

the skeptic

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CIRCUMCISION MYTHS

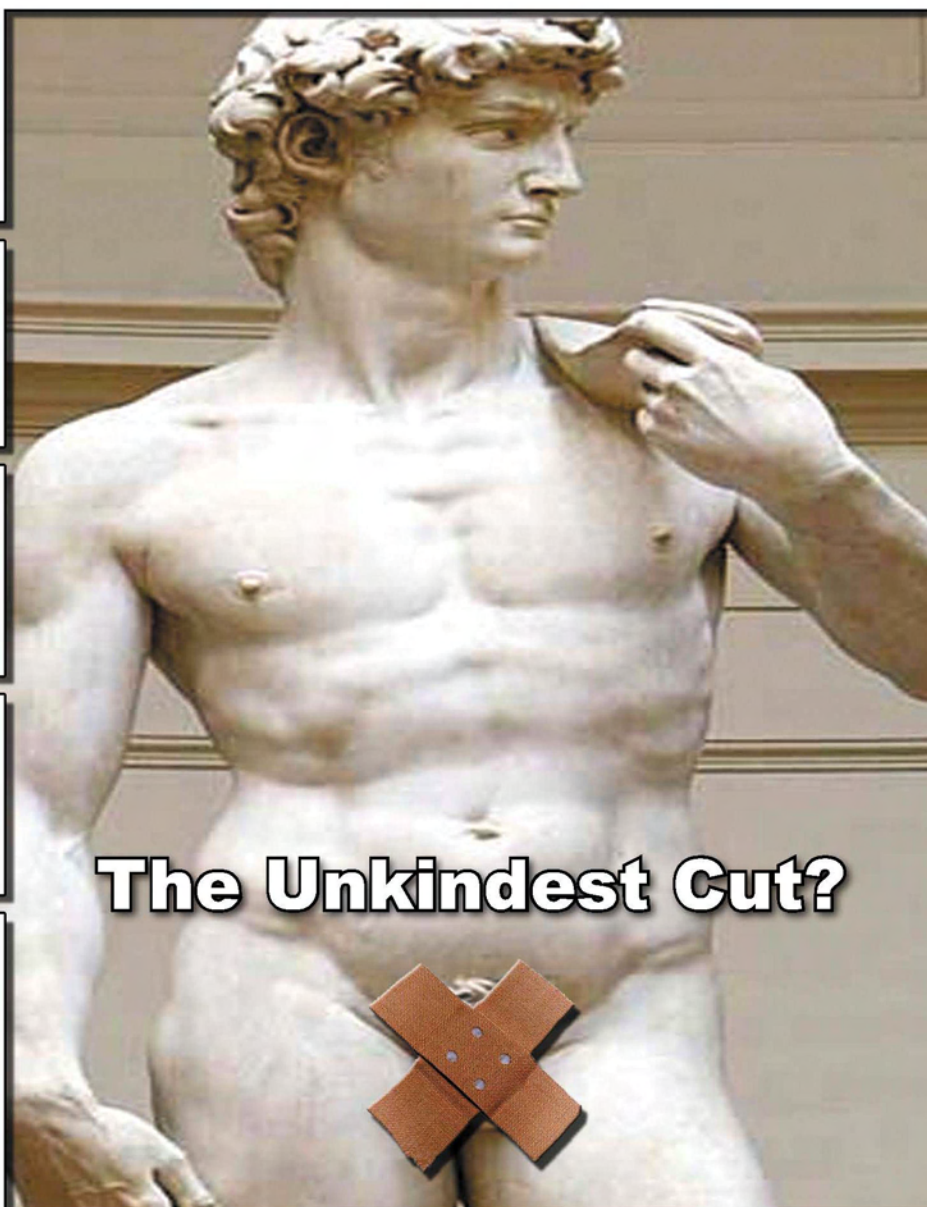
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OF MISINFORMATION**

**MARGARET COURT'S
WORD OF FAITH**

**A RESURRECTION
HOAX?**

**SPACE TRAVEL
FACT AND FICTION**

**HUNTING FOR THE
PARANORMAL IN
NEW ORLEANS**



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'God is Not Great: How religion poisons everything'

Australian Skeptics

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Editor

Barry Williams

Associate Editor

Karen Stollznow

Contributing Editors

Tim Mendham

Steve Roberts

Technology Consultants

Richard Saunders

Eran Segev

Chief Investigator

Ian Bryce

All correspondence to:

Australian Skeptics Inc

PO Box 268

Roseville NSW 2069

Australia

(ABN 90 613 095 379)

Contact Details

Tel: (02) 9417 2071

Fax: (02) 9417 7930

e-mails: skeptics@bdsn.com.au

editor@skeptics.com.au

Web Pages

Australian Skeptics

www.skeptics.com.au

No Answers in Genesis™

<http://home.austarnet.com.au/steat/default.htm>

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Editorial consultants:

Dr Stephen Basser (medicine)

Dr Trevor Case (psychology)

Dr Richard Gordon (medicine)

Dr Pete Griffith (biochemistry/microbiology)

Dr William Grey (philosophy)

Prof Colin Groves (anthropology)

Mr Martin Hadley (law)

Dr Colin Keay (astronomy)

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Dr Steve Roberts (chemistry)

Mr Roland Seidel (mathematics)

Branch correspondents:

ACT: Dr Pete Griffith

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Hunter: Dr Colin Keay

Qld: Mr Bob Bruce

SA: Mr Allan Lang

Tas: Mr Fred Thornett

Vic: Mr Ken Greatorex

WA: Dr Geoffrey Dean

The Importance of Skepticism

Sometimes I am tempted to conclude that the only normal people left in the world are those who subscribe to this journal. Take public debate on all sorts of important issues — do we hear public figures engaging in thoughtful discussion, with varying views being put and refuted? Not really; what we tend to encounter are people spitting clichés and vitriol at each other and all filtered through the prejudices of the news gatherers.

Then take entertainment, where the concepts of skill or talent have been replaced by the concept of celebrity, whatever that means. What are we supposed to be celebrating if not ability? And then there is education, where heated theoretical discussion revolves around one doctrine or another, leaving teachers and their charges bewildered and struggling with the fundamentals of language, maths and science. Reasoned thought seems to an abstraction to be held in very low regard by so many in our modern world.

But not in *the Skeptic*. In this issue we have a selection of excellent contributions on a variety of topics. Several of our writers have addressed the question of how we can advance the cause of Skepticism, no two of them are the same, but they all clearly show that their authors have invested a good deal of reasoned thought. We have been lucky over the years with the quality of the articles we attract from people with an wide range of skills, which

they are prepared to share with their fellow Skeptics. And all without losing their sense of humour.

Not all Skeptics take an active part in the organisation, nor should they be expected to. Among them are our many loyal subscribers who keep renewing their subscriptions every year, and who sometimes pen a note of appreciation for what *the Skeptic* means to them, for which we are very grateful. Not long ago I came across a box of the index cards on which, in pre-computer days, we used to keep membership records. Listing the members in 1985, there were around 400 of them and the astonishing thing is that 250 of them are still members. Given the effluxion of time and the fact that people tend to come to Skepticism later in life, that's a pretty impressive record.

Incidentally, at least partly due to a mention of Australian Skeptics in the index of Richard Dawkins' *The God Delusion*, and partly due to an unprecedented number of you taking out gift subscriptions, our numbers are now at the highest level ever.

Over the years I have got to know a lot of our subscribers, meeting many people at conventions and other functions and chatting to a lot more on the phone, which I always enjoy. But the chance of talking to every Skeptic is small, so let me relate a story of two long-time but unsung Skeptics named Stephen.

Stephen Robjohns lived near Adelaide and Stephen Rasmussen lived in Melbourne; both had been

subscribers for more than 15 years, and neither had ever attended any of our functions. Sadly, both of them died within the past year and both of them left substantial bequests to the Australian Skeptics Science and Education Foundation in their wills.

I had never had any contact with Stephen Robjohns apart from recording his annual subscription. I don't know what he did, although as he has always been shown in our records as 'retired', I suspect he was of advanced years. I spoke on the phone to Stephen Rasmussen a couple of times about orders he had placed for our books. Steve's was a very sad story. Diagnosed with leukaemia, part of his treatment had left him a paraplegic and confined to a wheelchair, though he continued to work as a manager of a computer components company. When we spoke, he told me that he loved the Skeptics and what we did, saying that being a Skeptic seemed to give an extra purpose to his life.

We are saddened at the passing of the two Stephens, very grateful for their generosity, and happy if anything we did contributed to their enjoyment of life.

And now an apology

In the first editorial I wrote as Editor, I celebrated the arrival of my first grandchild. It read:

An open letter to Nicholas Joyce, born May 2, 1990

At the moment you were born, the Solar System had a unique configuration. This fact is unlikely to have any effect on your future life. Your name contains a certain selection of letters. Apart from being a label you will wear for life, or at least until you decide you would prefer to be called something else, there is no hidden, esoteric significance in the letters which make up your name. You will live on a planet that is several billion years old and in a universe that is somewhat older. You are a member of the species homo sapiens and your distant ancestors were of different species. You are not the descendant of purpose-built humans who were designed to dominate our planet, nor are you the result of experiments by spacefaring

aliens. Your childhood ills will not be cured by quartz crystals, vibrations given off by coloured threads, or appeals to supernatural entities.

The world you will live in is a strange, complex place, full of contradictions. You will encounter superstition, fear, ideologies, hatred, dogmas and many other unpleasant things. You will also encounter knowledge, love, joy, beauty and lots and lots of people. I hope that you will be wary of superstition, fear, ideology, hatred and dogma, that you will seek out knowledge, love, joy and beauty and that you will be tolerant of people. I hope that you will be sceptical, because skepticism insulates, you from all those things which are the fruits of unreason. I will do everything I can to make it that way for you, and why not? That's what grandfathers are for.

That editorial brought me a measure of quite unexpected fame, as a number of other Skeptics and Humanist bodies around the world sought permission to reproduce it.

But this is not about what a clever bloke I am; it is to help explain why the last two issue of *the Skeptic* have been a little tardy in arriving. Nick grew up every bit as skeptical as I had hoped (including of anything I told him — but that's the nature of being 17). His parents decided that having a 6' 2" lad looming around the place and with brother Christopher heading for the same stratospheric heights, meant that the house we all share needed to be extended. And so it came to pass.

For seven long months we suffered having kitchen, dining room and laundry in what had previously been the kitchen, dust and rubble everywhere, unexpected losses of electricity and water and a plethora of tradesmen with all manner of esoteric skills, omnipresent. And that in a job that stayed on schedule. Last Friday, the last floor tile was sealed, and life has returned to normal.

So apologies for the delays, with an assurance that the next issue should be on track.

Barry Williams

Skeptics Around Australia

New South Wales

Australian Skeptics Inc
PO Box 268, Roseville NSW 2069
Tel: (02) 9417 2071 Fax: (02) 9417 7930
contact@skeptics.com.au

Hunter Skeptics

PO Box 166, Waratah NSW 2298
Tel: (02) 4957 8666. Fax: (02) 4952 6442

Victoria

Australian Skeptics (Vic) Inc
GPO Box 5166AA, Melbourne VIC 3001
Tel: 1 800 666 996
vic@skeptics.com.au

Borderline Skeptics

PO Box 17, Mitta Mitta VIC 3701
Tel: (02) 60723632
skeptics@wombatgully.com.au

Queensland

Queensland Skeptics Assn Inc
PO Box 6454, Fairfield Gardens QLD 4103
Tel (07) 3255 0499
qskeptic@uqnet.net.au

Gold Coast Skeptics

PO Box 8348, GCMC Bundall QLD 9726
Tel: (07) 5593 1882 Fax: (07) 5593 2776
lderrick@bigpond.net.au

ACT

Canberra Skeptics
PO Box 555, Civic Square ACT 2608
(02) 6231 5406 or 6296 4555
act@skeptics.com.au

South Australia

Skeptics SA
PO Box 377, Rundle Mall SA 5000
Tel: (08) 8272 5881
laurieeddie@adam.com.au

Western Australia

WA Skeptics
PO Box 431, Scarborough WA 6922
Tel: (08) 9448 8458
happs@istnet.net.au

Tasmania

Australian Skeptics in Tasmania
PO Box 582, North Hobart TAS 7002.
Tel: (03) 6234 4731
fredthornett@gmail.com

Darwin Skeptics Contact

Tel: 08 89274533
brer23@swiftdsl.com.au

Around the Traps

Some good news

A recently released UNICEF report, showing that around the world the annual deaths of children under 5 had declined to 9.7 million from a high of 13 million in 1990 is encouraging, although that number itself is still horrifying.

The report attributed the drop in childhood deaths largely to a range of common-sense measures which included immunisation programs, providing vitamin supplements, promoting the use of mosquito nets, and encouraging breast feeding.

