we've been visited by careless aliens:

Crop circles

These are intricate, geometric patterns or symbols created by carving patterns into various regions of crop growth, such as wheat fields, corn fields, and pubic areas. Although pranksters and hoaxers have admitted they created the designs and followed it up by demonstrating the process on television for everyone to see, it's left to the ufologists to ask the logical question: Since these people are admitted frauds, how can anyone believe them? They also counter with a more likely scenario that crop circles are forms of alien communication, and when we figure out the message, we may well have a cure for some of our most persistent diseases, such as stupidity.



Animal mutilations

When mutilated cattle, horses, sheep, or other domesticated animals - whose organs and parts are missing - are discovered abandoned in grazing pastures, the ufologists' explanation is that aliens raised them into their spaceships, performed the sloppy surgery, and then dropped them back to Earth. Although alternative theories by well-meaning scientists have pointed the finger at natural predators, as well as diseases, for the chewed up animals, let's face it, no alien in his right mind is going to return home from a long galactic trip without souvenirs for the wife and kids.

Alien abductions

Another clear sign that Earth has been visited by aliens is the 'abduction' of humans, who are sucked up into a spacecraft where they are placed on a lab table and diddled, often in a manner that on Earth would get them terrestrial jail time. Although initially most abductees don't 'remember' the abductions, eventually they are able to recall the event after being subjected to one of the miracles of modern medicine: hypnosis. Apparently, as smart as they believe they are, aliens still haven't completely worked out the bugs in their memory-erasing tools.

Too snooty to stop?

Continued...

UFO HISTORY

Following are some examples of alien visitation, randomly chosen by pulling dated ping-pong balls from a tumbler.

1492 While standing on the deck of the Santa Maria, Columbus sees a “light glimmering at a great distance”. Although the explorer believes it’s a UFO, he never puts two and two together when, four hours later, he lands on an island where natives are smoking tobacco that burns with a strange ‘glimmering light’ at the tip.

1897 A UFO apparently crashes in Aurora, Texas and the alien ‘pilot’ is hurriedly buried in a cemetery. Tests of the Martian spacecraft’s wreckage of scattered sticks, wood and mud suggest that it was an alien space wagon. The body is never exhumed so as not to disrespect the spaceman’s religion. Over time, when it’s decided that the alien should be dug up, everyone forgets exactly where the spaceman was buried.

1940s Both American and German fighter pilots describe large, fire-like balls that follow their planes at night. Each thinks the other has developed a secret weapon of some sort. American pilots dub these harmless objects “foo fighters” because the term “UFOs” hasn’t been invented yet and because “Kraut balls” is considered derogatory.

1947 Harold Dahl and Fred Crisman claim to have spotted donut-shaped UFOs. Luckily Dahl takes a picture of the spacecraft, but unluckily the photograph turns out to be useless because, according to Dahl, it shows too little ‘donut’ and too much ‘hole’. Both men eventually admit it was a hoax after an unpleasant visit by ‘men in black’.

1947 (two days later) Kenneth Arnold personally kicks off the modern-day UFO craze as he claims to spot several

unexplained aircraft around Yakima, Washington, which he accurately and unequivocally describes as saucer-shaped, disk-shaped, pie-pan shaped, bat-shaped, a pie plate or pie plate cut in half, flat, saucer-like, flopping like fish, crescent-shaped, and on and on to an impatient reporter who eventually condenses it to “flying saucer” so he can squeeze the story into his column.

1948 Captain Thomas Mantell is the first known casualty of a UFO encounter. This experienced pilot was told to fly toward a UFO spotted by a number of people over Fort Knox, Kentucky. Because he continues to chase the object to a dangerous altitude, he blacks out and dies when his plane crashes. Some ufologists claim that he was shot down by the hostile extraterrestrials he was chasing, such as weather balloons or the planet Venus.

1950 By now UFO sightings are becoming a national pastime in the US, alongside outing godless commies. In Great Falls, Montana, Nick Mariana spots two lights over an empty baseball stadium and films them. The popular and famous film has been studied for over 50 years by various UFO buffs, and they’ve concluded that the mysterious dancing lights were in all likelihood godless commie-type aliens.

1951 During August and September hundreds of Lubbock, Texas, residents witness the ‘Lubbock Lights’, a formation of about twenty fast-moving, V-shaped lights, which is described by many as a spacecraft and by smarmy skeptics as an Orson Welles’ Halloween stunt. Photos of these ‘lights’ are featured in dozens of newspapers, *Life* magazine, and *Architectural Digest*. A number of investigators attribute these sightings to the reflection of new vapour streetlights off formations of flying plovers (water birds), especially since most witnesses distinctly hear the moving lights tweeting.

1952 An air-traffic controller at Washington National Airport observes six UFOs on his radar screen, which sets off scores of sightings for the next

couple of weeks. This event creates a countrywide panic because it’s clear that space aliens from millions of light years away understand the significance of the US Capital. When pilots are sent to intercept these ‘orangy’ lights, the objects magically disappear and then reappear whenever the jets return to base. “Damn!” exclaims one frustrated pilot. “It’s like trying to catch those @#&*% eye floaters!” Eventually the apathetic aliens abruptly abandon the US Capital for good when they realise the area is completely devoid of intelligent life.

1953 In Bismarck, North Dakota, an erratically moving “red-glowing light” is spotted by pilots, as well as by people on the ground. Other seasoned pilots describe them as “white and green lights,” which they attempt to chase, to no avail. By now, many are beginning to doubt the aliens’ higher intelligence because it’s becoming obvious that visitors from other planets are too dumb to turn off their lights when sneaking around Planet Earth. Ufologists insist that the space beings are simply following FAA regulations.

1961 Married couple, Betty and Barney Hill, are abducted from their car by space aliens (who, by a strange coincidence, resemble fictional aliens appearing on popular television sci-fi shows at the time) for a few hours without their permission or, as it so happens, their knowledge. It’s not until a couple of years later, under hypnosis, that Betty and Barney imaginatively recall their encounter with first cousins of the “one-eyed, one-horned, flying purple people eater”, who seem obsessed with poking and probing their bodies with bizarre instruments. It’s clear through their testimony that one of the probings is the first official colonoscopy.

1967 Ashland, Nebraska, Police Officer Herbert Schirmer also claims to have been abducted by aliens. Later, under hypnotic regression, he reveals that the aliens are friendly, communicate through some form of mental telepathy, and own a used-spacecraft dealership on Venus. The aliens give him a tour of the ship and telepathically refer to

him as 'Inspector Clouseau', which is followed by telepathic giggling. They also telepathically tell him that "someday you will see the universe", which comes prophetically true when he quits the police department and becomes a Grateful Dead groupie.

1969 In Leary, Georgia, future US President Jimmy Carter spots a UFO. Although he eventually states he doesn't believe it was an alien spacecraft, he describes it as a self-luminous object shaped like a giant peanut. Ten years later he claims that while fishing in a pond, he fends off an attack by a killer rabbit. In 1980, he loses the presidential election to the more rational candidate Ronald Reagan, who often discusses the possibility that the Earth might someday be attacked by UFOs and bases numerous policy decisions on advice he and his wife receive from psychics.

1987 In Gulf Breeze, Florida, within a three-week period, Edward Walters observes alien spacecraft hovering around his house. On one of the nights, an alien shows up at his door; Walters doesn't answer, but the alien leaves behind extraterrestrial evidence: a Watchtower magazine. Walters takes a series of Polaroids of the spacecraft, which are published in the newspaper. Ufologists believe Walter's home might be a designated rest-stop area on the intergalactic highway. Others begin to see extraterrestrial spaceships everywhere in and around Gulf Breeze. After Walters eventually moves from his house, the new owner finds a miniature model of the spacecraft that had appeared in the photos. Then a friend, Tom Smith, eventually reveals that he and Walters built the model and faked the photos. Ufologists and Walters insist this phony 'evidence' was planted by the CIA, FBI, USAF, and the SPCA.

1988 Fay Knowles, her three adult sons, and their two dogs are traveling on the Eyre Highway between Madura and Mundrabilla, Australia, when they are allegedly attacked by a UFFO (an unidentified flying fried-egg-shaped object). The spacecraft eventually lands on the vehicle's roof and lifts the vehicle

off the road, but soon returns it to earth, probably realising they're unable to crack open the well-built car to get at the meat sitting on the inside. When the visibly shaken family finally reports the incident to police, the only available evidence is a strange black dust covering the car, four dents on the car roof, and the inexplicable transformation of the two Rottweilers into two nervous poodles. The intense media attention forces the family into hiding, except for the younger son, who is suddenly able to psychically communicate with Tasmanian devils. He soon signs a contract to star in his own television reality series: "The Tasmanian-Devil Whisperer".

1997 One of the most prominent sightings are the 'Phoenix Lights', which are seen by hundreds of Arizonians who supply hundreds of different descriptions of these illuminated spacecraft. When contacted, the USAF explains that the lights are probably flares, attached to small parachutes, they dropped while on training exercises in the area, but most of the witnesses dismiss the explanation after an unprecedented flash of actual skepticism. For some reason, the Phoenix Lights are given more credibility than most sightings because they were witnessed and eventually given the stamp of approval by trustworthy politician Governor Fife Symington, who shortly thereafter is forced to resign his post after being convicted of bank fraud.

2004 During Halloween night, hundreds of observers in Tinley Park and nearby Orland Park, Illinois, report sightings of three red stationary lights (first spotted in August) in the sky, which slowly and silently begin to move. The three lights are described as forming a triangle since not even highly evolved aliens can figure out how to form another geometric shape with three points of lights. Hundreds of videotapes and photos offer clear and solid evidence that there are indeed three points of light in the sky. Skeptics try unsuccessfully to dismiss them as stars that form the constellation Triangulum.

2008 More than thirty residents of Stephenville, Texas, spot a UFO, which they describe as a "mile-wide, silent object with bright lights that flies low at an amazing speed". Some believe it's a prophetic sign of 'the end of days' as predicted in the Bible, which makes perfect sense since cosmological calculations prove that Stephenville, Texas, is the exact centre of the universe. Unfortunately, no one thinks of snapping a picture of the mile-wide spaceship, which UFO 'field investigators' blame on mind-controlling, invisible-light beams. Ufologists also submit additional evidence: documents that reveal that 'government officials' have been capturing and returning 'aliens' to a planet with the code name of "Mexico". Eventually, this promising apocalyptic event ends not with a bang but with a whimper.

With such an overwhelming body of evidence staring us in the face, it's becoming more difficult to absolutely deny the possibility of extraterrestrial visitors. It may be time to reach across the aisle and join with the ufologists in keeping our eyes and ears open and our prefrontal cortexes shut. And although the evidence presented above is only the tip of the quickly melting iceberg, how much additional proof do we require anyway? A close encounter of the eleventh kind? And why this stubborn insistence on so-called 'physical evidence'? After all, this is real life, skeptics, not an episode of CSI: Outer Space.

And think about this: how will we feel when we eventually visit other solar systems and we're told we don't exist? Maybe if we're all a little less hostile to the idea of the aliens' existence, maybe, just maybe, they'll finally decide to stop by, say "ello," and promise never to probe our orifices again. ■



About the author

Paul DesOrmeaux teaches college writing and literature from a skeptical and critical-thinking perspective. He writes for *Skeptical Inquirer*, *Skeptical Briefs*, *Openly Skeptical* and several other skeptical publications.

Dealing with the transcendental

Beyond Belief: Skepticism, science and the paranormal

By Martin Bridgstock

Cambridge University Press, A\$39.95

Back in 1994, the author of this review was manager of a survey undertaken by the Malaysian Science & Technology Information Centre. This looked at Malaysian high school students' knowledge of science and scientific facts. Encouragingly, 87 per cent of 'non-science' students (ie those doing only basic science as part of standard high school courses) disagreed with the statement that "It is not important for me to know about science in my daily life." 96 per cent of science-specialist students likewise disagreed.

(Sadly, though, 3.4 per cent of science students apparently did not think an understanding of science was important in their everyday lives.)

On science facts, these students were asked whether the following statements (among others) were true or false:

- Electrons are smaller than atoms – 46 per cent of non-science students got this correct (ie less than 50 per cent)
- The earliest humans lived at the same time as dinosaurs – 39 per cent correct
- Lasers work by focusing sound waves – 31 per cent

Ten years later, in a similar survey in the US of the general public,

the same questions were also answered correctly by less than half of the respondents. Another question that got a less-than-half correct response was "It takes the Earth one year to go around the Sun". In other words, from a developing nation in the last century to one of the world's most developed nations in this century, there was no difference in science knowledge, and no apparent

improvement. The two surveys (as with similar ones carried out in other countries) are indicative of a large and worrisome ignorance of basic science facts.

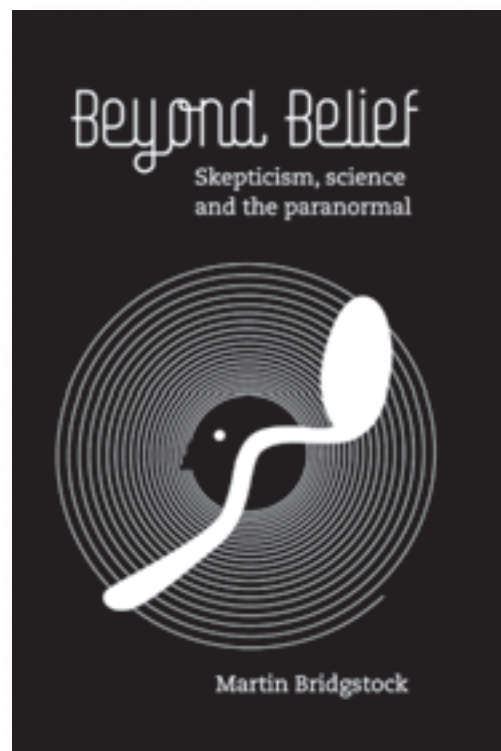
This is the starting point for Dr Martin Bridgstock's book on paranormal beliefs and how to approach them from a skeptical viewpoint. Bridgstock is, of course, well-known in Australian skeptical circles, and among his many achievements are establishing a course on skepticism and the paranormal at Griffith University, and being awarded Australian Skeptic of the Year – along with Dr Ken Smith – in 1986, and the 2006 Australian Skeptics' Prize for Critical Thinking in 2006.

In *Beyond Belief*, he introduces his subject (almost apologising for not getting to the paranormal crux from the get-go) with a chapter on scientific method and the role of science and scientists in developing our understanding of how the natural universe and all within it work. Rather than an apologetic intrusion, this chapter alone is worth the price of purchase, as it presents a brief but intelligible overview of its subject that would serve well as an introduction to any course on science and scientific method.

This is followed by a discussion of the nature of the paranormal, including religion, and of belief in the paranormal, as well as the relationship of paranormal propositions to scientific knowledge and method. Further chapters look at the history of skeptical thinking and skeptical thinkers, the principles of the skeptical attitude, how skepticism should be applied to paranormal claims and the difficulties inherent in that approach (what is good evidence, the problems of eyewitness accounts and single-occurrence events, even explaining the role of coincidence).

He concludes his book with a discussion about skepticism as an ethical pursuit and applying skepticism to non-paranormal areas. He affirms that "skepticism has an ethical dimension, giving us guidance about right and wrong conduct". This is where there is a change in the tone of the book – from the initial emphasis on the empirical practice of science to the philosophical concept of ethics. Bridgstock does, however, still emphasise the need for evidence in both pursuits; indeed, paranormal beliefs can be unethical on a number of grounds, he says, not least for their credulity and their frequently different standards for evidence.

If there any caveats about the book, they are minor. Bridgstock occasionally resorts to secondary sources, which might be more accessible for readers but it is not ideal. He also expresses the belief that the most dangerous pseudoscience is creationism/intelligent design.



Understandable when considering his background – 20+ years of battling with the creationist movement – but one could easily suggest that unfounded ‘complementary’ medicine might hold a greater risk for individuals and society at large. And he does confuse the Moon with Mars in his summary of the film *Capricorn One* (one for the nit-pickers).

More importantly, when asking if skepticism can be applied to non-paranormal areas, he attests that: “Strictly, by the definitions we have applied, the answer is no: since skepticism is the investigation of the paranormal, it cannot apply to other areas.” This restriction-by-definition appears to be almost legalistic in its application. Certainly, skepticism is applied in the debate over global warming, a scientific area without any indications of paranormality (so far). The Australian Skeptics has always had as its brief “the scientific investigation of pseudoscience and the paranormal”, and many investigations and debate have entailed non-paranormal areas (global warming, language, history, etc). However, Bridgstock does go on to say that “It does seem clear that something very similar to sceptical approaches is useful and we have seen how it can usefully be applied [to various areas of dubious truthfulness]. ... What this suggests is that skepticism is not a stand-alone phenomenon. It is part of an evidence-based movement that is beginning to exert a substantial effect on all parts of society.”

Throughout the book, Bridgstock goes into the reasons why people believe in the paranormal. He suggests that the essentially ephemeral nature

of our lives, our families and our achievements is a concern to many. “Science is spelling out a particular view of the universe ... [that is] unattractive at best, and horrific at worst, to many people”, he says, and this feeds into belief in the paranormal. With science eloquently describing ominous fates ranging from rogue asteroids, disease to global warming, it is not surprising that many people turn to alternative views, especially those that promise them a more ‘positive’, comforting and occasionally flattering view of the future and their individual role in the universe – the “transcendental temptation” – regardless of how ill-founded those beliefs might be.

This temptation is fed not only by an ignorance of scientific fact – as described at the outset of this review – but also by a lack of an appreciation of the procedures and benefits of applying a skeptical attitude, to be able to separate the wheat from the chaff, to discern the possible from the improbable.

It is this latter attitude that Bridgstock tries to define, put into context, and recommend. *Beyond Belief* is not an encyclopaedia of paranormal claims, nor an investigation of the minutiae of the ‘evidence’ presented for such claims. That information is covered in a multitude of other volumes and websites. Rather, as he says, “This book is primarily a work of advocacy. It outlines a method of thinking and argues that humanity would be better off if all of us adopted this method.” On that level, *Beyond Belief* is something that he can be proud of.

- Reviewed by Tim Mendham

How the magic pill felt the heat ... eventually

Firepower: The most spectacular fraud in Australian history By Gerard Ryle

Allen & Unwin, A\$35.00

Firepower was an Australian company which sold fuel additives claiming amazing fuel savings. The fact that these additives could not work did not stop Australians, including the Australian Government, pouring millions of dollars into the company. Commonsense went out the window. Then in 2008 it all collapsed. It is a ripping good yarn and this book tells it well.

As Gerard Ryle explains in the book, we all

know there are no simple pills or liquid additives that can give large fuel savings. Since 1971 the US Environmental Protection Agency has tested and published the results on 93 additives and devices. None have worked. Nonetheless, people still believe in these devices. Australia has a long history of ready investors in such products, from the Orbital Engine Company, which accumulated losses of A\$480 million, to painter Pro Hart with his Zero Emission Fuel Saver and Peter Brock with his magnetic and crystal Energy Polariser.

The Firepower story reaches back to New Zealand in the 1980s. A company called Power

How the magic pill felt the heat ... eventually

Continued...

Plan International was selling little blue paraffin fuel pills at up to \$5 each claiming a 17 per cent fuel saving. Ultimately, it collapsed following NZ Automotive Association reports questioning the testimonials. By the time the pyramid sales

scheme collapsed, there were 3000 distributors. Not bad in a country of only 3 million people.

The leading figure in the Firepower saga was a charismatic Australian named Tim Johnston. He is the villain at the core of the book. He was a dedicated Christian who read his Bible while having questionable ethics.

Johnston was not at all deterred by the New Zealand experience. He switched to selling brown pills across Asia and Australia based on an iron-based chemical called ferrocene. Ferrocene had shown benefit as an octane enhancer and antiknock agent in fuel when first discovered

in the 1950s. This gave Johnston a deep pool of testimonials to draw upon. Unfortunately ferrocene also gradually destroyed engines. This did not worry Johnston. Ferrocene is banned from being added to bowser fuel in most countries but strangely there are generally no restrictions on what can be in fuel additives.

Johnston criss-crossed Australia and Asia holding revival style meetings while selling distributorships for his pills. The Automobile Association of Malaysia endorsed his product; he was photographed with the president of the Automobile Association of Singapore.

In 2000 there was a small bump. His FuelMagic pill was tested by the Western Australia Ministry of Fair Trade. In 2003 they closed his Western Australian operations down.

This did not deter Johnston. If you are going to tell a lie, tell a big one. By now he was claiming sales in 91 countries and the support of Shell. He was trying to close sales to the Russian railways and in half the countries in Asia. But he was not

having a great deal of success.

Later in 2003 his luck changed and in a really big way. Austrade is the Australian government organisation responsible for promoting Australian overseas trade. The Austrade director for Europe, the Middle East and Asia, John Finnin, was very keen for Australian companies to do more business with Russia. Firepower seemed a hot prospect. Suddenly Firepower had government support and international status as a major Australian company.

Austrade apparently did no background checking on Firepower or its products and never asked Firepower for proof of sales. Gerard Ryle clearly views Austrade as very naive in this instance.

Johnston became a guest speaker at Austrade roadshows and Firepower became an Austrade case study. The Australian ambassador to Russia lobbied the Russian parliament, claiming Johnston's fuel additive products could give a 20 per cent fuel saving.

In November 2005 the Australian Prime Minister, John Howard, made an historic trip to Pakistan and signed 6 articles of agreement with the Pakistan leader Shaukat Aziz. The 6th article was an 'understanding of agreement' for a Pakistan company to purchase Firepower product.

Johnston flew in private jets around the world, some of it paid for by the Australian government. He was mixing with top people in Russia, with Bill Moss from Macquarie Bank, with Peter Holmes a Court and with celebrities throughout the world. There was dinner at the Lodge with John Howard.

Firepower had become hot property. People started clamouring for shares with the expectation of huge profits if and when Firepower floated on the London and Australian stock exchanges. Everyone wanted in and Johnston was happy to oblige. Investment advisors starting selling Firepower shares. At the same time Firepower stayed invisible to Australian company regulators as Firepower companies were registered in overseas tax havens. Laws requiring a company prospectus on new shares were bypassed by claiming all the shares were really transfers of existing shares.