The most significant reductions were brought about by concentrating on the prevention of two diseases, malaria and measles. The former was accomplished by the provision of mosquito nets, but it is the latter which is of particular interest to Skeptics. The implementation of immunisation programmes has led to a decrease of measles-related deaths by 60% world wide and by 75% in Sub-Saharan Africa. Despite these measures, saving 6-700,000 lives in the last year, around 239,000 children still died as a result of measles.

Remember those figures the next time you hear some vocal anti-immunisation proponent taking to the airwaves with specious claims that 'measles is only a minor childhood illness' or that 'immunisation doesn't save lives'.

Sites for skeptical eyes

Our Editor, Barry Williams, was invited recently to contribute a regular blog posting on matters skeptical and scientific to *The Australian Higher Education Supplement* site — not surprisingly, he was delighted to take up the offer. To date he has contributed columns on alternative medicine, astrology, psychic detectives and conspiracy theories, which have drawn thoughtful (and generally supportive) comments from readers around Australia and some from overseas.

There are several other blogs on the site (www.theaustralian.news.com.au/highereducation/), so the way to view them is to click on "Editor's Choice" and search to find the relevant one. Once you get there you will find a list of Barry's other blogs, all of which are still open for comments.

As it is quite rare for the mainstream media to take an interest in matters of interest to Skeptics, and as blogs are only maintained if they are attracting comments, we urge *Skeptic* readers to log on and add their thoughts on the issues raised.

And to show just what a 'media tart' Barry is, you can download an interview he did *In Conversation* with Robyn Williams broadcast on September 13 from: www.abc.net.au/rn/inconversation/default.htm

More sites

Our thanks to those who drew our attention to an excellent analysis of the "science" behind the current body of homeopathy research. It was made even more interesting because of the unexpected source. *Ars Technica: The art of technology* is a site that is usually concerned with computer and other IT subjects. You can read their report at:

arstechnica.com/articles/culture/the-pseudoscience-behind-homeopathy.ars/1

It reminds us of another seemingly unlikely source of good Skepticism, in *Popular Mechanics* thoughtful and expert rebuttal of many of the conspiracy claims surrounding the "9/11" attacks in the USA. See:

www.popularmechanics.com/technology/military_law/1227842.html

As Skeptics, we welcome them all to the cause of critical thinking. If you know of any other similar cases, please let us know.

Sad loss

It was sad to hear, on September 3, of the disappearance and presumed death of US aviator and adventurer Steve Fossett. Famous for setting many non-stop aviation and balloon-

ing records, and a friend of Skeptics patron, Dick Smith, he went missing in his aircraft while searching Nevada for a site suitable for an attempt on the world land speed record.

As would be expected, all the resources of Search and Rescue organisations were mobilised to find him, but at time of going to press, no sign of him or his aircraft has been found. This didn't stop various 'psychics' offering opinions about what had happened, nor the media from reporting their claims.

We can only imagine the added distress caused to Mr Fossett's relatives and friends by these attention-seeking individuals raising false hopes. Despite many unsubstantiated claims being made and TV producers basing programmes on such claims, we can find no evidence that *any* 'psychic' has ever provided *any* useful information leading to the finding of *any* missing person, or to the solution of *any* crime.

Crime and punishment

We have previously reported here on the imprisonment of cult leader, William Kamm, for sexual offences against a teenage girl. Kamm, 56, who is known by the title 'Little Pebble' among followers of his Nowra-based cult, the Order of Saint Charbel, has now been charged and convicted of a second similar offence.

Kamm, who claimed that he received messages directly from God and the Virgin Mary, and has also claimed he will be the last Pope, was found guilty of having regular sexual relations with a girl, beginning when she was 14 and continuing until she was 19, when she became pregnant and bore his child.

In sentencing Kamm, NSW District Court Judge, Peter Berman said he had abused his position as

the leader of his self-proclaimed cult to satisfy his own desires.

His current prison term was increased to 10 years, while his nonparole period was increased from 3.5 to 7.5 years.



NSW Skeptics Peter Bowditch, Eran Segev, Richard Saunders, John Sweatman and Barry Williams with Alejandro Borgo from Argentina (seated centre).

Welcome visitor

In mid-August, members of the NSW Branch had the great pleasure of meeting and dining with a Skeptic from Argentina. Alejandro Borgo is Director of the Center for Inquiry/ Argentina (www.cfiargentina.org), and Editor of the skeptical Spanish language magazine *Pensar* (www.pensar.org).

The meeting was most enlightening and entertaining, allowing us to discuss matters of skeptical interest in two very different societies. It came as no great surprise, though, that so many of those interests were common to both.

Alejandro Borgo, who is both a journalist and a musician, was in Sydney to perform with his tango orchestra, *Camerata Porteña*, at the Sydney Opera House.

More crime

And still on the legal front, it has been reported that six men, five from West Africa, have been arrested

in the Netherlands for an alleged Internet scam. They are accused of extorting money, including \$1.76 million from an Australian man.

We've all had these or similar offers from this type of scamster, and they have been running for at least 20 years. However, it is very difficult to feel sympathy for anyone who falls victim to what must easily be the most widely exposed scam of our times. And it is more difficult still when it is clear that, even if the offers of money were genuine, they would obviously be illegal within any jurisdiction.

The body politic

While *the Skeptic* has always resolutely, and correctly, maintained a non-partisan political stance, we are interested to note that, after years of seeing the emergence of overtly religious parties, a specifically named Secular Party has recently thrown its hat into the ring. Interested readers can find out about them from www.secular.org.au

Its on it's own...

... is precisely the sort of headline to provoke apoplexy among the apostles of appropriate punctuation who make up the British Apostrophe Protection Society (www.apostrophe.fsnet.co.uk).

We at *the Skeptic* propose that this is an organisation deserving of prosperity, and reject as preposterous the hypothesis posited by its opponents, that the apostrophe is no longer apposite. We predict that posterity will prove our proposition prophetic.

So there.

Bunyip

The Palm Reader of New Orleans

Down in New Orleans,
the land of dreams
(*Basin Street Blues*)

Jackson Square is a park of name-dropping proportions, located in the French Quarter of New Orleans, and 'protected' from the nearby Mississippi River by hillock-like levees. Along the park is the Cabildo, the site of the 1803 Louisiana Purchase, and the grand St Louis Cathedral, the oldest in the United States. From a distance, the view is faintly Disney, unlike the reputation.

The Cathedral features an enormous statue of Jesus Christ that casts an eerie rapturous shadow across the building at night. This 'night miracle' is apparently the most photographed scene in the area. Although the French Quarter was relatively unscathed by Hurricane Katrina, the long-suffering Jesus lost two fingers during the high winds. Jesus just keeps on sacrificing. According to folklore, He sacrificed His thumb and forefinger, single-handedly fending off the storm and redirecting the Hurricane before it hit the coastline.¹ Though Moses was clearly needed to part the sea...

"Before The Storm", a euphemistic, wistful phrase uttered often in New Orleans, Jackson Square was a bustling tourist zone and a thriving mecca for some 200 artists, musicians and mystics. However, the latter were not always welcome. In

2003 a Parish Ordinance (yes, 'Parish' is the Louisianan equivalent of 'County') forced the psychics, astrologers and palm readers out of Jackson Square. Ostensibly, this was a measure to return New Orleans to its former glory, a haven for art and

music. Rather than a display of skeptical zeal in this city of voodoo, hoodoo and juju, this was a fiscal ranking

for those who held permits and paid taxes. At this time, Jackson Square had 'deteriorated' into a hovel of homelessness, (Southern) decadence, filth and crime. The Ordinance was viewed as an elitist beautification campaign for the wealthy residents of the 'Beverly Hills on the Bayou'.

The Storm further depleted the 'street culture'. Only a handful of artists remain today. Of the 50-100 mystics that once plied their trade in front of the Cathedral, only about 5-10 have returned. Jerik Daenarson is one of these psychic stalwarts.

Jerik

'Jerik – House of Scorpio', as his sign proclaims, is the patriarch mystic of Jackson Square, and a palm reader with over 35 years experience. He operates his psychic stall, seven days a week from dusk 'til midnight. Payment is by donation. Known to all of the locals, Jerik came highly recommended by my hosts, as part of the Nawlins' experience (If

Jerik of Jackson Square

When you go to Jackson Square, you have to have a palm reading with Jerik!



Karen Stollznow, who has completed a doctorate in linguistics in the USA, (congratulations Dr S) is the Associate Editor of the Skeptic.

Check her site: www.bad-language.com

Nawlins isn't Strine, I don't know what is! But forget your high school French, the innovative pronunciation there is a wonderful example of linguistic evolution).

It was a Saturday night. The Bourbon Street crowds were rowdy enough to terrify the most belligerent contingent of drunken Aussie yobbos at an Oktoberfest. It wasn't Mardi Gras, but tourists hurled plastic beads at people from the hotels above, as intoxicated passers-by hurled back insults. The French Quarter is one of the few places in the US where drinking alcohol on the streets is permitted, as long as the drink is contained in a plastic cup. And so, the Quarter is crowded with tourists quaffing and spilling Hurricanes and Grenades.

I escaped to the renowned 24-hour Café du Monde, where the staple Café au Lait is blended with chicory (hearkening back to the blockade of the city during the Civil War, when the root was added to extend the coffee supplies). Their speciality is the lard-laden beignet, or 'French doughnut', a greasy instant-diabetes covered in an unfeasibly high mountain of icing sugar that carpets the floor of the café.

I arrived at the psychic promenade at 11pm. Sure enough, Jerik was there, resplendent in medieval jester-style garb. He was engaged in a group reading, but he paused and made eye contact, at which I nodded and he winked. The deal was sealed. At my turn, Jerik welcomed me like an old mate, and, in the way of those in the not-so Big Easy, he soon shared his Hurricane tale.

Jerik's psychic powers weren't sufficient to predict Katrina, "We'd been warned for many years, but we never thought it would actually happen". Jerik is a long-term resident of New Orleans, and was reluctant to evacuate during the non-calm before the storm. Like many others, he



Jackson Square

assumed that the city would weather "just another storm" in the turbulent climate.

Jerik described the storm as a fearsome vigil in a perpetual night of darkness and howling winds. The aftermath brought new horrors of



Casting a long shadow

hunger, thirst, isolation, crime, death and destruction. In the rioting, looting, junta-like state that followed, Jerik spent twelve days and nights in his "besieged city". He and his family were coerced to relocate temporarily to Knoxville, Tennessee. Others were forced out of their homes at gunpoint. Only a third of the former population have returned so far, and Jerik is one of those proud, resolute residents, infatuated with and forgiving of their hazardous home.

The reading

With his Southern charm and cultivated Californian accent, Jerik and I had a warm chinwag, as much as a palm reading. I was promised that my experience would not be a "Gypsy fortune telling", but would be a *bone fide* palm reading, backed by "good science" and his many years of expertise. Palmistry (also known as Chiromancy or Hand Analysis) is the practice of interpreting the markings on the hands, palms and wrist, and providing predictions about a person's past, present and future on the basis of those markings.

I need only speak to aid and abet a cold reading, but in his first 'miss', Jerik mistook me for being English. My mini-lecture on the not-so-subtle differences across Commonwealth accents provided him with some immediate and future fodder. "Show me the hand you write with. This is called your dominant hand." I presented my right palm, fingers straight out and thumb splayed out in isolation. "Your hand formation shows that you are a very dominant person." (I later attended a ghost tour in which my group made a pit stop by Jerik. He performed this very trick for the group, and this same 'hand formation' was presented as "Cantankerous. People see you as arrogant and argumentative. You're an

asshole!”). I resisted proving him right, and asked what other ‘hand formations’ might reveal. Apparently, resting the thumb straight alongside the hand would indicate a “team player”, while squishing the thumb onto the hand would suggest a “meek and mild” personality type.

Jerik lit up a cigarette and continued. Running a pen along my ‘heart line’, he told me that I am strong in personality, and strong in health. The heart line supposedly indicates literal and figurative issues related to the heart, ie, aspects of love and health. I am also kind, sympathetic and generous (in donating?). There was good news in the idiosyncratic creases of my hand; I will always have good relationships, and good mental health. It was all good.

The ‘Line of Head’ is supposedly indicative of the subject’s intelligence, talent and affluence. My ‘head line’ reveals that I am both creative and analytical. Apparently, I am an excellent communicator, and also a great listener. In an interpretation that was probably directly motivated by my spiel about pronunciation, I was told that I would make a great teacher or professor. I love to learn, and I love to share what I learn.

In a quick pre-judgement day, my ‘Fate Line’ revealed that I will have great success and fame in my career, there will be no major traumas or terrible events, and I will make a major relocation in my life (Really? Never!). I have a “high fertility rate” and will have 2 or 3 kids (which was a nice hedge bet on the 2.5 average).