Johnston had to keep Firepower looking strong and viable while stopping anyone from actually buying and testing its products. And he did that by pouring money into sport, and Australians love their sport. During 2006 he became the sponsor of the Sydney Kings, the most successful team in recent National Basketball history. The start of the 2007 Kings season was celebrated on a HMAS guided missile cruiser provided free by the Australian military. The Firepower sponsorship of the South Sydney rugby league team was



announced by Russell Crowe on the Jay Leno show in the US. Dozens of other teams and sportsmen in Australia, New Zealand and even Tonga were sponsored. There were expectations of spending \$60 million on sponsorships in 2007. The Firepower name was splashed over the sports pages. The shares kept selling.

As 2007 broke, Firepower was still talking of A\$600 million sales to Russia and of a stock exchange float but some people were starting to wonder if the company actually had a viable product. In particular, *The Sydney Morning Herald* newspaper reporters started to ask questions and to test the fuel additives. This book's author was one of those investigative reporters.

Suddenly it was all over. The Kings team ceased to exist and the 1100 people who had purchased shares for A\$100 million realised there would never

be a listing and the shares were worthless.

In 2008 Johnston left Australia. He is believed to have hidden at least A\$38 million in overseas bank accounts from his time at Firepower.

Gerard Ryle has produced a well written book with considerable detail of the events and the people involved. He obviously feels a strong sense of injustice over the entire Firespower saga together with frustration that people have such weakness for 'magic' fuel pills and devices.

This book is for anyone who likes a good read about fraud, greed and fuel saving devices.

- Reviewed by John Cameron

[Postscript: Curiously, Johnston returned to Australia in November for his daughter's 21st. He was served with an injunction to forfeit his passport. The saga continues. - Ed]

Model in question

The Climate Caper

By Professor Garth Paltridge

Connor Court, A\$24.95

The popular science shelves of our bookshops are brimming with books on climate change. Usually their authors either regurgitate the establishment views of anthropogenic global

warming (AGW) or strive to supplant it with their own pet theories. *The Climate Caper*, by Professor Garth Paltridge, takes a different approach.

Paltridge is an atmospheric physicist, so he has an excellent grounding in the uncertainties in our understanding of the physical processes that underpin the Earth's climatic system. [He is also a committee member of the Australian Skeptics (Tasmania).]

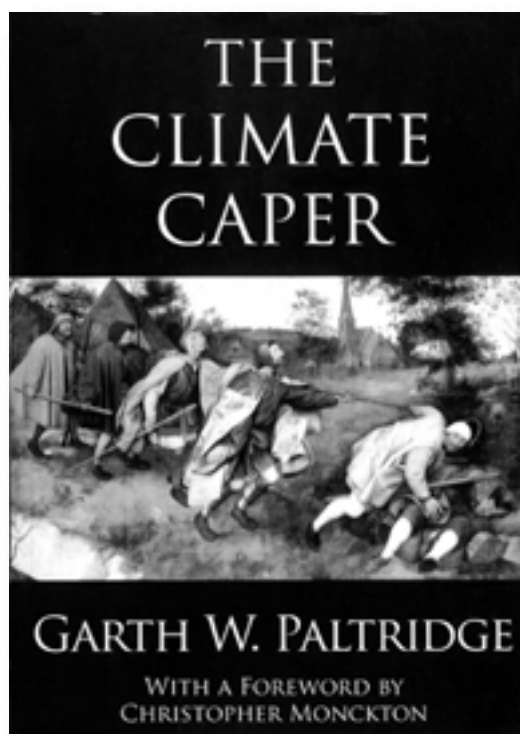
The book is aimed at the general reader, though there is a moderately technical

discussion of the modelling of feedback mechanisms. The argument is structured into chapters titled "Some Physics", "Some Economics" and "Some Random Sociology". The Caper spans these three areas of disciplinary focus.

The chapter titled "Some Physics" gives a general description of the climate models used in the IPCC forecasts, with particular attention given to the modelling of feedback gains. Paltridge begins by informing us that: "There are good and straightforward scientific reasons to believe that the burning of fossil fuel and the consequent increase in atmospheric CO₂ will lead to an average temperature of the world above that which would otherwise be the case." (p17)

It is uncontroversial to suggest that a doubling of CO₂ levels from the pre-industrial level will result in a 1.2°C temperature increase. However, there are significant uncertainties in our quantitative understanding of the primary feedback processes (water vapour, cloud, ground reflection of sunlight and lapse rate) that amplify or dampen this effect. The sum of these feedback processes is known as 'total gain'.

The models used in the IPCC process assign values of total gain between 0.4 and 0.8. Paltridge suggests this range of feedback values is suspiciously narrow. He takes this as a sign that "Either the individual process gains are ... correlated ... or there has been some subconscious choice of process description to keep the total gains of the various models within physically realistic bounds." (p26) Other researchers, such as Row and Baker, demonstrate that this range of values follows the anticipated normal distribution without any sign of systematic bias.



Model in question

Continued...

Paltridge suggests that any narrowing disparities between model projections may be an artefact of code reuse, but at the same time he bemoans the number of tuneable parameters in models as giving the theoreticians too much flexibility. I would have thought that code modularity would have assisted the rapid development of alternative models and that this would have increased the diversity of research. If tuneable parameters aren't being changed in an *ad hoc* way by researchers during their ensemble runs, then there would be little cause for concern either.

He says that models can only be compared to each other, although in other places Paltridge draws attention to the failings of climate models in recreating certain historical scenarios. Another suggestion is made that, owing to the steep curve of the feedback equation, outlying results would be skewed toward higher temperatures. This line could be further investigated with data from actual ensemble runs submitted to the IPCC.

On the economics of climate policy, Paltridge illustrates the difficulties of using cost benefit analysis over a 90 year time span to determine an optimal course of action. With reference to the Garnaut Report, he suggests that "The forecasting problem is much worse for the economist than for the climatologist." (p38) and "The problem of calculating the long-term benefit of an expensive exercise to prevent climate change has every chance of being inherently insoluble." (p39)

A fair comment for a skeptic. There are too many uncertainties in both the future state of our climate and the future worth of our climate to our economy to engage in any meaningful discourse of this kind.

However, Paltridge overshoots the mark when he says: "Whether society should do something about global warming boils down to whether it can be persuaded of two things. First, it must be persuaded that the coming of global warming is certain and that it will be detrimental. [...] Second, society must be persuaded of the greatness of the moral virtue attached to active personal sacrifice for the benefit of people 4 or 5 generations into the future." (p57)

This reasoning is not so sound. Firstly, we need not be persuaded of the certainty of an outcome in order to take action to mitigate the risk of it occurring. Secondly, (as is acknowledged elsewhere in the book) a significant number of initiatives that would reduce our greenhouse gas emissions would also confer an economic benefit that is realisable in the short term.

In the chapter "Some Random Sociology",

Paltridge gives several interesting anecdotes with a common theme - the efforts of academics, climate researchers and bureaucrats to stifle public discussions of doubts within their ranks about global warming. The most disturbing of these situations was one Paltridge recounts when his own research was rejected by a peer-reviewed journal on the grounds that the reviewer thought it was an attempt give respectability to views that were outside of the recent IPCC findings.

Taken at face value, these anecdotes demonstrate a strong desire to present a united front among the scientific community on climate change which is at odds with a culture of free inquiry. This attitude is frequently characterised as an unwillingness to give ammunition to 'the sceptics' (a term used as a catchall for those questioning the existence or extent of AGW). It is not unreasonable to wonder if this kind of fortress mentality, combined with other established publication biases such as the file drawer effect, is contributing to a body of missing research.

There was no attempt in this book to differentiate between what might be termed climate skepticism and climate denialism. Paltridge and other diligent researchers, such as Stephen McIntyre and Ross McKittrick, who draw attention to flawed methodologies or data quality could be reasonably described as having skeptical positions. However, significant media coverage is given to other authors, lobbyists and commentators who confine themselves to a rhetorical or ideological engagement to AGW without making a scientific case. Tom Bethell, with his *Politically Incorrect Guide to Science*, would be a good example of this mindset.

I would have liked to have seen a more detailed treatment of the scientific merits of the views apparently excluded from the mainstream of scientific discourse. Mention is made of the response of the upper atmosphere to increased CO₂ being ignored by climatologists, but the coverage is brief. While it may not have been Paltridge's intent to produce an overly technical book, at the very least a selection of works for further reading would have been appropriate. Given the abundance of opinion pieces in newspapers, magazines and blogs, it would be preferable for Paltridge to offer a more detailed exposition of the technical uncertainties and cultural biases that he touches on.

Reference

Roe G, Baker M, Science Vol. 318. no. 5850, pp. 629 – 632 10.1126/science.1144735 *Why Is Climate Sensitivity So Unpredictable?*

- Reviewed by Chris Guest

Holy leftovers!

In Search of the Church's Strangest Relic in Italy's Oddest Town By David Farley

Gotham House , US\$20.00

There must have been a good deal of early Christianity that the Romans found weird, but Christian fondness for the body parts of deceased heroes and heroines seemed particularly perplexing. Christians actually dug up bodies of martyrs and kissed the bones. When St Cyprian was beheaded, his followers rushed to sop up his blood with their clothes and then ran off with their sanguine mementos.

Of course, some Romans didn't mind being bribed to give up a body for its parts rather than doing away with it in some normal Roman fashion, but reverencing cadaver pieces still seemed peculiar.

It is still practised, and it might still seem peculiar, and if so, the most peculiar of such veneration is the subject of David Farley's book. Farley, raised a Catholic and perhaps not as devout as he used to be, visited Calcata, Italy, an ancient town that sits on a 450-foot cliff, thirty miles from Rome, and accessible only on foot or by mule. It was there he learned that for centuries the town had been a place of pilgrimage because it was the home of an especially sacred

piece of a body. But in 1983, the piece was stolen. Farley's curiosity was up: the sacred item was nothing less than Jesus's foreskin.

As befits a travel writer, Farley spends many pages of this agreeable and amusing book on Calcata, how he got there, and his side trips to do research in Rome or Turin. Not only is the town ancient, but it has a history like no other.

Somehow the fascist government was convinced that since the city was perched upon volcanic rock, it would collapse whenever the next earthquake came. In the 1930s the residents were made to go to a new town, with concrete buildings, named Calcata Nuova. Calcata itself was abandoned, but the government never got around to leveling it. Outsiders, like artists, hippies, and other eccentrics, began setting up camp in it, and those in Rome called it "the village of freaks".

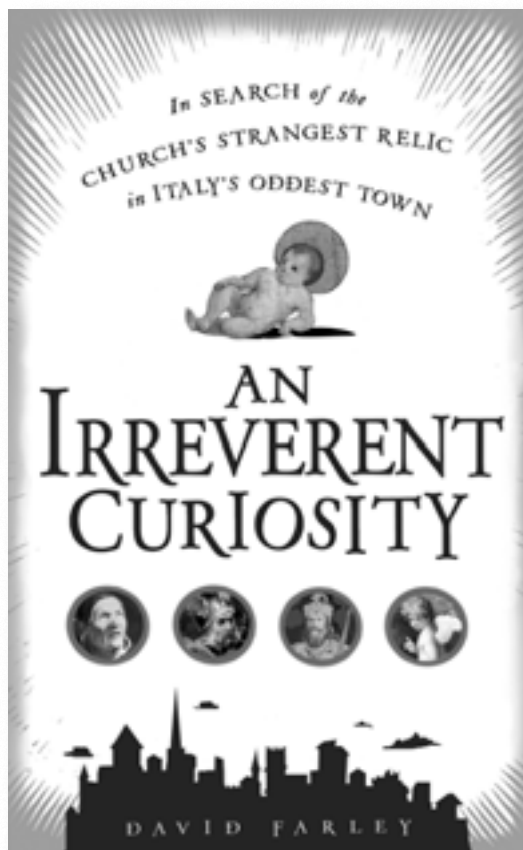
There are plenty of freaks here, most of them quite agreeable, and since Farley and his wife spent a year in the village, he got to know them and he writes about them with affection. There is a famous architect, a 97-year-old American choreographer, an artist who might be a witch and lives with crows in a cave, an Italian B-movie actor who has art books featuring nude studies of his tumescent self, and many more. Farley is amused by his new neighbors, and details how he got to learn some passable Italian from them. He dines with them (once on fried cow nerves), and probes their memories about their vanished sacred relic.

The cast of villagers includes, to get to the point of the book, the bibulous priest Don Dario, who was on duty when the foreskin of Jesus disappeared. It was last seen in a shoebox in the bottom of Don Dario's closet. This was in 1983, or maybe 1986, and maybe it was stolen, or maybe it was sold. Maybe the Nazis got it, or the Satanists. Or maybe it was reclaimed by the Vatican, which is not so interested in corpse parts as it used to be, and wanted to hush everything up. Or maybe they took it so that a clone could be made, and this would be the Second Coming.

After all, Don Dario had been put under orders not to show the relic to anyone and only bring it out for a procession on the Feast Day of the Holy Circumcision. In fact, he claims he can't even talk about it, and doing so might lead to excommunication. The fate of the holy prepuce is as murky as its history.

Farley reviews plenty about the church's enthusiasm for relics, which have included the holy baby spoon that Jesus used, and his umbilical cord, and his milk tooth, and his bib (with Virgin milk stains upon it), and the chart marked up to show his height as he grew up.

There are famously lots of pieces of the True Cross, and around thirty churches have at least one nail from the Cross. There is also lumber from the table that held the Last Supper. The crown of thorns is revered somewhere, as are a pair of the holy sandals. Jesus's blood is on display all around Europe. It might be that Jesus's trimmings of hair or fingernails would be worth sticking in a reliquary, and John Calvin sarcastically said that the



Holy leftovers

Continued...

holy urine and faeces would be apt for adoration.

The severed foreskin, however, would be something special. After all, if Jesus was assimilated bodily into heaven, it would be the one part of his flesh left behind. Or would it? There was an ancient debate on the issue, with some saying he was made whole (his foreskin was returned to him) before his ascension. Farley does his best to untangle the provenance of the snip of tissue, which involves, among other things, being wound up in the legends about Charlemagne. Sometime after that, St. Catherine, who fancied herself the spiritual bride of Christ, wore the circular tissue as her ring.

The prepuce in Calcata wasn't the only one; there were a dozen or so others in other churches, but the one in Calcata might have the best claim of authenticity. According to the story here, it was stolen by a German soldier at the Sack of Rome in 1527, and after it was found it filled all the air with the sweetest of perfumes and it spread glistening stars all around. This particular foreskin also was vouched for by St Bridget, who had a vision of the Virgin approving the veneration of the tissue.

In 1954 there was a conference at the Vatican to discuss the Holy Foreskin, and although there was a vote in favour of promoting Calcata and its relic, the petition was rejected. Instead, there was reference to a 1900 decree that discussing the Holy Foreskin would be a crime worthy of excommunication. Perhaps the church didn't like irreverent curiosity, and perhaps the church was taking an enlightened view that it was a mere 'medieval fantasy', but perhaps the church was protecting it because they knew it was the real one.

There are a thousand "perhapses" in this delightful book, and anyone who picks it up wanting to know for certain what really happened to the real foreskin is going to be disappointed. Farley's rollicking search for the truth, complete with picturesque setting, mysterious Vatican library chambers, a relic collection in Turin, secretive priests, and a town full of weird ones, is more substantial than any legend might be. We might, in all this lore, discount for sure at least one version of the foreskin's fate. The Greek theologian and physician Leo Allatius piously argued in the seventeenth century that the foreskin had arisen with Jesus, but that it became the rings of Saturn.

- Reviewed by Rob Hardy



{ EmbiggenBooks }

Home of the Sunshine Coast Skeptics

What critical thinking boils down to is the means to construct and to understand, a reasoned argument and - especially important - to recognize a fallacious or fraudulent argument. The question is not whether we like the conclusion that emerges out of a train of reasoning, but whether the conclusion follows from the premise or starting point and whether that premise is true.

- Carl Sagan

205 Weyba Rd Noosaville Qld (07) 5474 0990
www.embiggenbooks.com (soon all stock available online)

Your Stars: DECEMBER 2009

With our Astrologer Dr Duarf Ekaf

Aries: 19 April-13 May

Due to popular demand, your star sign has been reassigned to another planet. In the meantime, watch out for shooting stars and don't shoot any stars. I mean, they would not like it, would they? Your lucky underwear is just out of the wash.

Taurus:

14 May-19 June

The stars advise you to subscribe to this magazine as, and this is really amazing, they predicted you would be reading this astrology column. See! And you dared to doubt the power of the zodiac. Your lucky food is off the menu this month.

Gemini: 20 June-20 July

If you so choose, this is the time to put off making those important choices. If you cannot choose which choice to choose, try tossing a coin or throwing a party. I'm great fun at parties and my fee is quite reasonable.

Cancer: 21 July-9 August

Jupiter is in your 4th House this month, which means there is no room for you. Try staying in your 3rd House as Mercury just left to visit Pluto in Neptune's bar and grill. Your lucky tooth is the Lower Lateral Incisor.

Leo: 10 August-15 September

A black cat will cross your path. In fact take your chair, go outside and sit by your path and wait. Just keep waiting and waiting until that black cat comes along to fulfil this prediction. Remember that 3 white cats or 2 gray ones count as a black cat. If desperate, 4 dogs of any colour will do.

Virgo: 16 September-30 October

Feeling out of balance? Try weighing up your options. Place one option in one hand, the other option in the other hand. Now stand on one leg for one minute. There! You have found your balance again. Your lucky number is the very last 4 digits of π .

Libra: 31 October-22 November

This is a good time for sneaking into the cinema to watch a scary movie. You'll need a special device to let you see the film, as you'll be hiding under your seat. Yes ... (here it comes ... you have been warned) you'll need a 'horror-scope'.

Scorpio: 23 November- 29 November

The planets were not aligned at the time of your birth. Sorry to be the one to tell you this. Yes, you are not special at all, and I really could not be bothered to cast your horoscope. Your lucky day is not today.

Ophiuchus: 30 November-17 December

Your mother told you there would be days like this. Come on, you know what I mean. That problem you have been having with that person from work about the thing Oh yes, the stars know everything about you.

Sagittarius:

18 Dec-18 January

This month is your detox month. A time to cleanse your ... what ... oh ... sorry about that The stars are telling me that it is in fact your 'detax' month, a time to do your BAS and GST. Personally, I'd rather have an enema.

Capricorn: 19 January-15 February

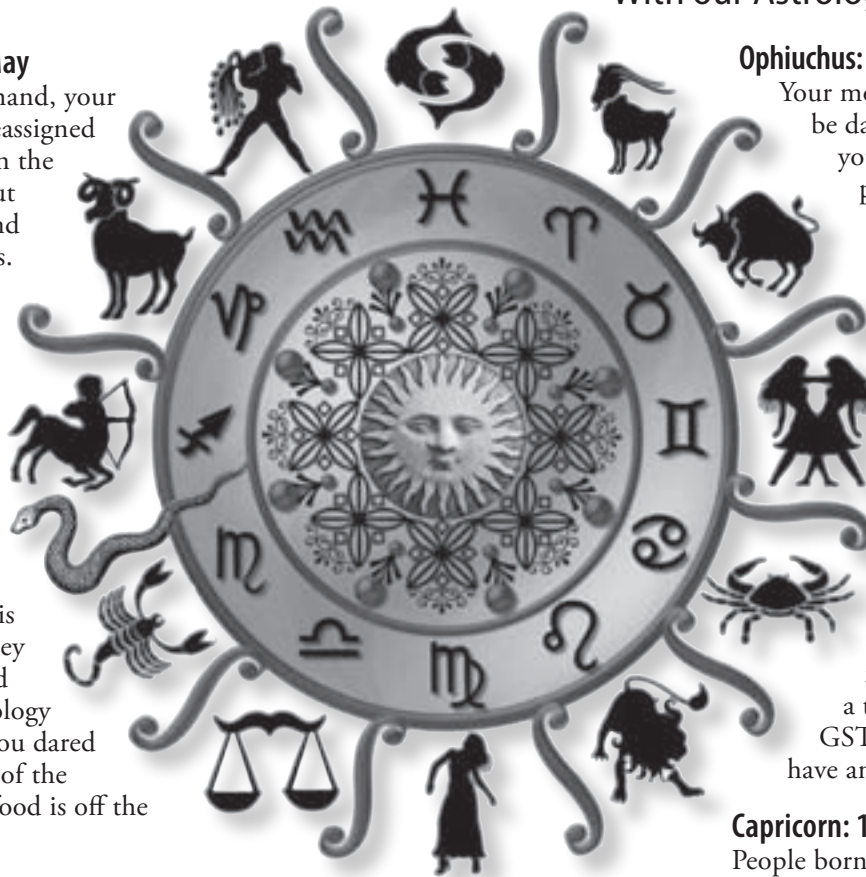
People born under your star sign are much like you. Two eyes, one nose, some legs and so on. It's the people born under other star signs you need to look out for. Hell, some of them aren't even skeptics! Your lucky sandwich is ham, just like you!

Aquarius: 16 February-11 March

If it feels right for you, just get out there and do it! (Unless that means breaking the law or upsetting anyone or even making people worry a little bit about you.) Apart from that, who cares what other people think?

Pisces: 12 March-18 April

Did you know that in a past life you were Henry VIII? Nice eh? And I bet he's really disappointed to be reincarnated as you! But don't despair, as many people think they were Henry VIII in a past life. Strange how no one thinks they were a garbage man. ■



Energy, global warming, sensible heat and ice ages

In which correspondents respond to past articles on the AGW theme, as is their wont.



Politics and Wind

I would like to comment on “Blowing in the Wind” by Mark Lawson in *The Skeptic* (29:3).

I was surprised to find this article in *The Skeptic* because the arguments used against alternative energy sources are political in nature rather than scientific. The author takes a strong stance against wind power based on the current high costs, but ignores the fact that wind power is renewable energy whereas coal, oil and nuclear resources are bound to run out sooner or later.