My ‘life line’ is thin, deep and long, indicating that I will live well into my 80s. I overheard other subjects being told that they too would ‘live well into their 80s’. We live in an aging population, but this was too uncanny. This stock gem was further repeated by a few local friends who had visited Jerik (including one in his 60s, suffering a terminal illness).



Jerik in full flow

Was Jerik telling me what I wanted to hear, or did he truly have better vision than me in the dim light of the night? Anecdotally, Jerik’s reading contradicted two other palm readings that I have had previously (where I was respectively told that I would have 1. one child; and 2. that I would be childless).

Jerik’s reading was very formulaic and rehearsed, with many stock phrases and jargon that must keep the tourists convinced. The ‘psychic

code’, preventing the ‘disclosure’ of bad news, keeps the tourists happy (but who is to say a psychic can foretell bad news? Better to avoid than be inaccurate!). Overall, the reading was replete with generalisations, constituting a warm reading; and assumptions, constituting a cold reading.

Palmistry

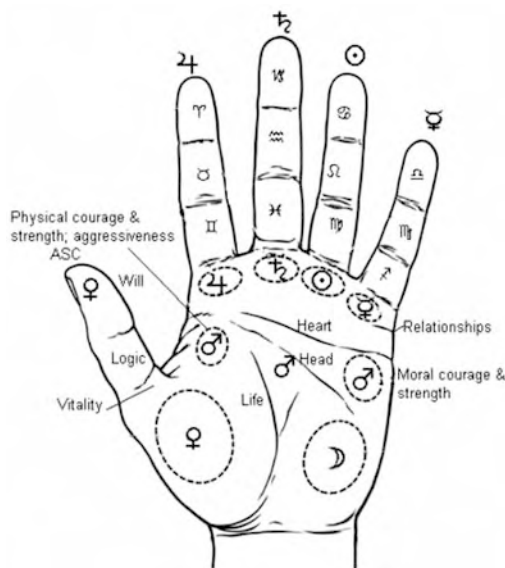
One website unwittingly admits that palmistry is a pseudo-scientific attempt at kinesics (the study of body movement, such as gestures), and therefore presents a cold reading:

A palmist usually greets their clients and watches to see how they use their hands.

*Do they shake, ring their hands, fidget or when they place them on the table do they lay flat or hold them close and tight fist at first? This can tell the palmist right away if their clients are shy, suspicious, or relaxed.*²

This was borne out by my own experience, when Jerik introduced Heather, his “apprentice”. I shook her hand prompting her comment, “I like a woman with a strong handshake.” Did my “strong handshake” influence Jerik’s portrayal of me as a “dominant” person? In addition, interpreting the shape and appearance of the fingers and nails, and the texture of the hands as soft or rough, is part of a cold reading, leading to assumptions about the background and personality of the subject. For example, the subject who indulges in manicures might be labelled ‘vain’, while the male subject with rough hands might be perceived as a tradesperson.

Some proponents believe that palmistry is more ‘scientific’ than other paranormal practices, such as a psychic reading. Palm reading certainly appears to have ‘structure’, in that specific markings are meant to be invariably indicative of specific traits and events. However, there is subjectivity and ambiguity in any palm reading. It



Palmistry: your life in your hand

is one person's subjective (often conflicting) interpretation of superficial features, using an unproven theory. Palmistry makes many obscure, irrelevant and untestable claims. For example, traditional palm reading contains elements of astrology, whereby different fingers and 'mounts' or bumps supposedly represent different planets. Whatever that means...

Using the shape, colours and appearance of the hand to identify personal characteristics is a form of physiognomy (ie, judging character based on superficial appearances). So, are the lines on our hands specific signs, or inconsequential, random markings? Some aspects of appearance are certainly indicators of physical health or disease, such as white markings on the fingernails that can suggest a zinc deficiency. However, one web site claims that palmistry has practical applications for medicine, and functions as a diagnostic tool. It is claimed that there is a correlation between specific hand patterns and finger ratios to conditions including ADHD, Autism, Dementia, Dyslexia, Schizophrenia and Depression.³ The site offers many links to genuine medical publications but these are irrelevant to palmistry, which is divination, not diagnosis. A book by John Manning further suggests that digit ratio can reveal such characteristics as homosexual inclinations, musical aptitude and sporting prowess.⁴

Duke University

During the reading and the tour, Jerik repeatedly spoke of a Duke University study in which he claims to have participated. The study reputedly revealed that two vivid lines below the hand, across the wrist, indicate that the subject is not predisposed to Parkinson's disease. I could not find any reference to this particular study, so I contacted Tim Strauman, Professor and Chair of the Department of Psychology and Neuroscience at Duke University, in Durham, North Carolina. I received the following reply to my enquiry:

I'm aware of no such study. At one time

there was a "research institute" called the Rhine Research Center at Duke (back in the 30s and 40s originally) that purported to study parapsychology. At some point Duke and the Rhine Institute parted ways, thankfully, but it may be that the story you heard originated from some Rhine study.

The Rhine Research Center (www.rhine.org/) still exists in Durham, but it is no longer connected with Duke University (although they make much of their former connection to the institution). During the 1930s, Joseph Rhine conducted experiments into ESP and other paranormal phenomena, using Zener cards and other paraphernalia. However, Rhine was later criticised for using poor experimental design and faulty statistical analysis.⁵ If Jerik referred to these early studies, it is impossible that he could have participated in them. It is plausible that such a study exists, perhaps through another department at Duke University or through the modern incarnation of the Rhine Research Center, but I could find no reference to this. In any case, the alleged study is again unrelated to the main aims of palmistry concerning personality, love, career and other social themes.

While there is no concrete or significant evidence to suggest that there is a connection between illness and hand markings, there is certainly no evidence to suggest that hand appearance is related to personality and can be used to predict future events. The lines on our hands are more likely creases formed by hand movement, rather than markings that predetermine our lives. Most palmists will admit that these lines change over the course of a lifetime, but this is often seized as an *ad hoc* hypothesis to explain the dynamic features of palmistry, to account for different readings over time. The site www.handanalysis.co.uk further claims that our lines are influenced by our behaviour:

Most prediction is based on the direction you are going in now. It is not set in stone — we all have free will to make

*choices and changes in our lives that will affect our future and alter our 'fate', and our lines will change accordingly.*⁶

The site goes on to make a revealing observation that we can extrapolate to the entire practice:

Some people have several "marriage lines" (these days we would say "relationship lines") but have never married or lived with anyone, or had only one marriage type relationship. Although many palmists still read these lines, (and sometimes get them right!), any prediction about children or marriage from the hand shouldn't be taken too seriously, as very often it is not accurate.

Indeed, palmistry itself shouldn't be taken too seriously.

Where does this leave Jerik? As part of the street culture, Jerik and his mystical cronies are important to the tradition of Jackson Square. These mystics are as New Orleans as gumbo, and probably as paranormal too.



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Acknowledgements

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Teaching Skepticism:

Does it Affect Paranormal Belief?

Martin Bridgstock's well-known skeptical course is assessed for its impact on student beliefs – and the results are astonishing!

Skeptics have long been concerned at the prevalence of paranormal beliefs. Polling in the USA shows that about 73% of the population has at least one paranormal belief (National Science Foundation 2006), while in Australia a *Reader's Digest* Poll shows that at least 80% of the population believes in ESP (*Reader's Digest* 2004).

The reasons for this concern are pretty obvious. If so many people have poorly-evidenced beliefs, then it is likely that at least some of them may take disastrous actions based upon them. These might include using worthless alternative medicines, paying large amounts of

money to 'psychics' or making bad decisions based on astrological forecasts. In addition, if so many people in the population believe in the paranormal, what does that say about the ability of our democratic system to sort out good from bad government policies?

Education is not a guaranteed answer to these concerns. Martin Bridgstock surveyed first year students several years ago. He found that paranormal belief among students was still high, though less than among the general public. About 57% of students held at least one paranormal belief (Bridgstock 2003).



Co-author Alisa Taylor is a postgraduate student at Griffith University. Co-author Martin Bridgstock is a Senior Lecturer at Griffith University, and was the 2006 winner of the Australian Skeptics' Prize for Critical Thinking.



Martin Bridgstock with his wife, Vicki at the 2006 Convention, where Martin was presented with the inaugural Australian Skeptics Prize for Critical Thinking

In response to this, Martin began a course at Griffith University, *Skepticism, Science and the Paranormal*. This course aims to give students the kind of intellectual tools needed to analyse paranormal claims (Bridgstock 2004). More generally, it introduces students to the idea of forming beliefs based on the evidence. The course has been a substantial success, growing from small numbers in 2003 to having over 100 students enrolled in 2007. Comments and feedback on the course have been overwhelmingly good.

A logical question to ask about courses of this kind is: do they have any effect? The main aim of Martin's course is not to change student beliefs: the aim is to give students the ability to evaluate evidence for paranormal claims, and to make up their own minds. Judged by this standard, it is clear that most — though not quite all — of the students do learn a good deal from the course. They can usually ask for evidence for paranormal beliefs, assess whether the evidence is enough to convince a reasonable person, and look for alternative,

natural explanations. However, it is clearly of interest to know what is happening to paranormal beliefs as well, so we carried out some surveys. Alisa Taylor's PhD is focused upon the value of education in affecting paranormal belief, and it was logical to look at Martin's course.

We must stress that these results are not conclusive. The statistics we report here are from a pilot survey, designed to uncover problems in both.

Although there were about 100 students on the course, the delay in starting meant that we did not obtain answers from all of them. In fact, we received completed forms from 48 students in week 5, and 65 at the end. We are determined to raise these figures in the proper survey next year.

The questionnaire had some general questions about the students' age and gender, and also asked about the students' general level of skepticism, and what aspects of the paranormal interested them most. Perhaps most important, the questionnaire also asked students to rate, on a five-point scale, how far

they believed or disbelieved in fifteen propositions about the paranormal. Mixed in among these items were four scientific theories: evolution, the big bang, continental drift and quantum theory.

Now clearly, because we did not receive replies from many of the students, and the pre-course and post-course respondents are rather different, it is possible that the results are invalid. On the other hand, as we shall see, many of them are so dramatic that we think they will be of interest to skeptics. In fact some of them astonished us!

First results

The first result we analysed was to do with student interest in the paranormal. We asked students what their area of greatest paranormal interest was, and then asked how strongly they believed in that aspect. Most students reported themselves interested in the following: UFOs and Extraterrestrial Life, Ghosts and Hauntings, Alternative Medicine, Telepathy, Parapsychology and Psychics¹.

Table 1a shows the percentages of

<p>Table 1a: Change in Belief in Paranormal Belief of Most Interest</p>	
Believe/Tend to Believe Before course	Believe/Tend to Believe After course
62.5% (30 out of 48)	30.8% (20 out of 65)
<p>Table 1b: Change in Proportion of students regarding themselves as skeptical, or tending to be skeptical</p>	
Skeptical/Tend to be Skeptical Before course	Skeptical/Tend to be Skeptical After course
70.8% (34 out of 48)	86.1% (56 out of 65)

1. The 48 students at the start mentioned a total of 69 paranormal items. The ones listed in the text received a

total of 43 mentions. The paranormal items at the end of the course were very similar.

Teaching Skepticism

students believing, or tending to believe in their chosen aspect of the paranormal, before and after the course. The results are quite dramatic. Out of the 48 students who completed the first questionnaire, 30 (or 62.5%) reported that they believed, or tended to believe in the paranormal item they had selected. After the course, of the 65 who responded, only 20 (or 30.8%) said that they believed or tended to believe. We applied a significance test to this result², and there appears to be less than one chance in a thousand that this is due to chance.

This result is quite staggering. It suggests that a few weeks of coursework can essentially halve

student paranormal beliefs, in the area which interests them the most. We stared in disbelief at this result for some time, and then went on to the next item. This concerned students' own assessments of how skeptical they were. Alisa expected that once students had been exposed to skeptical methods of thought, they would be far more likely to regard themselves as skeptical. Martin was more doubtful. He had noted that many paranormal believers regard themselves as skeptical, except that they have some strange beliefs which, they think, are supported by evidence.

As Table 1b shows, Alisa's theory is closer to the truth. There is a

change of about fifteen percent, with significantly more students regarding, or tending to regard, themselves as skeptical after the course. The effect is less marked than for the first question, perhaps because some believers previously regarded themselves as 'skeptical,' even though they clearly were not!

Changing beliefs

What about changes in specific paranormal beliefs? Table 2 shows the percentage decline in each paranormal belief, and also the probability that this could be due to chance. All of the paranormal beliefs experienced a decline in support, and for a majority these declines

Table 2:
Change in proportion of students believing or tending to believe in paranormal claims.