Furthermore, the author uses a number of suspect claims and quotes, which are misleading and provides an unfair negative image, where problems are accentuated and benefits are ignored.

Let me address the dubious points one by one:

- Straw man argument: Wind power is no good because of a low effective CO₂ reduction. This just means that politicians introduce wind power for the wrong reason. It doesn't change the fact that wind power is valuable (and can be a major player in achieving 20 per cent renewable energy by 2020).
- Political argument: Wind power is no good because it is too expensive/ineffective. The most important reason for introducing wind power is that the energy is renewable. Sooner or later fossil fuels are bound to run out. Why not jump on the bandwagon now and help develop the sustainable energy systems of the future, rather than sit back and leave the problems for future generations?
- Ridiculous arguments: Wind turbines are noisy, ugly and birds get killed by the blades. To me, these points seem really minute and easy to deal with compared to the multitude of present issues in utilising oil, gas, coal & nuclear fission.
- Weird accentuated claim: “Wind energy's contribution to future power generation will be of largely symbolic importance.” This quote is specific for the present situation in the UK (according to one source) and reflects the political unwillingness to take alternative

energy seriously.

- Narrow minded argument: Wind farms integrate badly into the existing power grid, so they are no good. Think broad, think new; find new ways of storing the energy. The Technical University of Denmark has a research initiative called CASE (Catalysis for Sustainable Energy) which does exactly this.
- Superfluous comment: “... it is obvious that wind and renewables have substantial problems”. Sure they have problems, and your point is?

In the Scandinavian countries, the situation looks much better, with Denmark at the forefront of wind turbine design and manufacturing (5.7 billion Euros export of wind technology and 28,400 employed in the sector at the end of 2008 according to the Danish Wind Industry Association). Denmark obtains 16-18 per cent of its energy from wind power, despite being a tiny country of only 44,000 square kilometres with five million inhabitants (conveniently, hydro power from Norway and Sweden acts as a buffer for the wind farms). This situation is a direct result of the energy/oil crisis of the 1970s in western Europe, after which sustainable energy production and energy conservation measures were taken seriously.

In Australia, the possibilities are legion: vast uninhabited areas, mild climate, plenty of sun, but not much seems to be happening. There must be a political will to introduce alternative energy at a cost, for it to have a big impact in the present economical climate. I wish you luck in making some good choices for the future.

Steen Winther
Castlecrag NSW

Hypotheses

The whacky hypothesis that I mentioned in my first letter (*The Skeptic*, 29:2 – that energy as heat is “the cause of the perceived warming, and not rising CO₂ levels” - Ed) turned up in an Opinion Essay in *New Scientist*, April 4, 2009, a few days after I sent my letter off to our editor. That essay was based on a paper published in *Eos*, a journal of the American Geophysical Union¹. It postulates that while the earth is not

presently affected by the level of energy usage, the outlook for the future is grim if energy usage continues to rise at an ever-increasing rate.

Mark Lawson was partially correct in a way when he said that carbon dioxide has an upper limit of its effect on global warming (*The Skeptic*, 29:1). I came across an e-book called *A Heat Transfer Textbook* by John H Lienhard IV and John H Lienhard V² while trying to find a copy of my old textbook *Heat Transmission* by WH McAdams. This e-book said in its section on global warming: "Many factors must be considered in examining the causes of global warming. Carbon dioxide, for example, is present in such high concentrations that adding more of it increases absorption less rapidly than might be expected". This is not as good as experimental evidence, but it goes part way towards backing up Mark's statement.

While searching the internet for values for the solar radiation on Earth, I found values as high as 1400W per square metre measured at the upper boundary of the atmosphere, and as low as 120W per square metre at ground level, which don't sit well with the 250W per square metre quoted by Robert O'Connor (*The Skeptic*, 29:3). The *Heat Transfer Textbook* shows that for a solar generation plant using solar panels an area of 26 square kilometres would be needed to supply the equivalent of an 800Mw turbine. That is an area bigger than that of Mudgee town.

Yet another paper available on the web³ suggests that total solar irradiance (TSI) has been the dominant forcing for climate change during the industrial era. It goes on to say that the periodic character of the TSI record indicates that solar forcing of climate change will likely be the dominant variable contributor to climate change in the future.

Professor Bob Carter says in his article⁴ that the developed world is being asked to pay a high price for a load of hot air.

A web site⁵ lists many of the scientists who are opposed to the global warming theories that are in vogue today. Many of them are quite eminent in their field.

Some quotes taken from that site are:

1. Hendrik Tennekes, retired director of research, Royal Netherlands Meteorological Institute: "The blind adherence to the harebrained idea that climate models can generate 'realistic' simulations of climate is the principal reason why I remain a climate skeptic. From my background in turbulence I look forward with grim anticipation to the day that climate models will run with a horizontal resolution of less than a kilometre.

The horrible predictability problems of turbulent flows then will descend on climate science with a vengeance."

2. Antonino Zichichi, Emeritus Professor of nuclear physics at the University of Bologna and president of the World Federation of Scientists: "Models used by the Intergovernmental Panel on Climate Change (IPCC) are incoherent and invalid from a scientific point of view."
3. William M. Gray, Professor Emeritus and head of The Tropical Meteorology Project, Department of Atmospheric Science, Colorado State University: "This small warming is likely a result of the natural alterations in global ocean currents which are driven by ocean salinity variations. Ocean circulation variations are as yet little understood. Human kind has little or nothing to do with the recent temperature changes. We are not that influential. I am of the opinion that [global warming] is one of the greatest hoaxes ever perpetrated on the American people. So many people have a vested interest in this global-warming thing - all these big labs and research and stuff. The idea is to frighten the public, to get money to study it more."

In the late 1970s, I read an article commenting on the complaints from scientists that they were not well-supported financially by governments. The writer suggested that science would get more attention and funding from governments if they could find a problem for research that would likely gain votes for the politicians. The first thing science tried was the 'nuclear winter', and when that went away of its own accord, they came up with anthropological global warming and really set the cat among the pigeons.

Information contradicting this as well as rising sea levels comes from a number of sources. DJ Wingham and others⁶ give evidence of the thickening of the Antarctic ice sheet and say that this contributed a fall in global sea levels of 0.08mm per year over the period 1992 to 2003.

John Ness (*The Skeptic*, 29:3) thinks I have some confusion about latent heat and radiated heat. No John, not so. I am also aware of specific heat as well. Latent heat⁷ is the heat required to induce a change of state of a substance from solid to liquid or from liquid to gas all without raising the temperature of the substance. Sensible heat⁸ is heat that, when applied to a solid, liquid or gas results in a change in temperature of same. Specific heat⁹ is the amount of heat required to raise the temperature of a unit mass of a substance by one unit on the temperature scale. This affects the

Energy, global warming, sensible heat and ice ages

Continued...

sensible heat and is applicable to solids, liquids and gases. Radiant heat is heat which is emitted by a body through space. Its transmission is not dependent on conduction or convection. It is dependent on the absolute temperature given in degrees Kelvin. Since terrestrial ice is at a temperature higher than 0 degrees Kelvin, it must radiate heat. Of course, the ice will radiate heat at a lesser rate per square metre than a similar sized piece of red hot iron.

A paper entitled "Global Deception - The exaggeration of the global warming threat" by

P. Michaels¹⁰ sets out some of the case against the global warming threat. It argues that it might be wise to save the proposed vast expenditure on carbon emission reduction for investment in energy technology of the future rather than embarking on a probably unsuccessful, expensive program to meet an emergency that does not exist.

Space has run out for me to reply to other comments on my original letter. I have possibly taken up too much already.

Jack Hamm
Mudgee NSW

CORRECTION

In a Forum piece by Nick Ware (*The Skeptic*, 29:3), we may have inadvertently given great cause for alarm. Through some missed punctuation, we had Mr Ware saying: "There are long term variations in the input of photons as the Earth's orbit fluctuates: these variations cause the 105 year cycle of ice-ages." That should, of course, read: "... the 10⁵ year cycle of ice-ages", a slightly different kettle of fish. Our apologies to Mr Ware, and to those who hurriedly went out and bought copious supplies of warm clothing.

The Editor

References

1. www.tinyurl.com/d75q23
2. web.mit.edu/lienhard/www/ahht.html
3. www.acrim.com/
4. www.news.com.au/couriermail/story/0,23739,21920043-27197,00.html
5. en.wikipedia.org/wiki/List_of_scientists_opposing_the_mainstream_scientific_assessment_of_global_warming
6. www.cpom.org/research/djw-ptrsa364.pdf
7. en.wikipedia.org/wiki/Latent_heat
8. en.wikipedia.org/wiki/Sensible_heat
9. en.wikipedia.org/wiki/Specific_heat_capacity
10. www.geocraft.com/WVFossils/Reference_Docs/PMichaels_Jun98.pdf

Jesus, rules, laws, errancy, and bacon & egg rolls

In which we again look at a few issues about Jesus, and come to a conclusion (at least temporarily)

Once more ...

Mike Meyerson (*The Skeptic* 29:3) disagrees on three issues in my Bible article and asserts:

- Jesus did not exist;
- Jesus told his followers to accept all Jewish Laws including dietary laws; and
- The early Tribal God of the Hebrews is the same as the Christian God.

His beliefs do not withstand skeptical examination.

Meyerson questions Jesus' existence (*The Skeptic* 29:2 & 29:3), saying "the only evidence of Jesus' existence is the Bible" as if that disposed of the Bible as evidence. He quotes McKinsey's *Encyclopedia of Biblical Errancy*, dismissing references to Jesus by Suetonius, Tacitus, Pliny the Younger and Josephus, but when examined none of McKinsey's arguments stand up.

It is possible to deny anything. Holocaust deniers ignore the mountainous evidence for the Holocaust only 67 years ago. Applying Meyerson's criteria, Socrates, Buddha, and Mohammad did not exist. Biblical claims about Jesus can be questioned, but if Jesus did not exist why does Christianity exist? The only response is that Jesus was concocted by a conspiracy which

never leaked despite the conflicts and rifts of early Christianity - an inherently improbable thesis, so that doubting Jesus' existence can be left to the fevered imaginings of conspiracy theorists.

To address Meyerson's other beliefs, the evolution of Jewish Religion must be understood. From 1200-760 BC, God was the harsh Hebrew tribal God, located in a physical place who supported the Hebrews, harmed their enemies, imposed harsh penalties, demanded sacrifices and was unconcerned with morality.

From 760-730 BC, the Prophets Amos, Hosea, Micah and Isaiah introduced a new understanding based on compassion, justice and concern for the down-trodden. Micah (6:6-8) sets out the old and new: "Shall I bring the Lord burnt offerings and year old calves? Will the Lord be pleased with thousands of rams, with ten thousand rivers of oil? Shall I give my first born for my transgressions the fruit of my body for the sin of my soul? For what does the Lord require of you but to act justly, to be merciful and to walk humbly before your God".