Paranormal Belief	% change	Significance Level (.05 is 5%)
Telepathy or communication between minds without using the traditional senses	-37.9%	0.00025
Psychic or spiritual healing	-28.3%	0.0010
Ghosts or spirits of dead people can come back in certain places and situations	-27.4%	0.0020
ESP or extrasensory perception	-26.7%	0.0020
That houses can be haunted	-25.5%	0.0056
Clairvoyance or the power of the mind to know the past and predict the future	-23.4%	0.0045
People can hear from or communicate mentally with someone who has died	-18.7%	0.010
UFO's are alien craft from another planet or star-system	-17.2%	0.027

Table 3:
Change in proportion of students believing or tending to believe in scientific theories.

Scientific Theory	Percentage Change	Significance level
Continental Drift – the continents have been moving for millions of years and will continue to move in the future	+4.9%	.29
Evolution – human beings as we know them today are descended from earlier species of animals	+8.4%	.22
The big bang – the universe began with a big explosion	+13.9%	.09
At its basic subatomic level the universe is probabilistic and can not be completely known	-3.1%	.45

2. We used Fisher's exact probability test. Conventionally, if a probability is below 5% it is counted as significant. Sometimes other probabilities are used, such as 1% or .1%.

3. Non-significant changes were found for: Channelling, Reincarnation, Witches, Atlantis, Aliens visiting us in the past, Creation and Astrology. All of these showed changes of less than 15%,

and all failed to reach the 5% significance level.

were statistically significant. Some of these declines were extremely large. For example, the decline in belief in telepathy was about 38%. In fact, the change was even more dramatic. In the first survey, nearly 44% of students said that they believed or tended to believe in telepathy. In the second, the proportion had shrivelled to less than 6% — just a handful of students.

Some of the other beliefs showed similar — and statistically significant — declines in belief: psychic or spiritual healing declined by over 28%, ghosts by over 27% and ESP by over 26%. Lower down the table, the declines in belief are less, and there were some where the changes did not reach statistical significance³.

There are two possible reasons for this. One is that, generally, fewer people hold these beliefs and so the declines cannot be as great. Another possible reason is that, for some people, paranormal beliefs are not casually held, but form a central part of their lives. These people will be much less likely to change their views as the result of a short course. Alisa remembers one student in her tutorial group. He was a strong paranormal believer, and sat stony-faced as the skeptical discussions raged around him. His entire demeanour said that he was not going to change his beliefs, and he didn't. For people like this, a few weeks of coursework are not going to make much difference.

What about beliefs in scientific theories? There were four scientific beliefs, and the changes in belief

appear in Table 3. For three of the four beliefs there are modest increases in the proportions who believe, or tend to believe in evolution, the big bang or continental drift, though none of these reach levels of statistical significance. The fourth scientific theory, a statement from quantum theory, experienced a slight decline in support, though this is so small as to be effectively zero.


We are reluctant to draw firm conclusions from these statistics on scientific beliefs. They do suggest that the descriptions of the working of science in the course may influence some students to treat scientific theories more seriously. As for the quantum statement, most of the students on the course are not scientists, and it may be that they do not recognise this as being scientific, as opposed to paranormal.

Conclusions.

We must stress that these results are in no way conclusive. They come from a pilot project, and are not at all proof against criticism. In addition, changing student beliefs was explicitly not the purpose of the course. The purpose was to enable students to think skeptically about the paranormal, and we are generally happy with the results of our efforts in this direction.

On the other hand, the survey does show some very dramatic changes in student beliefs. Students are less likely to believe in a whole range of paranormal propositions, especially those most of interest to them. They are also more likely to

regard themselves as skeptical after only a few weeks of coursework and discussion. There are also some — very faint — indications that the construction of the course may also lead students to take scientific findings more seriously.

Some American studies have indicated that skepticism toward the paranormal does increase as a result of courses of this kind, but then decreases over time (Gray 1987). We regard this as entirely possible. However, we are encouraged by the outcomes of this pilot survey, and look forward to having more conclusive results to report later. 

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Nominations are open for the 2007 Skeptics Prize for Critical Thinking

See: www.skeptics.com.au

Philosophy & Critical Thinking in High Schools

It's logical to teach philosophy and reason

"Well", said the parent to me somewhat incredulously, "what bloody use is studying philosophy to my kid? How does that pay the bills?" Fact is, of course, that it doesn't. At least, not by itself. What makes the study of philosophy so powerful is the ability of students to use the thinking skills they develop during their time in the subject in other areas — we might even optimistically say all areas — of their lives.

So to Queensland, and the home for a hundred years of a subject called *Philosophy and Reason* (formerly *Logic*). This is offered to high school students as part of their mainstream studies and typically draws them from backgrounds across the sciences, arts and humanities. Ask a school which department it falls under and they usually need to look it up (it's found in Maths or Humanities mostly).

It's worth noting that the name change is recent. It was hoped that the change from Logic would be less of a disincentive for schools and teachers to offer what was often incorrectly thought of as an esoteric, high level subject with a kind of mathsy feel. Now, it is the case that we do some meaty deductive logic with all kinds of symbols, of the type that those familiar with formal logic would recognise, and we didn't want to lose this rigor in the name change. The rather eclectic bunch of Logic teachers involved were very

keen on the title Critical Reasoning and Philosophy, but alas the powers that be in Education Queensland poo-pooed the acronym (so to speak). And so it was that Philosophy and Reason came into being. Happily, this, along with a few other initiatives, has resulted in a doubling of the number of schools offering the subject.

Course outline

So what do students learn and has it helped them? After all, most teachers of Maths, History or English would tell you with some force that their subjects already provide opportunities for developing high level critical thinking skills. To what end philosophy, then?

Let me outline the course very briefly. There are three strands: Deductive Logic, of which I have already spoken; Critical Thinking, involving a range of topics from how to construct and test hypotheses and how to build and break down arguments, to discerning uses of analogy and using inductive reasoning to solve problems; and finally, what most people think of as philosophy, things like the study of ethical, social and political theories as well as philosophy of mind, human nature and the like.

What makes this stuff useful is that it is in large part an exploration purely of the skills of rational thinking. Whereas other subjects do indeed promote the practice of



Peter Ellerton is the Head of Curriculum (Senior School) at Calamvale Community College, Qld
www.criticalthinking.net.au

thinking skills, and develop it very well with students who already have some degree of mastery, it is unusual to have the process set out to be so free of a particular content area. This is particularly true of the deductive logic and critical thinking components that take up at least two-thirds of the course.

So there is a point after all, but ...

...does it work?

Personally, the best definition I've heard of education is 'the ability to detect crap'. And this applies to students' own output. If students know what not to do and what to look out for, they have a much better chance of producing quality work. It's a kind of a 'clearing the way' approach. One of the units in the critical thinking part of the course is a section on recognising fallacies in reasoning, with a lovely assignment involving analysis of fallacies in the media.

Now, with the amount of advertising, commentary and opinion out there that fairly bursts with fallacious reasoning, students are like pigs in mud when let loose to root out examples for discussion in class. Not for them is the assumption that goose jelly is good for arthritis because it is 'natural'. Nor will they accept that Shane Warne should be listened to about anything he is advertising outside of how to make a ball do weird things in the air.

They recognise that the argument 'we've been doing it for a thousand years' is generally an argument for how little humans like to give up their beliefs, and, dearest to the hearts of most skeptics, they are acutely aware of the distinction between science and pseudoscience. In particular, our investigations into such topics as crop circles, natural medicines, psychics, faith healing, astrology, and — surely the nadir of faulty reasoning — creationism, have produced students annealed against, one hopes, future choices that may lead along these ruinous roads.

Combine all this with an understanding of the validity of reasoning in argumentation, the value of analogy and an ability to critically analyse hypotheses and yes, there is value here beyond the average subject choice of Maths, History, English and the like.

Feedback

Wow. That sounds good when the teacher talks about it. Do the students feel the same? Pretty much. We have a tight network of teachers of the subject in Queensland and we are continually getting the message from students who go on to study in areas such as pharmacy, journalism, law, science and political science (to name a very few) that, even with the diversity of these destinations, the study of critical thinking skills has been one of the most useful high school experiences upon which they can draw for their current work. Surprisingly few go on to study philosophy beyond a few subjects, but then again that might have something to do with our parent's opening comments....

This point was made by Alan Saunders on a recent interview with me on Radio National's *Philosopher's Zone*. Apart from university lecturing (and radio announcing) as a career, how do we sell this to students?

There is a surprisingly effective hook for subject selection evenings when parents, students and teachers come together, and indeed there are several barbs to this hook. One of these is the performance of philosophy students on the Queensland Core Skills (QCS) test, a common test taken by all Queensland students that are potentially university bound. Students in this subject group consistently outperform students in most other subject areas across all categories of the test, including short answer and written components.

Another advantage is that critical thinking skills obviously contribute to success in other subjects, making

the study of philosophy complementary in a way that the medicinal namesake utterly fails to deliver (not least of which because the study of philosophy, is quantitatively verified by numerous studies).

But the most effective strategy for students is telling them that we are not really interested in what they think, but are extremely interested in why they think it. We say the class will encourage argument, debate and discussion and we guarantee the right to be heard — the only catch being that you need to be able to justify your point. There really aren't many opportunities in a normal classroom to state, expand on and justify your opinion in the presence of others who are not only keen to hear, and pick faults in, your argument, but are keen to respond in kind.

The religion question

Do we deal with religion? Yes and no. Obviously a Dawkins style approach would have a few drawbacks to teenagers, including some sound parental correction no doubt, and it's never a good idea to launch into topics with ignorance of the audience's background, as one often has with regard to students' religious viewpoints. Rather, students are introduced to a series of logical arguments for and against the existence of god. These begin with simple ones such as the argument from design (yes, we do teach intelligent design in schools!) and go through to more sophisticated ones such as the cosmological argument (everything had a beginning so god must also have one) and the ontological argument so soundly dealt with by Kant.

Students happily find the logical errors in such arguments and greatly enjoy the logical inconsistencies of being simultaneously omnipresent, omniscient and omnipotent (and the associated problems of evil). Mine have even proved that their

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Forums for Skepticism

Posing a challenge to all skeptics

Reflections upon Andrew Mayne's *'Think Skeptically, Act Locally: 50 Things You Can do To Encourage Critical Thinking'*.

It's not enough to be noticed; it's not enough to simply have an audience. Paris Hilton has an audience. What we as skeptics need is empirical data showing the effectiveness of what we are doing. We don't want to make a big splash; we want to make a big difference.
Dr Mark Henn, University of New Hampshire.

Today, I still see fliers in my local chemist for homeopathy — a treatment questioned by *The Lancet* medical journal as no better than placebos.¹ My students attended a presentation during the recent Australian tour of Dr Richard Wiseman and queried me about 'what else is out there like this for us?' It concerns me that it was only this year that I discovered sciencewa.net.au — the Science mail-out site which aims to inform the public of events and lectures in my state. Yet there are still people who are not students, teachers, self-identifying skeptics or enthusiasts of the wonders of science; people in my local community who don't have the incentive to seek out such information to improve their knowledge of scientific concepts — is it simply solved by internet sites?

When I learned that out-of-body experiences were being touted as

evidence of the existence of god in my school's religious education class, I stopped believing. I stopped believing that the skeptics on various 'Skeptic' forum boards, that I eagerly frequented and even moderated for two years, were as impressive or resourceful as they once appeared to be. Although the 'big issues' were debated and we all talked about 'raising awareness' for skepticism, science, *et al*, the few practical gems became lost in the swathe of forum boards, blog posts and useful links that soon became overshadowed or 'bumped' out of existence by yet another flame war, gossip-fest or picture of a kitten.

In the end, I turned to researching and rereading articles that were in print, not html, and discovered that my desire for something more tangible had a precedent. How many of us recall Andrew Mayne's *Think Skeptically, Act Locally: 50 Things You Can do To Encourage Critical Thinking* from *Skeptic Magazine*, 2004?² I think it's time to revisit strategies like the ones he proposed.

The challenge

As a teacher from an all-girls' school, one particular issue concerned me the most: why aren't there more women interested in skepticism? Maybe because we're not addressing the grass roots situation of the average woman, let alone the average man, and really have little to no say in changing the academic



Kylie Sturgess, a teacher from Perth, won a Skeptics Prize for Critical Thinking in 2006

world. Could everyday persons still have influence in numbers, if they were better informed? Was there a way to perhaps contribute as a skeptic to reversing the trend of students avoiding science subjects in secondary and tertiary courses, which included students like my own? And was the internet really the best way to do it?

Why do people think science is dry? Perhaps because they don't know the avenues to find out more about it, especially if they're young people. Why do people claim we are in ivory towers? Why are skeptics mostly 'old white men'? Why are we considered 'elitist and humourless'? Could it be because underneath it all, we are? Or worse, that we reinforce that stereotype with our behaviour, acting publicly only as sneering nay-sayers or the development of "groupies for scientists" trend amongst young women claiming to be "skepchicks" (making me wonder if Ariel Levy — the author of *Female Chauvinist Pigs: Women and the Rise of Raunch Culture* — should be included on the next panel discussion at The Amazing Meeting)? For me, what humour there was on skeptics' forum boards became more about cutting the credulous down for egotistical satisfaction. It was even less funny when those who did it said they represented us all with that attitude and behaviour.

I thought that this was highly cynical of me until I started noticing that I was not alone. Ben Pile wrote in his article 'Debunking the Debunkers'³, of how;

... putting science and rationalism back on the map is going to take more than PR, angry rants about stupid religious people, or teaching kids that 'science is cool'. We don't need a police force to protect us from bad ideas. We just need better ideas.

This perspective that Pile puts forward indicates how we may undermine all our well-meaning efforts. Unless we start making a difference in our own neighbourhoods and show ourselves to be

caring, generous, thoughtful and proactive citizens of a real-world community. I admit, this seems to be forgotten at times amongst the flame-wars and scramble to be first with the off-the-cuff put-down, with even the most generous and intelligent contributors online.

Building platforms

I feel that the internet platforms for skeptics of different educational levels and interests and creation of places to discuss the issues never actually seemed to make much difference to more than a handful of people who were already calling themselves 'skeptical'. It comes across as just reinventing the wheel again and again at times. A paper presentation at the 2007 Amazing Meeting failed to convince attendees about how a 'popular' skeptical women's website really appealed to non-skeptics; leaving unanswered questions about funding, year-late promises of acquiring non-profit status and exactly how brash blogged opinions and nude calendars really tackled the issues they claimed to care about. Their bold front page, last updated over a year ago, said more than any proclamation of reaching a nebulous 'target audience'. It was this that led me to question again and move towards suggesting a solution rather than just criticising.

Maybe you feel that you don't have the skills to promote skepticism in public? I agree that just because someone is an accomplished researcher doesn't mean they're a good communicator too. Just because someone is a scientist doesn't mean they're a skeptic. We're not all book writers or professors at the podium.

But we don't change anything by being fantastic researchers and/or communicators on internet sites who mainly focus on associating with other skeptics and social activities that have no accountability in terms of what they really produce. No — not all of us are like this. But it concerns me that those who are,

appear the most active and the most easy to find online, especially if you're a member of the younger generation.

In short, it's not the 'I grew towards' stories that I want to hear but 'here's some things I did that changed a child's situation' that is kept for posterity for others to find with ease. Or better yet, 'here's how people in my street or my community learned something and dealt with a danger or a problem that had a pseudoscientific or paranormal basis' that won't get overshadowed by attention-seeking. Something that sets a better example than 'here's my abusive view of all people who adhere to this paranormal notion and here's my YouTube video of me cursing their beliefs'.

Making a difference

I would certainly like 'here are some real strategies and informed studies that I based upon significant experience and scholarship in the field!' The fact is, not all of us are going to be the last category. That doesn't mean we can't work towards that today — and if not for our own curriculum vitae, why not for the future careers for the children in our community?

These days I feel like saying to all proclaimed skeptics — give me ten ways that you can change what you see in your world and make accountable differences.

I began by looking at myself — here are mine.

1) Donate a book to a library

Instead of swapping books on a forum board amongst other skeptics or reviewing books by well-known skeptical authors and only talking about them with other skeptics — try donating books that particularly inspired you to think critically about 'weird things' to your local school or library. If we can start getting those skeptical books that are out of print back into circulation, they'll deliver royalties and raise their profile (especially when in a library). It can start to address the imbalance

caused by the overwhelming number of horoscope and new age texts in the 130 Dewey decimal section of the library. Dr Richard Wiseman's tour resulted in over ten new 'Quirkology' books in suburban libraries.

The tradition of 'Book-crossing' or leaving books with a message inside for people to 'read — register — release' may initially seem like a good idea for Carl Sagan's classic *Demon Haunted World* — but it really doesn't have an accountable result like knowing if it's being read or respected. We also have to consider the risk of having *The Demon-Haunted World* thrown in the bin by annoyed cleaners on the order of the management when you start sneaking them into hotel bedside tables. And what if fundamentalist groups retaliate in return with their own books?

2) Creative writing

There are quite a few groups of skeptics online who have creative writing groups. This could cater to adult readers of short stories but also to children and teenagers. Several authors I've already mentioned have written short stories aimed at children. Cross-curricular education programs can mean that issues and techniques from the Science classroom can be used in the Humanities. Get in touch with the publishers of those books to see how popular they are and cater to the much-needed niche likewise.

It would also help if people started writing for non-skeptic magazines, especially if you're a teenager yourself. Max Fagin from *Skeptical Briefs* wrote a fantastic article on 'Psychic versus Skeptical Predictions' for CSI⁴ — and at the time he was a high school senior.

Considering the number of pseudoscientific and paranormal features in the average teenage girl's magazine, it could be proposed that we're heading towards a crisis point. These young women are being urged to pay for dubious advice that is unchallenged by the publication and in fact promoted by it. This would be

an excellent project for a group to tackle, especially those who tout the 'skeptical women' banner.

3) Donate a DVD or a magazine

If you have a particularly well-loved skeptical book in mind, buy two copies and give one to a friend who has children and the other to a school library. Be willing to discuss it with the parents and any children, especially teenagers.

I notice that there are quite a few critical thinking books out there by authors like Philip Cam (who has written philosophical enquiry short stories based on the 'Philosophy for Children' model by Lipman and Sharp), Tim Yule, Joe Nickell, Bill Nye, Dr Karl Kruszelnicki, Dan Barker, as well as the new series of the Baloney Detection books. Give children your *Junior Skeptic* section of the *Skeptic* magazine, the CSIRO's *Helix* magazine or if they're older, a gift-subscription. Magazines traditionally grab the reader quickly and are more likely to be mentioned in conversations, which is why donating them to libraries or even doctor's offices should be encouraged. Let's challenge the homeopathic requests by making reflection start in the waiting room!

What is done with books can also be done with DVDs and films... every public, let alone school library should have a DVD loan section and if not, start one by donating some. In fact, why not start looking at how we can make short films for internet broadcast? The boom in pod-casting should encourage us to follow suit.

4) Write a letter to the editor

Many of these points already assume that you have money to spare on them and I apologise for that. The cost of a stamp or a click of an email is all that it takes to send one letter to an editor. Why not aim, on forum boards, to use the 'creative writing skills' that so many boast about, to start a real writer's club aimed at polishing draft letters to the editor on credulous issues?

Highlight at least three issues in the media each week and create a 'form letter' structure that could be tailored for anyone to forward on — just the basics for those who are unfamiliar with how to structure short, snappy letters that actually have a chance to be printed. Writing to the advertisers in regards to your support or distaste for the content that they are linked to is another aspect we should consider.

5) Write a letter to the producer/journalist

Letters to the editor can also be letters to the producer, the radio station, the journalist who wrote the article and your local council. If the adage that a letter counts for seven other people who didn't take the time to put pen to paper, imagine what seven letters that have additional personalisation upon a well-composed basic template from a group could mean to those who have the power to change the things? The replacement of *Catalyst* with *Psychic Investigators* at the end of 2006 on ABC TV was bad enough — now it appears that Foxtel stations are becoming more and more inundated with psychic shows, haunted house 'reality TV' (usually on the 'women's channel' W) and even promoting psychic lecture tours by the likes of John Edward.

I'm not just thinking about criticism of what credulous material that is sent out there — how often do we write to broadcasting companies or film producers to thank them for creating certain documentaries? Enough of a pressure group and enough letters of praise to the local paper for it being shown or encouraging new ones we've heard of like Richard Dawkins' *The Enemies of Reason* (as well as encouraging everyone to tune in) can only help in encouraging likewise action for future programming choices. Keep in mind that rather than dictating, it is about suggesting a wider range for everyone's benefit.

6) Produce a brochure

The New Zealand Skeptics group, on their website at www.skeptics.org.nz/ SK:RESOURCES:1001 have produced information flyers and brochures, not unlike those information leaflets that we get at chemist stores or are used to promote vitamin supplements or information on popular illnesses. I was personally delighted to see that the Australian Skeptic website followed suit, producing them under the heading of 'educational links'.

With a keen skeptical group collating and organising themselves, many topics could be produced and published, printed off by any skeptic and given as an addition to the stands at the chemist, the reading material at the doctor's office and the local community hall. Keep in mind that getting in touch with a church group can be an excellent start to caring about how many groups outside the skeptics suffer from the effects of the pseudoscientific — we have the example of Robert Lancaster's determined efforts with his 'StopKaz.com' site and how con-artist Kaz deMille-Jacobsen targeted religious communities world-wide for her own profit.

7) Write book reviews

Book reviews on skeptical sites are all fine — but unless you're already a skeptic, you're not likely to read them. Let's target Amazon.com and the other major book review sites to use our talents to intelligently target the problems with credulous textbooks and update and foreground some of the skeptical texts that do not often get considered by the casual browser. We can start bumping their profile by using the tactics that get popular search engines like 'Google' referring to those more reasoned reviews first, rather than a less critical one.

Shouldn't we also consider writing reasoned, researched and polite critiques of the popular credulous and pseudoscientific texts? E-

Skeptic has already dissected Anne Coulter's most recent book and that led me to think that perhaps other works by the likes of Browne, Edward, *et al* need fresh reviews that will lead potential buyers to recognise an alternative interpretation to the back-cover blurb. Providing these to a bookstore is a good strategy too, or a library review section.

Many publishing groups request reviewers and should want a wider range of people who would be interested in their books. Start using them in the local book clubs or write up "reader's guides" for ones that you think will be easily accessible for people in your community. Start up a community book club that specifically aims to use texts that will match well with what teenagers are studying in Science class and become not only a book club but an informal tutoring/discussion group. This way it would match up with something that's already relevant for young people's educational needs rather than a dictating attitude.

8) Run social events

If skeptics want to be seen as an authentic force for improving the communication of science, they have to provide something more than social events in venues where teenagers are not welcomed to listen. The tradition of the 'skeptic in the pub' is certainly proactive — yet limited. The opportunity to have a more open forum in a more publicly-accessible space where you can address a wider age range will knock criticisms that we are just sneering nay-sayers or a narcissistic coterie of scientists. Although the danger of a debating forum is that it is not where science and education on science happens, a proper lecture and opportunity to have discussions later is always a start. At least it's local networking too.

Contact your local university and ask if they host scientific speakers and get involved by helping out in any way you can, promoting with flyers, telling people about the lecture. Contact those same speak-

ers and see if they're interested in talking to high schools.

See if you can help in some way in promoting such speakers, not just during Science Week but Careers days; see if this coincides with aspects that are being taught in schools. Not just the Science department either; the English department, the Society studies, Mathematics department, Health studies and many other groups could benefit from hearing another side to what we are told about pseudoscientific claims in the media.

9) Get involved with a local school

Getting involved with a local school needn't be so hands on — you can contribute your mind. This year, the West Australian Skeptics' Award was run again, involving people judging high-school student reports on a paranormal or pseudoscientific claim. The WA Skeptics offered several Awards for what they saw as entries which showed excellent overall examples of clarity, organisation, survey skills or testing, critical thinking and thorough research. They gave honourable mentions to those who demonstrated much of the above and gave feedback both for the task and for the school/teacher. There may be many people who enter into a typical creative writing competition or submit a manuscript, gain no critical feedback and never try again. At least getting back something that reiterates the rules, tells more about what the organisation is looking for or provides some tips might improve the likelihood of another entry.

There is absolutely nothing stopping a community group in a bigger state, another country and with a larger population doing something the same. It's not just for the Science departments either — work could be done by any student by creating suitable templates for writing reports that takes in consideration their reading and writing ability. Contacting your State Science Teacher's association and getting their support and endorsement could be the beginning of a

great project that might even gain student credit in their science classrooms or even a pre-existing Science competition.

There is a similar plea for resources by the Queensland Studies Authority for their Philosophy and Reason course. With the new AS Critical Thinking course in the UK, they should also warrant our attention and support. See what your state's curriculum is like by contacting your local school and finding out what professional educational groups are looking for likewise. The whispers of a 'National Curriculum' should have us all writing in and encouraging a new 'Philosophy' or 'Critical Thinking' course across all the states — and contributing.

The time is well overdue for people to start thinking how they could be more proactive in promoting the benefits of the challenge by creating resources or contributing to young people's education on pseudoscientific claims.

10) Do your bit locally

Of course, money isn't the only factor that hinders us — many of us have jobs and commitments that are just as if not more important than contributing to the communication of critical thinking. Consider how you can tailor what you do every week and every month so you can do your part.


If you make an effort to help fundraise, why not use it to contribute to projects like those above that primarily target changes to your community? With work, you can cater your efforts to incorporate doing something that contributes to a scientific or skeptical project, even if it's just once a year. Look at what other local projects there are out there and how you can donate to something that will actually make an accountable difference to your everyday.

Of course, some of the best things people can do just involve creating ideas and being a support mechanism for those in a position to do

something with it. We don't further anything if we fail to respect the need to keep ourselves, our jobs and our families alive.