In Babylon in 587-539 BC, Hebrew exiles faced up to maintaining their identity and worshiping a distant God whose dwelling place was destroyed. They adopted the Babylonian creation myth to underpin strict Sabbath observance, which with male circumcision became key signs of Jewishness. The rituals and rules of Judaism were elaborated and defined. The contradictory idea emerged of a universal God who was everywhere. Universality versus exclusiveness was a long lasting Hebrew conflict.

The Goss/Meyerson disagreement is over the meaning of Jesus' statement (Matt 5:17): "I come not to destroy the laws and the prophets but to give them their full meaning." Christianity adopted many Jewish beliefs but did not adopt them all. In Jesus' time Jews regarded 'the law' as the Ten Commandments, the Prophets' teaching on justice and compassion, plus rituals and rules governing personal behaviour. Meyerson asserts this was also Jesus' view and that he also advocated a harsh pre-prophetic Tribal God.

The evidence shows Jesus only endorsed the Ten Commandments and the Prophetic teaching, rejecting the rituals and rules and, like Jews at that time, rejecting the harsh tribal God. Meyerson quotes six verses of Matthew and one from Mark which he asserts show Jesus insisted on full obedience to all the Mosaic Law. He quotes the "inerrant words of McKinsey" citing Jesus (John 7:19, John 5:46, 47) claiming this means Jesus staked his authority on the authority of Moses.

But the passages cited do not mean that, and earlier verses make quite clear that Jesus says his and Moses' authority came from God.

None of Meyerson's citations support the claim that Jesus accepted the ritual, rules or the old tribal God. Indeed, the phrase "I came not to destroy the Law and the prophets but to fulfil them" implies changes. When surrounding verses are examined, some of Meyerson's citations actually contradict his case, eg Matthew 23:3 which he claims has Jesus saying to follow the Pharisee's law. But he omits the rest of the verse: "but not what they practice; for they preach but do not practice". Verses 13-36 have Jesus criticising the Pharisees because they only follow the law's external rituals, eg "clean the outside of the cup and plate but inside are full of extortion and rapacity". So this passage actually rejects the rules and ritual of Jewish law.

In the Gospels, Jesus endorses justice and compassion and rejects the ritual and rules. Mark 12:29-31 records the scribes asking him the main commandment. Jesus quotes Deuteronomy 6:5, 10:12 and 30:6: "You shall love the Lord your God with all your heart, soul, mind and strength and the second is this, You shall love your neighbour as yourself. There is no other commandment greater than these." Jesus thus endorses that Jewish law adding "mind" to Deuteronomy, thus saying you must use your brains in thinking of God! When asked who is my neighbour he told the story of the Good Samaritan. Samaritans were hated by Jews, so he makes a point about universality, justice and compassion. There are 3000 such references in both the Old and New Testaments dwarfing all other issues.

Jesus says in Mark 12:38: "Guard against the teachers of the Law of Moses. They love to walk around in long robes and be greeted in the Market. But they cheat widows out of their homes and pray prayers just to show off." In the case of the adulterous woman (John 8:3-7), Pharisees asked Jesus what should be done since the rules prescribed stoning. Jesus replied, "Let him that is without sin cast the first stone". Both vary from Jewish law. On dietary laws, Matthew 15:11 quotes Jesus saying "not what goes into the mouth defiles a man but what comes out of the mouth". Mark 7:5-8 records that when Pharisees criticised his disciples for not washing their hands before eating, he called them hypocrites, saying "they teach as doctrines the commandments of men and leave the commandments of God". There are many such other verses. Indeed there is no verse Meyerson has given or can cite where Jesus upheld rigid



Jesus, rules, laws, errancy, and bacon & egg rolls *Continued...*

adherence to the rules.

On the harsh tribal God of the Hebrews being the same as the Christian God, this is the revelation Meyerson promised. But the revelation is only of his ignorance of theology and Bible history. He argues that because the Babylonian creation myth incorporated into the Bible in the 6th century BC mentions God and because John's Gospel says that God and Jesus were there at the beginning, it means that the Jewish God prior to 760 BC is the same as the Christian God. Merely stating his thesis clearly refutes it. At best, he makes the semantic point that "God" is the descriptor throughout. A God of harsh penalties, genocide and vengeance is not the same God who urges justice, compassion,

care for the downtrodden and love for your neighbour. Those asserting the contrary have just not thought about it.

Jesus advised Christians to use their brains. It is useful advice for everyone.

David Goss
Mawson ACT



... and Again

George Bernard Shaw must have had individuals such as Barry Butler in mind when he said, "No public man in these islands ever believes that the Bible means what it says; he is always convinced that it says what he means."

Butler uses the theologians' ploy of maintaining that what is said in the Bible is not what is meant. Butler maintains that, "Jesus states the principle in a startling and categorical manner and leaves the hearers to work out the practice." In this respect I concede that Butler is partly correct in that whenever the followers disagree with Jesus they resolve the matter by hearing what they want to hear. Frequently what they hear conflicts with each other's hearing as well as with Jesus. This would also explain why there are more than 1000 distinct Christian sects, (McKinsey, *Biblical Errancy*) each sect hearing Jesus' words as they wish to hear them. At least 999 of these sects must therefore have a hearing impediment.

In the verse in question, Luke 14:26, Jesus said, "If any man come to me and hate not his father, mother, and wife, and children and

brethren, and sisters, yea, and his own life also, he cannot be my disciple." These words are unambiguous. Jesus could not be more explicit. Butler, however, "hears" this statement to mean that "Jesus is speaking about a choice between natural affection and loyalty to Christ." If that were the case, why wouldn't Jesus simply say what he meant in Butler's words? In any case, why can one not have both affection for one's family and loyalty to Christ? Butler is correct on this point-the hearer hears what he wants to hear.

Butler predictably mentions Tacitus and Pliny the Younger in an effort to present a smidgen of historical evidence for the existence of Jesus. I again urge readers interested in the historicity of Jesus to refer to McKinsey's *Encyclopedia of Biblical Errancy*, in which McKinsey demolishes the argument for any historical support for the existence of Jesus from Tacitus, Pliny the Younger, Suetonius and Josephus. In respect of Tacitus, McKinsey details 16 reasons (and mentions that he could list more) as to why the records of Tacitus are insufficient for claiming the historicity of Jesus.

I will discuss only two of the 16 reasons given by McKinsey because these are relevant to Butler's argument. Butler asserted that Tacitus mentioned "Christus" and writes of his home and his date of execution by order of the Roman governor. Butler however fails to provide details of Jesus' home address or his date of execution. Has Butler forgotten that Jesus, himself, claimed not to own a home? (Matt 8:20). How can the date of Jesus' execution be known when it cannot be established that he even existed?

McKinsey emphasises that when Tacitus writes about Christ, this could apply to any one of many other so-called Christs who were put to death in Judea, as well as to Christ Jesus. McKinsey also mentions that worshippers of the Sun God Serapis were also called Christians and Tacitus could therefore have equally been referring to these people.

It was not unexpected that Butler would provide some scriptural evidence in favour of rejecting Jesus' demands to adhere to the Mosaic law. This is not difficult as Jesus habitually contradicted himself, in word and deed. Butler stakes his case on the four words at the end of Matt 5:18: "For verily I say unto you, Till heaven and earth pass, one jot or one tittle shall in no wise pass from the law, till all be fulfilled". He claims that the words "till all be fulfilled" are significant. How these few words alter the situation he fails to make clear, but in any case nothing appears to have been fulfilled.

Butler also quotes Mark 7:15 in favour of rejecting Jesus' commands with regard to observing the dietary laws, "There is nothing from without a man, that entering into him can defile him: but the things which come out of him, those are they that defile the man." As Butler points out, this verse has been interpreted to mean that the dietary laws can be rejected. But is this meagre evidence sufficient to allow rejection of laws that Jesus insisted we obey or suffer eternal damnation? In more recent Bibles, eg the *Revised English Bible*, theologians have inserted a further line following Mark 7:19: "By saying this he [Jesus] declared all foods clean." This line is not evident in the *St James Bible* and therefore cannot be claimed to be a correction of a previously mistranslated sentence. I suspect the insertion was made to bolster the weak argument in favour of rejecting the dietary restrictions.

In the previous edition of *The Skeptic* I detailed the large body of evidence demonstrating that Jesus was overwhelmingly in favour of rigid observance of the Mosaic law. It is obvious that the scriptural evidence is heavily weighted towards keeping the Mosaic law rather than breaking it. The safest course for a believer is therefore to comply with Jesus' instructions on this matter. Is it worth risking eternity in hell for a bacon and egg roll?

Butler's point is, however, noteworthy for two reasons. Firstly, it demonstrates Jesus' propensity to contradict himself. What is one to do if Jesus tells us at one point to keep the Mosaic laws or risk damnation, and subsequently tells us to discard the same laws? Remember, also, that when considering two contradictory statements only one can be true, the other must be false.

The second point is that the interpretation of Mark 7:15 to mean that the dietary laws no longer apply has not been without consequence. This is because by doing away with the dietary restrictions, the followers of Jesus gave themselves the licence to eat pigs. It took many centuries before medical science discovered that pigs harbour the cysts responsible for tapeworm. The ingestion of infected pig would at best leave the host with a repugnant intestinal parasite and at worst would kill the host due to cysts forming in the brain. Did Jesus intend this to be the case? Jesus himself would undoubtedly never have eaten pig.

The more convenient interpretation of Jesus' teachings with regard to diet also means that his followers have now implicated Jesus in causing much more disease than he could have cured during his visit to earth.

Past events, however, have less impact

than current matters. Consider two current issues that again suggest the followers of Jesus would be wise to follow his advice. Firstly, the swine flu epidemic could probably have been avoided completely if pigs were not farmed for food. Secondly, while I agree that up until now one could have argued reasonably against circumcision on medical grounds, this is no longer necessarily the case. This is because it has recently been shown that circumcision provides significant protection against the HIV virus (*BMJ* 2000). How many Christians have contracted HIV/AIDS because they rejected Jesus' advice on living according to the law? Jesus himself would have been circumcised. Paradoxically, when it comes to the dietary laws and the matter of circumcision, it is the Muslims and Jews who are in greater accordance with Jesus than Christians.

Butler's final sentence sums up the man and the situation. "I continue to hold the view that there is sufficient historical evidence for the Christian faith." Pity he cannot supply any. Butler has presented the classic argument from the position of invincible ignorance. Under these circumstances debate is redundant. I suggest that discussion on the matter be closed.

"In matters of religion it is very easy to deceive a man and very hard to undeceive him".
- Pierre Bayle, French philosopher.

References

BMJ 2000; 320 1592-1594 10 June
McKinsey, CD (2000). *Biblical Errancy*, New York, Prometheus Books.
McKinsey, CD (1995). *The Encyclopedia Of Biblical Errancy*, New York, Prometheus Books.

Mike Meyerson
McMahons Point NSW

Editor's note: This particular series of correspondences has now stretched across four issues (and several thousand words) of The Skeptic. Beginning with a piece by Barry Butler of about 900 words in the Autumn 09 issue, the debate in these pages has grown to ten times that amount, and in the editor's view is heading for an endless "I said – You said" argument. I will, therefore, take Mike Meyerson's advice and call an end (at least for the time being) to this debate. No correspondence will be entered into, double meaning definitely intended.