Even if it's a small thing that inspires you from going to a conference, take it beyond the forum boards and try contributing something to a real world community, not just an internet one. Although conferences can be loved for their social aspects and everyone can write pages and pages about 'why they became a skeptic' — try thinking about how to make others skeptical in your street. The best place to start is your own backyard as it's always going to be there when you log off.

I challenge you, not for a million dollars, but to show your own top ten list of 'things to do'. If you can't give me ten — then just five.

Then either do some of them or pass it onto some people who can make it a reality by inspiring them to use the resources they have. Because this is something everyone can do. 

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...Philosophy from p 17

pet gold fish is god. After all, an all-knowing, all-powerful creature need do nothing all day — why bother when you can do anything and know exactly what it would feel like to do it — exactly as a goldfish does, ergo....

Do we say god doesn't exist? No, but we point out the logical problems with these arguments and ideals. Same deal incidentally for logical arguments against the existence of god. They all fall down too. A discussion of the relative strengths and merits of such arguments may be carried out in a more private moment with the class. As we say, whatever is said in philosophy stays in philosophy.

Let's help each other

There are many other points that could be raised here, but I am not selling the course. I am far keener to promote the study of anything that will contribute to people's ability to think and reason well. I know we are far from alone with our work with philosophy in schools, with the Skeptics' own Kylie Sturgess, in WA and teachers in other states doing great things. I have built a web site (www.criticalthinking.net.au) for teachers of the subject, and of critical thinking in general, to help get a leg up in their own states and schools. The site could do with some support in terms of material and ideas, so I'm always keen to hear from potential helpers.

I'm always pleased by the comments of my past students who tell me how different the world is to them through a critical lens. Rather than taking the passion or fun out of life, they realise how empowering a critical education can be. We need to make such a realisation part of our national standards for students alongside the standards for numeracy and literacy. 

The Hobbit from the Isle of Flowers

Finding new branches
of the family tree



Colin Groves, Professor of Biological Anthropology at ANU is an original Member of Australian Skeptics

On October 28, 2004, people interested in human evolution were in for a bit of a shock. The announcement that the remains of a tiny little humanlike creature, only 14,000 years old, had been found in a cave called Liang Bua on the island of Flores, Indonesia, burst upon an unsuspecting world. Not only were many people not ready for it — but many people did not believe it either.

The discoverers were Mike Morwood, of the Department of Archaeology and Palaeo-anthropology in the University of New England in Armidale, Thomas Sutikna, of the Indonesian Centre for Archaeology in Jakarta, and teams led by them. The detailed description of the remains was the work of Mike Morwood's colleague Peter Brown, well-known for his earlier work on the human fossils from Australia and China. He has a notable website called *Peter Brown's Australian and Asian Palaeo-anthropology*.

The evidence consisted of a “partial” (pretty complete, actually) adult skeleton, LB1 (LB standing for Liang Bua), plus the isolated lower premolar of a second individual, LB 2. LB1 was found in a very deep excavation, nearly 6 metres down, dated to approximately 18,000 BP; the isolated tooth, LB 2, was much older. The tiny species— LB1 represented an individual only 1 metre high — was dubbed *Homo floresiensis*, and, this being the age of Peter Jackson, all over the world

people seemed to invent the same nickname for it — the Hobbit.

The story of human evolution

The story of human evolution has been becoming increasingly complicated over the past 20 years or so. Until then, many people assumed an almost straight line of descent: *Australopithecus afarensis*—*Australopithecus africanus*—*Homo habilis*—*Homo erectus*—*Homo sapiens*. There were two major divergences from this. First: somewhere around about the *Australopithecus africanus* stage, say about 2 million years ago, a massive vegetarian group, *Paranthropus* (sometimes called the “robust australopithecines”), branched off and went its own way until it became extinct about one million years ago. Secondly: a couple of hundred thousand years ago, the famous Neanderthal species, *Homo neanderthalensis*, branched off, though not everybody agreed with this (and some people, a very few, still believe that the Neanderthals were just early European/Middle Eastern representatives of *Homo sapiens*).

But through the 1990s and the early 2000s, new discoveries more and more favoured a view which previously had been a minority one: that human evolution had involved lots of “speciation events” (new species arising), extinctions, ancestral species persisting alongside their descendants, and cases of some

species surviving little changed for long periods of time. This view, dubbed “a bush not a ladder” by the late Stephen Jay Gould, makes human evolution much more like that of other species whose evolution over the past 6 million years or so is well-known: elephants, African pigs, antelopes and so on.

Homo habilis is first known from remains in Ethiopia that are 2.3 million years old, though the exact species of *Australopithecus* it evolved from is still unclear. At about 2 million years ago, perhaps a little more, it gave rise to *Homo ergaster*, and the two lived apparently side-by-side until about 1.4 million. Meanwhile, descendants of *Homo ergaster* spread out of Africa (remains of some of them have been found at Dmanisi, in Georgia), and ended up as the well-known species *Homo erectus* in Java; with its thick angular skull and massive brow ridges, *Homo erectus* survived virtually unchanged (just its brain was somewhat larger) in Java until very late — controversial, but perhaps as little as 30,000 years ago — and was certainly not ancestral to *Homo sapiens*.

Meanwhile, back at the ranch, *Homo ergaster* evolved into this and that, some descendants remaining in Africa and some dispersing out of it, and eventually evolved into Us, in Africa, between about 250,000 and 150,000 years ago. Our Neanderthal cousins separated from our ancestors perhaps as much as half a million years ago, and survived till about 30,000 years ago. Like *Homo erectus*, the Neanderthals were a regionally restricted species; Neanderthals were restricted to Europe and western Asia as far east as Uzbekistan, and when the ancestors of modern European *Homo sapiens* entered Europe from the Southeast 40,000 years ago, and moved slowly but inexorably westward, the Neanderthals crumbled before them.

End of the Neanderthals

Why? We don't know. Presumably an accident of history had provided our

ancestors with some cultural equipment that the Neanderthals did not have.

As far as we knew in early 2004, the Old World at 30,000 years ago was inhabited mostly by our own species, *Homo sapiens*. A few Neanderthals were holding out in Spain, and perhaps a population of *Homo erectus* was hanging on in Java. Even outside the Old World, *Homo sapiens* were establishing themselves: they were in Australia and probably New Guinea by about 50,000 years ago. (Not yet in the Americas or in the Pacific, but that would come). At 30,000 years ago, and until as late as 12,000 years ago, sea levels were low, and the islands of Sumatra, Java, Borneo and Bali — known as Sundaland — were joined to the Southeast Asian landmass, but being largely rain forested they might have been habitable by humans only around the edges. So it may well be that *Homo sapiens* spread around the northern edge of Sundaland and island-hopped across to New Guinea and then down across another land-bridge to Australia, and did not reach Java and discover the *Homo erectus* holdouts until later.

A sudden change

And now suddenly, at the end of 2004, we learned of another species that had shared the world with us even after the last Neanderthals and the last *Homo erectus* had gone. Perhaps, Peter Brown and his colleagues argued, *Homo floresiensis* was the descendant of these last *Homo erectus*, which had moved a few islands along to the east: it had a receding forehead and receding chin, and made stone tools, like *Homo erectus*, but had smaller body size, smaller brain, smaller brow ridges, and strangely short legs compared with its arms. When large mammals get cut off on smallish islands, they do tend to get reduced in size — insular dwarfing, it is called; and indeed the remains of a dwarfed *Stegodon*, an elephant-like creature, were found in the same deposits as the Hobbit. But — so late in time! — could it be possible?

Denial

No, came a chorus from Indonesia, from Australia, from America, from Britain, from Israel. The “deniers” had arrived.

Most of the deniers argued that LB1 was an ordinary modern human, afflicted with microcephaly. This is a condition which occurs sporadically, fortunately rarely, in modern populations, in which the brain is underdeveloped. Modern human brains — strictly speaking, the volume inside the brain case (ECV, endocranial volume) — vary in perfectly normal people from about 1200 to 1700 cc, and a few individuals can be even smaller or larger than this; a person is called microcephalic whose brain is under 700 cc, and people with under 400 cc have been recorded, but extremely rarely. Mostly, these people are also small in stature. The ECV of the Hobbit was around 400 cc, and its stature was about 1 metre — what more could one ask for?

It was more elaborate than this, of course. The first detailed analysis, claiming that the Hobbit was no more than a microcephalic dwarf, appeared in a paper led by Indonesia's leading palaeoanthropologist, Professor Teuku Jacob, in 2006, and including Australian, American and Chinese co-authors. They made a number of points:

- there is a people called the Rampasasa, who tend to be small in size, living in Flores today, not too far from Liang Bua;
- some of these Rampasasa people have receding chins;
- LB1 has a very asymmetrical skull, as would be expected in a person with a pathological condition, rather than a healthy person;
- and so on.

The other paper seriously disputing that *Homo floresiensis* was a new species was by Professor Robert Martin, of the Field Museum of Natural History in Chicago, and an Anglo-American team led by him. Bob Martin's particular speciality is allometry, meaning relative growth.

Consider: a child is not just a small adult — the body proportions, and the proportions of the head and face, are different, and change to the adult proportions during growth. In the same way, when body size increases or decreases during evolution, proportions change as well. Brains, for example, are relatively larger in small species, and proportionately smaller in large species; relative to their body size, mice have larger brains than rats, and cats have larger brains than lions.

Martin and his colleagues argued that, if the Hobbit were, as the describers had suggested, a dwarfed descendant of *Homo erectus*, then its brain would be much bigger than it is. They concluded that it was therefore not normal, but pathological — a microcephalic, just as Jacob and his colleagues had argued. Their paper contained another criticism, too. Previously, a study by the brain evolution expert Dean Falk had compared an endocast (a cast of the inside of the brain case, approximately representing the shape of the brain itself) of the Hobbit with that of a modern microcephalic, showing that they were totally different, but one of Martin's team managed to track down the identity of the particular microcephalic individual from whose skull Falk had taken that endocast: a microcephalic boy who was only 10 years old at death (a German boy named Jacob Moegele, who died in the mid-19th-century).

A few other papers appeared questioning that the Hobbit was anything but a microcephalic dwarf modern human being. None of them really did much more than say "there is this syndrome, there is this hormone deficiency, it might have

been this way if you extrapolate this condition...", but it was Jacob *et al.* and Martin *et al.* who had offered actual details.

The fight-back

So it wasn't looking good for *Homo floresiensis*. Or was it? Lost among all this sea of denial had been an announcement by Morwood and his colleagues, in October 2005 — just one year after the initial announcement of LB1 and the isolated tooth, LB 2 — of more specimens from

and tibia (shin bone). LB 5 was a couple of small bones of an adult. LB 7 was a tiny, but adult, bone from the thumb; LB 8 was another shin bone; LB 9 was a femur (thighbone). But the real clincher was LB 6, represented by several hand bones, a scapula (shoulder blade) and a mandible.

And the LB6 mandible was exactly like the mandible of LB1. Jacob *et al.* had implied that, if you have a receding chin, you are like *Homo erectus* or one of the other

primitive species of the human lineage. But it is not like that at all. First, all modern people have a bony chin of a certain structure: there is a strong ridge running along the lower margin of the jaw, and there is a weaker ridge running down the midline to meet it; this has been called the Inverted T structure. However receding your chin may be, you have this structure. Secondly, earlier members of the human lineage, like *Homo erectus* or *Homo habilis* or the australopithecines, lacked this external buttressing but had an internal buttressing system: a large backwardly-projecting lump, called the Inferior Transverse Torus, at the lower margin, and usually a smaller one, the Superior Transverse Torus, above it (the two tori are separated by a depression where the tongue muscles insert). Both LB1 and LB 6 have these tori, and neither of them has the Inverted T. This alone puts them way outside the range of mod-

ern humanity.

But there was something else about these new finds from Liang Bua. LB 4 came from a higher level in the cave than LB1 — it was only 12,000 years old. Most of the other new specimens were from lower



Two views of the skull of LB1, the type specimen of *Homo floresiensis*
Photos: Debbie Argue

Liang Bua. More parts of LB1 had been discovered, making the skeleton almost complete; and remains of other individuals had been discovered. LB 3 was a tiny ulna (forearm bone). LB 4 was a child represented by a radius (the other forearm bone)

down, going back to a level dated between 74 and 95,000 years ago. They were all tiny — in fact LB1 was the largest of them! Over a period of more than 60,000 years, did only dwarfs — let's face it, micro-dwarfs, Tom Thumbs — happen to come into the cave and die there? That seems to strain credulity. It looks to me very like a species peculiar to Flores, which lived there over quite a long period. *Homo floresiensis*, in fact.