What you think ...

Open-minded?

I recently received a book as a gift from my sister: *Inspiration: Your Ultimate Calling* by a guy named Dr Wayne W. Dyer. I am afraid that I had to return the gift to her, having never proceeded beyond the back page text. I simply couldn't understand the language; not because I can't read English but all the strange and weird non-scientific terms made no sense to me.

"There's a voice in the universe calling each of us to remember our purpose" ...? No, the only voice I hear is that of the wife asking me to take out the garbage.

"...in this world of impermanence." Hmm, I know incontinence when I see it, but impermanence? Wikipedia tells me that it is a Buddhist term that expresses that existence is in a constant state of flux? Not very helpful at all...!

"We chose our physical body, and we chose the parents we needed for the trip." Say what? I want to choose again! And when I go on a trip I call for a taxi.

"It doesn't seem too great a stretch to move into the idea that we chose this life in concert with our Source." I can't quite follow you on this one, pass me the bong, please.

In short – this book is nothing but new age crap that can't be read at face value nor understood in a logical sense. This beckons an interesting question: should I, as a skeptic, persevere and read through the book trying to make sense of what is clearly nonsense? Or is it OK for me to return the gift to my sister and tell her: Thanks but no thanks, this is too much for me, I can't make head or tail of it.

In the old days, I would probably have persevered, read the book, looked into all the strange concepts and discussed my findings with my sister. But nowadays I choose the more arrogant approach and tell her that I don't need this book, I don't understand it because it is non-scientific rubbish and I simply cannot in my wildest dreams imagine that the book could bring anything sensible to my life.

And this feels great and brings me to the core of this letter:

Should skeptics make efforts to examine, understand and evaluate every single weird world view that they encounter? Should every religious pamphlet from the bible to new age hocus pocus be read from cover to cover and diligently debated?

Personally, I believe that this is a lost cause, because the discussions are always held on (and with) the terms of the weird world view. You can hardly have a discussion about, say, the Christian religion, without entering into the realm of the fairytale, using the names of God, Jesus, Moses, Mother Goose and what have you, thereby giving credence to the actual existence of these fictitious characters. Even *The Skeptic* is positively saturated with bible quotes these days (so said Jesus, so did Jesus, etc.) and it does worry me a bit. This is equivalent to discussing what kind of beer flows from the volcanoes in Flying Spaghetti Monster heaven. Fun and entertaining, but ultimately pointless.

Steen Winther
Castlecrag NSW

Harwood & free choice

"The future cannot be foreknown, even by a god - unless the future is predetermined and there is no such thing as free will." Thus states William Harwood at the beginning of his concluding paragraph of his essay "Prophet & Psychics", (*The Skeptic*, 29:3, p38). Unfortunately, he has fallen for the mistake of equating lack of free will with pre-destiny.

While it is true that there can be no free will if the future is predetermined, the opposite is not true. A future that is not and cannot be predetermined does not imply that free will exists. As far as I know, there

is no credible scientific evidence for the existence of free will.

If free will is a fiction and our lives and decisions are not predetermined, then what is the alternative? The third option is that our decisions are made according to chance. No, this does not mean that decisions are completely random events. Our chance decisions are governed by probabilities that are partly predetermined by past events. Each moment of every day we are faced with many possible courses of action. I contend that the course "chosen" is a lottery but with the probability of each outcome weighted according to past events and preconditioning.

I was born without wings. Therefore, when I wake up in the morning with a full bladder, the probability is that I will decide to walk, not fly, from my bedroom to the bathroom in order to urinate into the toilet bowl. The decision to chose walking over flying is fairly well predetermined by my lack of wings. The decision to urinate in the toilet and not my bed is less strongly determined by considerations of childhood training and the fact that a wet smelly bed would make for an uncomfortable experience for the coming night. A free choicer would say that I made a free choice for the toilet as opposed to the bed. I would say that my course of action was governed by chance but with the odds heavily weighted to the toilet option because of pre conditioning and past experience.

It is possible to construct a scientifically plausible explanation for the mechanism of "choice" based upon chance. This would involve the invocation of the Heisenberg uncertainty principle but that would be the subject of a whole other essay (seem to remember this may have already been done in *The Skeptic*).

Free choice plays no part in my decisions because free will like god does not exist. They are both constructs of the human mind with no credible scientific evidence for the existence of either. In this opinion I would be expected to be condemned by the religious but not by the rational. I challenge Dr William Harwood to devise an experiment that could distinguish "choices" resulting from free will from those determined by chance.

Kenneth Cooke
Strathfield NSW

HMAS Sydney & Warren Whittaker

We welcome you most warmly to your new position as editor of *The Skeptic*, but you may have to lift your game*. In his article “Seeking the Sydney” (29:3, p19), Bret Christian describes Warren Whittaker as an ex-RAAF navigator. He had a high regard for Lindsay Knight as a result of his computer and electronic target equipment produced in Albury, not as a belief in ‘map dowsing’. Warren is in fact an ex-Indian and British Army Lt Col. who was also a keen sailor. This was where he gained his expertise in navigation. Most of his deductions of the site of the wreck of the Sydney were based on his experience of navigating small boats. He has admitted handsomely that he was wrong on this.

Edward Brentnall
Southbank Vic

**Mr Brentnall originally penned his letter as if the Editor authored the article in question. We're not sure, therefore, if by “lift your game” he is referring to the editor's choice to run the article, the editor's apparent lack of adequate fact checking, or indeed the actual author's error. We have modestly assumed the last point, and edited his letter accordingly.*
- Editor

More on wind energy

I should clarify a few points concerning my article on wind energy in the previous issue (*The Skeptic*, 29:4, p28).

As I have discovered since writing the article, there are quite a few surveys which estimate that supplying 20 per cent of the electricity grid's power with wind energy will increase wholesale electricity prices by up to 10 per cent. The wind advocates who sent me the material were then surprised to be told by me that the result implied that wind power was 50 per cent more expensive than fossil fuel plants,

megawatt for megawatt.

A closer look again at the surveys, and I refer in particular to one by the UK Energy Research Council which was part funded by the Carbon Trust, *The Costs and Impacts of Intermittency*, indicates that they take a largely favourable view of wind energy.

Network operators always keep some reserve power, in the form of plants continually operating but not producing electricity, off the grid in case one of the major generators goes down. For wind, this spinning reserve is greater, with German power company E.On GmbH saying in one report in 2004 that it backs up 80 per cent of the power being generated by wind at any time. In contrast, the UK ERC calculates that reserve requirements will add around 14-16 per cent to the costs of wind energy.

One part of the difference is that the E.On figure includes normal reserve requirements (so I was a little unfair to wind in that regard), while the UK figure is for additional reserve requirements. Another seems to be, and I have not fully confirmed it, that the UK calculations assume quite low variations in wind energy on any given day – perhaps unrealistically low – while the wind that comes in off the Baltic to power the E.On generators naturally varies considerably.

Spreading wind generators out helps reduce variations but there are limits. As an executive at the Electricity Supply Association of Australia explained to me, generators have their own transmission limitations. If the wind stops blowing in South Australia, a wind generator in Queensland cannot substitute for it. The energy will not transmit that far.

Another major difference – if you want you can make the costs add up to anything – is whether the grid authorities will treat wind separately with its own reserve requirements or calculate risks and reserve requirements across the whole grid, which greatly reduces the reserve requirements for wind. Weather forecasting is getting a lot better but I think it would have to be very good indeed before the grid managers stopped treating wind conservatively.

On top of all that, there is the problem that transmission towers have to be built out to often remote areas, a lot

more of them have to be built, and they have to be built to take the maximum output of the wind generators – not the average output which is, optimistically, around one third of installed capacity. It is like building a super highway to areas where, most of the time, the traffic can be handled by an ordinary road. An additional problem, to hammer the point home, is that the grid manager still has to ensure that the grid has enough capacity to cope on the worst days without wind, plus a reserve. These are very hot days with no wind or little wind over a large area.

As I noted in the original article, wind energy promises to cost a great deal in return for reductions in emissions that will be far less than the public expect. They are little more than symbols to buy green votes.

Mark Lawson
Hornsby Heights NSW

Cult counselling

John L Perkins ‘Getting out of Cults’ was an interesting piece but I wanted to raise a few pertinent points.

Firstly, his definition of exit counselling: “The psychological support given those wishing to recover from immersion in a cult is called exit counselling or cult counselling.”

This is incorrect. Exit counselling is an intensive, intervention process with educational sessions. It's a voluntary procedure where a cult member meets with a counsellor, and usually members of his family or spouse, to reevaluate his or her involvement within a group. This type of counselling can take several days. Mr. Perkins is discussing the recovery process after successful exit counselling. It's essential to not confuse these two distinct things as errors and accidents can arise from doing so.

I wish to draw Mr Perkins' attention to a shared principle in two of the major approaches to exit counselling. Firstly, the information oriented approach used by Carol Giambalvo: “Under no circumstances

Cult counselling

Continued...

should an exit counsellor influence a client in any particular direction about his or her religious practice, faith, or any other beliefs"¹. Secondly, strategic intervention approach developed by Steven Hassan: "In examining and evaluating any group I suspect of being a destructive cult, I operate primarily in the realm of psychology and not theology or ideology. My frames of reference for thinking about destructive cults are the influence processes of mind control, hypnosis, and group psychology. I look at what a group does, not what it believes"².

Furthermore, "...close scrutiny of a group's particular doctrine is unwarranted and unnecessary."³

Additionally, Michael Langone, PhD, a counselling psychologist and the International Cultic Studies Association (ICSA) executive director, states most exit counsellors agree to the following statement of purpose: "The purpose of exit counselling is to promote critical thinking skills especially regarding the use of mind control. Exit counsellors will not violate clients' rights to self-determination nor will they unduly influence clients' ideological or spiritual orientation"⁴.

Exit counselling and cult counselling isn't about stopping or dissuading people from having religious beliefs. It does not examine "the problem of religious delusion". I call attention to this feature because it is a common misconception but Mr Perkins' primary focus.

The service Mr Perkins is offering differs substantially to contemporary exit counselling. Indeed, what he discusses might be better defined as an "atheist support group".

Atheists might be able to help people recover from post cult trauma by teaching them about science, reason and critical thinking. However, the notion that an atheist armed with reason can effectively put off a fully fledged cult member from their beliefs is debatable.

I share Mr Perkins concern about counsellors that wish to indoctrinate

vulnerable people into their own religious beliefs. Nevertheless, secular, ethical counsellors do exist.

Naturally, it's important to ensure that any service is accurately advertised and described; this allows people to make well informed decisions. While I don't doubt Mr Perkins' sincerity, I'm concerned his group is very inappropriately named. The lack of interest and support he is experiencing may be due to this very simple fact.

REFERENCES

1. Giambalvo, Carol. Exit Counselling: A Family Intervention. *How to Respond to Cult-Affected Loved Ones*, p29
2. Hassan, Steven. *Combatting Cult Mind Control*, P. 96
3. Hassan, *ibid*, P. 99
4. Giambalvo, *op cit*, P. xiii

Michael Wolloghan,
NSW secretary,
Cult Information Family Support

Atheism & cults

The article "Getting out of Cults" by John Perkins can be summarised as follows:

- Exit counselling is assisting people who would like to leave a religious sect.
- This can be assisted by showing that the sect beliefs are not true.
- Counsellors with religious beliefs have a limited ability to debunk other sects as mainstream religious beliefs are almost equally irrational.
- Atheists are in the best position to provide sound rational advice. John is aware that his claims sound arrogant, so he makes the following assertions:
- The essential feature of religious belief is that it is not rational.
- Believers lack curiosity about the basis for their own beliefs.
- Religious beliefs are characteristically delusional.
- Those who rely on facts and evidence rather than faith achieve a higher level of authenticity.

To support his assertions, John refers to his website where he offers \$100,000 to anyone who can prove that their religion is true. The implication is that if my opponent cannot prove their case, then what I believe must be true.

I checked his website and his money is quite safe, considering the sort of evidence and proof that he requires. Darwinism, let alone atheism, would certainly fail the same criteria.

There are very few things in life that can be proven. We cannot even prove that other people have minds. Most of our choices are based on incomplete evidence and intuition. If we based our choices only on proof, then life would be brought to a standstill. To paraphrase cosmologist Alexander Vilenkin, "A wise man will accept a good argument but a fool requires a proof."

Traditionally, the case for atheism has been based on the following two expectations:

- The universe is eternal and so has no cause.
- Science will progressively provide explanations for our observations and remove the necessity to invoke God.

However, both of these expectations have failed. The universe is not eternal; it had a beginning, which strongly suggests a transcendent cause. In some cases, scientific discoveries have made it harder to explain the universe according to solely naturalistic causes. For example, the laws of physics and the initial conditions in the Big Bang are so extremely finely tuned that it cannot be due to chance. These factors have given renewed impetus to various forms of the cosmological and teleological arguments.

The claim that atheists are more rational than believers is not necessarily true. I will illustrate this with the responses of prominent atheists to the Kalam Cosmological Argument, which is: "Anything that begins to exist has a cause. The universe began to exist. Therefore, the universe has a cause."

The first premise was rarely challenged as it was assumed to be self-evident. Thus, traditionally, atheists have attacked the second premise and have asserted that the universe is part-eternal. However, for both philosophical and

scientific reasons, the second premise is now widely accepted as being true. This gives the atheist far less wriggle room. The responses of prominent atheists to this are quite interesting.

Quentin Smith believes that the most rational position is that the universe popped into existence uncaused out of nothing, ie he denies the first premise. Daniel Dennett believes that all three statements in the argument are correct. However, he claims that the universe is self-caused, ie it boot-strapped itself into existence.

During an interchange on the Kalam argument with an atheist friend, he introduced me to *Causality and Rational Knowledge* by Mario Bunge, who is an atheist. Bunge claims (without argument or evidence) that it is rational to believe that the universe is self-caused (see Daniel Dennett), self-existent (past-eternal) or uncaused (see Quentin Smith) “to avoid a whole lot of nonsense” (ie theism). He is simply re-badging an irrational claim and calling it rational.

The above examples are not isolated, but typical. All positions are somewhat desperate and are great examples of ‘cognitive dissonance’ at the highest level. Responses of atheists to the fine-tuning argument follow a similar vein.

John Perkins’ claim that atheists occupy the intellectual high ground and are the only group who are rational and logical seems to me to be quite arrogant and baseless. According to John, I am deluded, I am blind to contradictions, I lack curiosity about the authenticity and basis of my beliefs, I have an aversion to issues that challenge my faith, and I do not rely on reason and evidence. Maybe John should counsel me.

I respect John’s desire to help others. However, if you, as a minority group believe that you can offer effective counselling on the basis that you are the sole custodians of logic, truth and rationality, then I believe you may do more harm than good. You may be deluding yourself.

Kevin Rogers
Modbury SA

An actual homeopathic cure?

In “Around the traps...” (*The Skeptic*, 29:3, p5), I read that the WHO has confirmed its rejection of homeopathy for treatment of just five ailments (HIV, TB, malaria, influenza and infant diarrhoea).

It has occurred to me that there is one condition homeopathy has proven time and again to be useful in treating, a condition rampant in so-called Western Society. Pera Turgida is the single condition that is instantly relieved by the application of homeopathic remedy of just about every type.

Pera Turgida is roughly translated as “a swollen wallet”.

Glenn Brady
Leopold Vic

Psychology & placebos

I have no desire to become embroiled in either bashing or defending psychiatry, although, as a medical practitioner whose practice contains more than 75 per cent psychiatric patients, I tend to side with Harriet Hall (*The Skeptic*, 29:3, p51).

What I wish to take up is Chris Borthwick’s statement (ibid, p48) about the placebo effect, where he says: “... and it’s worth pointing out that none of the hard sciences have anything remotely resembling a placebo effect”, as if that gives the hard sciences greater authority.

I would ask him why it is worth pointing that out? What relevance does it have to his argument? Of course the hard sciences have no placebo effect. Where could such an effect come into play? The placebo effect involves the human brain and its capability to influence the physiology of the human body. The hard sciences involve the accumulation of data sets from which an hypothesis can be drawn, verified or refuted. Is there

“anything remotely resembling a placebo effect” in this process?

Well, it’s worth pointing out that the human brains of different human bodies (the researchers) are capable of coming to entirely different conclusions when analysing the exact same sets of data! Even in the hard sciences! Is this “anything remotely resembling the placebo effect”? Beliefs influencing conclusions?

Alan Moskwa
Joslin SA

Community courses

Kevin Yeats wrote (*The Skeptic*, 29:3) that there are too few scientific courses at community colleges. If he consults the Eastern Suburbs Community College (Sydney) website, he will find often my course called “This IS Rocket Science”. It describes what rocket scientists get up to, for those who perhaps missed their chance to try it themselves. The course contains pictures, humour, and lots of principles, with as little (or as much) maths as you want. It is a selection from my university course. I have also presented at WEA (city) in the past; if Kevin would like a course in his area, then I can approach a community college there to offer it.

Ian Bryce
Rozelle NSW

Attitude, God & cults

I would like to offer brief comments on one letter and two articles in the September 2009 issue of *The Skeptic*.

I applaud the sentiments expressed by Dr Vivienne Miller in her letter deprecating the current tone of *The Skeptic*, though I might have expressed them a little less vigorously. I would add my concern about the use of the expression “(sic)” in quotations from

Attitude, God & cults

Continued...

other writers when there is a grammatical or spelling error. This often seems to be condescending or ever derogatory.

Perhaps Dr William Harwood's article on "Prophets and Psychics" would be among those Dr Miller would consider insulting. In any case, this article contained a logical mistake, which in my experience is made by numbers of atheists. He wrote: "... Victor Stenger's irrefutable proof (*God: The Failed Hypothesis*) that 'God', as opposed to gods as a class, does not exist. Stenger's methodology was to show that the definition of 'god' included qualities that are mutually exclusive, and therefore an entity that combined those qualities cannot exist."

The references to an hypothesis in the title of Stenger's work, and to a "definition of God", show that it is a human conception of God that is being discussed, not God. To illustrate the error involved here, I refer to an Egyptian Pharaoh of the thirteenth or fourteenth

century BC who attempted to institute a new religion, focusing on the worship of the sun as a sole deity. [Presumably Akhenaton, 14th century BC – Ed] I don't know what qualities were attributed to this deity, but for the sake of argument suppose they included those qualities in Stenger's definition of 'God' that he found to be mutually exclusive. Would it follow that at that time the sun did not exist?

John Perkins, in his article "Getting out of Cults", set out an idea and program for helping people who want to escape from a cult, or religion, which seemed to be quite good, so long as no pressure is put on the people being helped. However, in the course of his article he wrote: "When challenged to back up their assertions with testable evidence, (religious) believers are unable to do." He seemed to regard this as evidence that firmly held religious beliefs are delusional. I take it that, as an atheist, he would assert that: "There is no God". Can he put forward testable evidence to support this assertion? If so, what? If not, then, by his own argument, if his belief is firmly held, it is delusional.

Bill Moriarty
St Leonards Vic

Help on street lamps

I have been commissioned to write a book on the scientific enigma of Street Lamp Interference, in which people apparently affect street lamps as they walk, cycle or drive towards them, usually turning them off.

Although I have 200+ statements by people who claim this experience, I am keen to gather all the data I possibly can. If SLI has happened to you, or someone you know, I would be glad to hear from you.

Please provide as much information as you can, especially about the circumstances and your state of mind when it occurred. I would be glad to hear from people who have affected other appliances, from domestic lights to railway crossings. Also any comments or suggested explanations. Contact me on hilaryevans@btconnect.com or by mail to 11 Granville Park, London SE13 7DY.

Hilary Evans
London UK

CRYPTIC CROSSWORD SOLUTION



CODE BREAKERS SOLUTION

1. Solution

She believed in nothing; only her skepticism kept her from being an atheist.

Key: abcdefghijklmnopqrstuvwxyz
arentyouclvdbdfghijkmpqswxz

2. Solution

Melbourne, 12-14 March 2010: A plague of atheists!

Key: Caesar cipher, advance 3 places in a-z-0-9-a

3. Extra puzzler solution

All polar bears are left-handed, as any Inuit knows, so wait until the last moment and then, still facing the bear, jump to your left. The bear will still swipe with its left front paw, ie on the wrong side, so that you can then run away. Of course, this problem would then repeat itself; but a mathematician would be happy with this answer.

Are you skeptical?

Skeptics think critically where there is doubt.

The Skeptic promotes skepticism, reason, science, education, critical thinking and common sense.

Skeptics analyse claims.

The Skeptic investigates paranormal and pseudoscience beliefs and practices from a rational and scientific perspective.

Skeptics are open-minded.

But not so open that our brains fall out! An open mind is not an empty head.

Skeptics seek the evidence.

The Skeptic publishes findings that are sometimes humorous, often sobering and always fascinating.
An informative and factual resource for the public and media.

We invite you to subscribe to *The Skeptic*.

The Skeptic is published quarterly by Australian Skeptics Inc.
Complete and post or fax this form, phone us, or visit www.skeptics.com.au
Cheques, money orders and credit cards accepted.

Name:

Address:

Phone number(s):

Email:

Credit card details (*Visa or MasterCard only*)

Name on Card:

Card Number:/...../...../...../...../.....

Expiry date:/.....

Signature:

Please specify:

1 year subscription [] \$44.00

3 year subscription [] \$120.00

Overseas subscribers please add A\$15 per annum for surface mail, A\$25 for airmail.

Total enclosed: \$



Send to:

The Skeptic

PO Box 262

Roseville NSW 2069

Ph: 0432 713 195

Fax: (02) 8088 4735

email: orders@skeptics.com.au

Celebrating
AUSTRALIAN SKEPTICS
30TH ANNIVERSARY

In association with the
James Randi Educational Foundation

THE AMAZ!NG MEETING

comes to Sydney

TAM AUSTRALIA
AUSTRALIAN SKEPTICS
26TH ANNUAL CONVENTION
Sydney, Australia
November 26-28, 2010



More details soon www.skeptics.com.au