Other criticism

What about those other criticisms? What about the asymmetry of the skull of LB1? Jacob's colleagues had simply ignored the fact that the skull was damaged, partly at the time of excavation. The left orbit (eye socket) was partly shorn away, making it look rounded, not angular like the right orbit; and the right cheek bone was partly caved in. Of course the skull is asymmetrical! That is not to say that there was not some pathology: there were tiny little pores on the braincase, a condition known as porotic hyperostosis, a sign of mild anaemia, and actually quite common even in apparently healthy people. But not gross deformity!

And what about the microcephalic brain, used for comparison to that of LB1, being that of a 10-year-old boy? True; but at age 10, the human brain has achieved 95% of its full growth! Dean Falk returned to the question in a paper early in 2007; she and her colleagues had now found nine more microcephalic skulls and made endocasts... and they were all like Jacob Moegele. LB1, on the other hand, was very like a tiny, but normal, human brain — like a tiny *Homo sapiens* or *Homo erectus*.

What of Bob Martin's demonstration that, with a brain of that size, the Hobbit was most unlikely to be a dwarfed *Homo erectus*? This is perfectly correct, but is it germane? When the second announcement (Morwood *et al.*, 2005) of new discoveries was made, Peter Brown and co. put forward a new hypothesis, which

they considered preferable to the one which they had at first proposed. They now suggested that *Homo floresiensis*, rather than being a dwarfed descendant of *Homo erectus*, was a direct descendant of a more primitive species, perhaps *Homo habilis*, which had spread its range outside Africa before the ancestors of *Homo erectus* did the same thing.

Full assessment

Late 2006 also saw the publication of the first full assessment of *Homo floresiensis* which was not one of the "deniers". This paper was led by Debbie Argue, and it was a real clincher, though I must admit to some slight bias here, because I was one of the co-authors. We went over what is known about microcephaly, and showed that in abundant ways LB1 is well outside the range of individuals with this condition; and we assessed the actual evolutionary position of *Homo floresiensis*, concluding that Peter Brown, Mike Morwood and colleagues were right second time: it is closest to *Homo habilis*, representing a much more primitive condition than *Homo erectus*. The implications of this are profound. The earliest spread of members of the human lineage out of Africa must have been before the generally acknowledged one that resulted in *Homo erectus*. Somewhat before 2 million years ago perhaps.

It is common these days for journals to issue advance online versions of papers that they are going to publish properly in a future issue, especially in the case of papers that they feel are likely to make a splash. Presumably they smell publicity, and hope that they may get more subscribers. Whatever. The Argue *et al.* paper was placed on the *Journal of Human Evolution* website well before it was officially published, and even before the proofs had been sent to us for correction!

And so it was seen by Bob Martin and his colleagues, who were obviously distinctly embarrassed because they had shown in great detail why LB1 could not have been a

dwarfed descendant of *Homo erectus* — and here were we saying that its ancestry was not that at all, and everything they had written was irrelevant! They mentioned our paper mainly on their last two pages, refuting it rather hurriedly with the words "the complete lack of documentation of such a lineage in the fossil record represents a major problem". Which of course it is not; *Homo erectus* left its remains in Java from at least 1 million years ago, and must have come ultimately from Africa, but there is no trace of anything between Africa and Java, the fossil record of the intervening areas is too poor. Only in Java itself is the fossil record reasonable, although even here in the earlier levels there are mostly jaws and teeth (the magnificent skulls of "Java Man" date from higher levels, round about a million years ago), and some of these have been suggested, from time to time, to be something other than *Homo erectus*. Perhaps *Homo floresiensis* has an ancestor, so far undetected, among these early scrappy specimens from Java?

Latest findings

What has happened since then? Well, we know of another paper that is in the pipeline — it has been awarded "advance online publication", like Argue *et al.* was — by the American functional anatomists Susan Larsen and Bill Jungers, showing how primitive the postcranial skeleton of *Homo floresiensis* really is. Each time something like this happens, I think "surely, this must now silence the deniers". I thought it when Dean Falk published her first study of the brain cast, then when she published her second. I thought it when the discovery of LB 3, 4, 5, 6, 7, 8 and 9 was announced, giving *Homo floresiensis* such a time span. I thought it when the world was given a look at the new mandible, LB 6, and saw how similar it was to that of LB1. I thought it when Debbie Argue led our team in its detailed analysis. When the Larsen/Jungers "not-

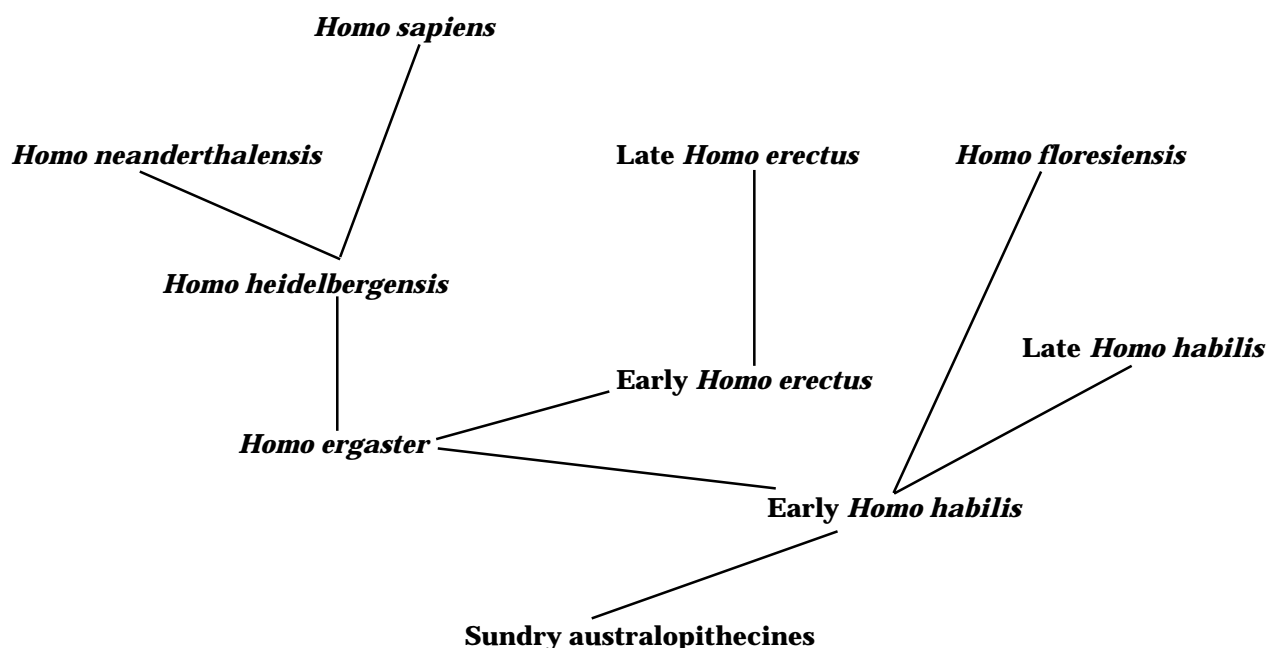
really-published" paper appeared online, I thought it again. I am sure I am wrong. Like creationists, the Hobbit-deniers will keep coming back for more.

Now, of course, all these people pro and con are not just names at the top of publications, they are real people with their own motivations, straightforward or devious, and their own barrows to push. You can read between the lines of a scientific paper, but you have to know something about the people involved even to guess at what is behind it all: whose feathers were ruffled, who had fallen out with whom, who was intent on justifying some previously held position. Over the past five or 10 years, there has been a spate of, shall we say, candid books on the personalities of palaeoanthropology, and following in this tradition, Mike Morwood, with the aid of Penny Van Oosterzee, has now published his unvarnished account of what happened in a book. And a really great read it is too.



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A quick-and-dirty view of the later stages of human evolution

Circumcision Myths

Questioning a common cultural practice



David Vernon is a freelance writer. Based in Canberra, he writes about science, parenting, health and history. His books include an anthology of birth stories told by men, *Men at Birth* and the just-released *With Women: Midwives Experiences*.
web.mac.com/david.vernon
Email: dvbooks@mac.com

What would you do if I told you that I was going to have my newborn daughter's ears pierced at the ripe old age of eight days? How would you feel if I had a nasal ring torn through the septum in my baby's nose because I have a nose ring? Would you blanch if I told you that I had a small but intricate pattern tattooed on my baby son's penis without anaesthetic because these days it seems to be fashionable?

I assume that you would report me to the police for child abuse. But if I told you that my son was being circumcised, you might frown, but you wouldn't report me to the police, would you? Why not? What is it about circumcision that is acceptable in our society (if considered a bit peculiar) but piercing my baby is completely unacceptable? Surely both are forms of mutilation; although varying in severity. Circumcision is permanent mutilation whilst piercing can be reversed.

In Australia, between ten and twenty percent of baby boys are circumcised¹. The rates in other Western countries vary widely, with sixty percent of American boys being circumcised, thirty percent in Canada, six percent in the United Kingdom (rates fell dramatically when it could no longer be claimed free on the National Health Service) and less than two percent in Scandinavia (with it being found by a court to be illegal in Finland in 2006²).

There are many reasons given by parents for circumcising baby boys. This article considers the reasons given and examines whether the claims made stand up to scrutiny or whether they are simply myths.

A circumcised penis is easier to keep clean

I'm the father of two young boys. My partner and I have managed to teach them to wash their hands after going to the toilet. It wasn't difficult. They even wash their hands without my asking before meals. We've also taught them to brush their teeth before school and after dinner. It hasn't taken any effort to teach them to wash their penis. My bet is that once their foreskin starts to retract, they'll be more than happy to practise pulling it back to wash! Teaching boys to wash their penises is nothing more difficult than teaching them basic hygiene. Why don't we surgically remove fingernails? Then dirt wouldn't get under them and we wouldn't have to clean our nails!

There seem to be two origins to this notion that uncircumcised penises are unclean. The first is the generally held view that circumcision originated in the Middle East because of all the sand and dust. The argument made is that sand lodges under the foreskin and causes irritation and infection. This is a fallacy. This idea was laid to rest by Robert Darby in an article in the *New Zealand Medical Journal*, "The

Riddle of the Sands: circumcision, history and myth" (July 2005) where he analysed the medical records of Allied Troops in the Middle East during both World Wars. His findings were that there was no increase in any infection of the penis caused by the rigorous conditions of the deserts of the Middle East, despite the vast majority of troops being uncircumcised. As the owner of an uncircumcised penis, my mind boggles at the thought of how you'd get sand under the prepuce. What were those soldiers doing?

A little further thought indicates that it is bizarre to consider that the Jewish and Islamic practice of circumcision was based on hygiene. Cutting off the foreskin with a semi-sharp stone or knife, and bandaging the resultant wound with unsterilized material is the best possible way to injure, maim or kill a baby. One concern that the World Health Organization has raised with its proposal that men in Sub-Saharan Africa should be circumcised (see below) is that the act of circumcision itself (through the use of unsterilized implements) can lead to the transmission of HIV. Circumcision would not have arisen for hygiene purposes.

The second reason that people believe that a circumcised penis is cleaner than an uncircumcised one is the existence of some evidence showing that uncircumcised men have higher rates of infections of the penis than those who are circumcised. In all cases (except where the man has a reaction to soap) these infections could be avoided with some basic cleanliness. There is little doubt that a study of gastro-intestinal upsets would show that those who wash their hands have fewer stomach upsets than those who don't wash their hands. The answer to the hygiene issue is simple — wash your penis!

I also hazard to suggest that a boy, who has a regular habit of washing his penis, is going to be considerably more alert to the issue of sexual health when he gets older, than one who hasn't needed to think about it.

I'm Jewish so I'm required to circumcise my baby boy

Under Jewish law in the Tanakh or Hebrew Bible, the necessity for circumcision arises from *Genesis* 17:1-14:

God [then] said to Abraham, 'As far as you are concerned, you must keep My covenant — you and your offspring throughout their generations. This is My covenant between Me, and between you and your offspring that you must keep: You must circumcise every male. You shall be circumcised through the flesh of your foreskin. This shall be the mark of the covenant between Me and you. Throughout all generations, every male shall be circumcised when he is eight days old. [This shall include] those born in your house, as well as [slaves] bought with cash from an outsider, who is not your descendant. [All slaves,] both houseborn and purchased with your money must be circumcised. This shall be My covenant in your flesh, an eternal covenant. The uncircumcised male whose foreskin has not been circumcised, shall have his soul cut off from his people; he has broken My covenant.

Further, *Leviticus* 12:3 states "on the eighth day, the [boys'] foreskin will be circumcised". Jews believe that failure to do circumcision will lead to karet, or excision from being one of God's people, as stated in *Genesis*. Indeed, circumcision is so much a part of Judaism that grown men, if they convert to Judaism, must be circumcised.

The fallacy of relying on *Genesis* or *Leviticus* for guidance on the importance of circumcision is that so much of the *Tanakh* is ignored by modern Jews already. So why stick with circumcision? A few examples of ignored laws:

Leviticus 5:1-10 If you commit a sin then you can expurgate your sin by sacrificing a goat by gouging it through its neck. If you can't afford a goat then two turtle doves are okay.

Levi 20:13 Gay men must be stoned to death.

Lev 25:44 Slavery is perfectly acceptable.

Lev 25:46 Any slave you own is hereditary property that you can happily pass onto your children when you die.

Deuteronomy 21:1-29 If you find a dead human body on your land then you must decapitate a female calf and wash your hands in its blood over a swiftly running stream.

Deut 21:10:14 Rape is perfectly acceptable as long as it is an enemy woman you are raping.

Deut 21:18-21 If your son doesn't do as he says, then feel free to flog him. If he still doesn't do as you ask, the priests will organize some blokes to stone him to death on your behalf.

I could go on and on with the number of rules and commandments that have been abandoned (quite rightly too) by modern Judaism. If the *Tanakh* is the inerrant word of God, then all these rules must be kept. If the *Tanakh* is not the inerrant word of God, then why is circumcision so utterly important? Cannot circumcision be ignored just like most other archaic laws are ignored?

And indeed there is a growing movement of contemporary Jews who do not accept the *Tanakh's* requirement to circumcise. This movement has developed a ceremony called the *Brit shalom*,⁴ or "Covenant of Peace" that takes the place of the traditional Jewish *Brit Milah* or "Covenant of Circumcision." The movement relies on *Leviticus* 19:28 ("Do not make gashes in your skin") and *Deuteronomy* 14:1 ("Do not mutilate yourself") for its religious basis. And thus it is clear that being Jewish doesn't mean that circumcision must be a requirement to maintain the faith.

I'm a Moslem so I'm required to circumcise my baby boy

Why? Where does this law come from? The *Koran* makes no mention of circumcision, unless you follow a most convoluted path to find it. Verse 16:123 of the *Koran* states:

Then We revealed to you: Follow the faith of Ibrahim (Abraham), the upright one, and he was not of the polytheists.

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By being told to follow Abraham, Moslems are being told to follow the teachings of Abraham, which leads back to the Jewish *Tanakh* and *Genesis* 17:1-14 (see above). However, various Islamic scholars do not accept this approach⁵, and not surprising, as it would mean that Moslems would need to accept and follow all the Abrahamic laws, outlined in *Deuteronomy* and *Leviticus*.

Moslems against circumcision quote three verses of the Koran that they state shows that God wanted nothing to do with circumcision:

Our Lord, You did not create all this in vain (3:191).

He perfected everything He created (32:7); and

[The devil said]: I will mislead them, and I will create in them false desires; I will order them to slit the ears of cattle, and to deface the fair nature created by God. (4:119)

Thus if the *Koran* does not extol circumcision, where does the requirement come from? The *Sunnah* (which is the traditions and words of Mohammed, interpreted by scholars) does mention circumcision.

Mohammed said: "Circumcision is a sunnah for the men." The term sunnah here means that it conforms with the tradition of Mohammed himself, or simply a custom at the time of Mohammed. Someone came to Mohammed and became a convert before him. Mohammed told him: "Shave off your unbeliever's hair and be circumcised."

Mohammed said: "Let him who becomes a Muslim be circumcised, even if he is old."

One asked Mohammed if an uncircumcised man could go to pilgrimage. He answered: "Not as long as he is not circumcised."

However, these statements are not without controversy. Some believe that they are not authentic statements from Mohammed⁶. And it is generally accepted that these recitations were not collected until 200 years after the death of Mohammed and therefore their accuracy is very much open to question.

Therefore the spiritual guidance for Muslims, suggesting the need for circumcision is missing.

I'm a Christian, so I'm required to circumcise my baby boy

No you're not. As a general rule, Christians are not required to follow their God's rules laid down in *Genesis* and *Leviticus* because at the Council of Jerusalem held in circa 50CE, it was agreed between two competing sects of Christians, after vociferous and fiercely argued debate, that Christians did not need to be circumcised. St Paul declared that:

Those who want to make a good impression outwardly are trying to compel you to be circumcised. The only reason they do this is to avoid being persecuted for the cross of Christ. Not even those who are circumcised obey the law, yet they want you to be circumcised that they may boast about your flesh. May I never boast except in the cross of our Lord Jesus Christ, through which the world has been crucified to me, and I to the world. Neither circumcision nor uncircumcision means anything; what counts is a new creation. Galatians 6: 12-15.

Despite Paul's declaration, some Christian creeds, such as the Eritrean Orthodox, Ethiopian Orthodox and Coptic Orthodox still practice circumcision. The Catholic Church for a while seemed a little unsure of whether or not it supported the practice. Until the Second Vatican Council in 1965, Catholics celebrated 1 January as a Holy Day of Obligation as it was the Feast of the Circumcision of our Lord. Post Vatican Council, the Holy Day of Obligation was renamed the Solemnity of St Mary, the Mother of God and circumcision was no longer celebrated.

There is one final point to be made about circumcision and religion, and that is that a small baby does not understand the 'covenant' he is making with his God when he is circumcised. Surely, it is a greater act of faith for the boy to undergo circumcision when he is an adult, and can make the decision of his

own free will? Circumcision when the child doesn't know the significance of the sacrifice is surely meaningless in not only the child's eyes but also his God's eyes?

I want my son to look like me! Or like his brother/uncle/grand-dad/my best mate/my bank manager...

Why? If you wear glasses, do you want your son to wear glasses? If your son's brother has a bendy penis (penises that have bends up to 30° are considered normal by GPs) does that mean your son has to have one too? How are you going to bend it? Rubber bands and paddle pop sticks? If your son's uncle is bearded, does your son have to have a beard? Why are penises any different? The worst that will happen is your son will say "Dad, why does your penis look like that?" and that gives you the wonderful opening to discuss penis maintenance with him. It also gives you the opportunity to suggest that it will be a choice he can make when he is eighteen.

A circumcised penis is sexier...

Err, this is your baby son we are talking about here. I don't think you need to worry too much about penile fashion eighteen years hence. An American Study entitled "Women's Preference for Penile Circumcision in Sexual Partners"³ showed a preference for circumcised men. But a major problem with the study, was that only 38 of the 128 women in the study had ever had sex with an uncircumcised man. Familiarity breeds, well... familiarity. Making conclusions on the basis of such a small sample size is fraught with inaccuracy.

And then on the flip side, according to Kirsten O'Hara writing in "Sex as Nature Intended It," (2002) women are five times more likely to have an orgasm with an uncut man than with a cut one and that premature ejaculation was far more prevalent in circumcised men than in uncircumcised men. I'll leave you to consider the ramifications of this data.

AIDS and circumcision – the World Health Organization recommends circumcision

Well not quite. The World Health Organization has stated that recent experiments show that circumcision reduces the risk of HIV transmission by sixty percent⁷ and that circumcision should be considered as a public health measure in sub-Saharan Africa⁸. While this recommendation may be quite apt for Africa, I'm not convinced by the argument for those who live in the affluent West.

How many couples would make use of a contraceptive, which has a 40% failure rate? And given that the outcome of failure of the method is not a baby, but potential death, it seems a crazy reason to circumcise. And it is a most dangerous idea to promote. "Am circumcised, will bonk!" is not something that will lead to a reduction in HIV!

We know that a condom is by far the best reducer of HIV, so why promote something that reduces transmission by 60% when we know that condoms do it by 99%?

Circumcision stops masturbation

I nearly wasn't going to include this as a serious argument for circumci-

sion, as most men rather enjoy the practice, except it was the main argument put forward by doctors in the late nineteenth and early twentieth century for doing circumcision.


In the 1890s, it became a popular technique to prevent, or cure, masturbatory insanity. In 1891 the president of the Royal College of Surgeons in Great Britain published *On Circumcision as Preventive of Masturbation*, and two years later another British doctor wrote *Circumcision: Its Advantages and How to Perform It*, which listed the reasons for removing the "vestigial" prepuce. Evidently the foreskin could cause "nocturnal incontinence," hysteria, epilepsy, and irritation that might "give rise to erotic stimulation and, consequently, masturbation." Another physician, P.C. Remondino, added that "circumcision is like a substantial and well-secured life annuity ...it insures better health, greater capacity for labor, longer life, less nervousness, sickness, loss of time, and less [sic] doctor bills."⁹

Now I'm not quite sure why anyone wants to stop masturbation when we know that it neither causes hysteria nor epilepsy and in fact may help reduce the chance of

prostate cancer¹⁰, but those who claim that circumcision reduces masturbation appear to be correct. A 2007 study found:

There was a decrease in masturbatory pleasure and sexual enjoyment after circumcision, indicating that adult circumcision adversely affects sexual function in many men, possibly because of complications of the surgery and a loss of nerve endings¹¹.

Conclusion

Listed above are the main reasons put forward for circumcising baby boys. There are many arguments put for not circumcising babies, but I think the main one is simply that it is a breach of a fundamental human right — the right for bodily integrity. We do not condone the bashing, mutilation or injury of any adult, as we believe that a person has a right to bodily integrity and autonomy. Why as a society do we punish criminal assault so severely? When we circumcise we take away the right of that child to be intact. We also take away the right of the child to make his own decision at a later date about circumcision himself. None of us has that right to make that decision for a baby boy. 

Notes

1. Royal Australasian College of Physicians, Policy Statement on Circumcision, 2004 p1

2. "Court rules circumcision of four-year-old boy illegal." *Helsingin Sanomat*, Helsinki, Monday, 7 August 2006.

3. Williamson ML, Williamson PS. Women's preferences for penile circumcision in sexual partners. *J Sex Educ Ther* 1988; 14: 8

4. See: www.jewsagainstcircumcision.org/brisshalom.htm

5. See "To mutilate in the name of Jehovah or Allah — Legitimization of male and female circumcision", by Sami A. Aldeeb Abu-Sahlieh, July

1994. At: www.quran.org/CIRCUMCISION.HTM#Chapter%20II Accessed 2 Apr 2007

6. Ibid.

7. Auvert, Bertran; Dirk Taljaard, Emmanuel Lagarde, Joëlle Sobngwi-Tambekou, Rémi Sitta, Adrian Puren (November 2005). Hyperlink medicine.plosjournals.org/archive/1549-1676/2/11/pdf/

10.1371_journal.pmed.0020298-S.pdf"* Randomized, Controlled Intervention Trial of Male Circumcision for Reduction of HIV Infection Risk: The ANRS 1265 Trial " (PDF). *PLoS Medicine* 2 (11): 1112–1122.

8.Hyperlink www.who.int/entity/hiv/

mediacentre/MCrecommendations_en.pdf"* New Data on Male Circumcision and HIV Prevention: Policy and Programme Implications. WHO (March 2007).

9. "The Ritual of Circumcision" Karen Ericksen Paige, *Human Nature* p40-48 May 1978. See:www.noharrrm.org/paige.htm Accessed 1 April 2007

10. "Maturbation cuts cancer risk." See: news.bbc.co.uk/2/hi/health/3072021.stm Accessed 1 Apr 2007.

11 DaiSik Kim, Myung-Geol Pang (2007) The effect of male circumcision on sexuality *BJU International* 99 (3), 619–622.

Margaret Court's Word of Faith

The service game is
not the same

Margaret Court (nee Smith, b. 1942) is unquestionably Australia's most successful tennis player. Playing in the 1960s and 1970s, Court amassed over 60 Grand Slam titles, including eleven Australian Opens, five US Opens, five French Opens and three Wimbledon singles victories. In 1970 she won the Grand Slam (all four major singles titles in a calendar year).

Having married into the Western Australian Court dynasty (two of whose members, Charles and Richard, were State Premiers), Margaret Court retired from international tennis in 1976. Shortly before that time, she had converted from Catholicism to a brand of Pentecostalism. In the early 1980s she obtained a theological qualification and re-emerged into public life in 1991 as the head of Margaret Court Ministries. By 1995 she was running Victory Life Centre, a Pentecostal church with weekly attendances now approaching 2,000. Her television show *A Life of Victory* appears regularly on the Australian Christian Channel.

Court is highly regarded by Australian religious right organisations and has spoken at gatherings of groups such as the Australian Christian Lobby and Fred Nile's Festival of Light. Speaking at the Ninth National Prayer Breakfast held at Parliament House, Canberra in November 1994, Court declared to the audience that 'Homosexuality is an abomination to the Lord! Abor-

tion is an abomination to the Lord!' (*New Life*, 24 Nov. 1994)

Healing miracles

But I'm not going to dwell on Margaret Court's socio-political views and activities here. Rather, I'll focus on her so-called 'healing ministry', recently highlighted by Robert Bertoz in a letter to *the Skeptic* (Summer 2006, pp. 63-4).

Briefly, Robert attended one of Court's 'miracle services' at CityLight (Pentecostal) Church, Kingston, Tasmania. Court spoke for some time, explaining that the Devil brings pain and suffering but that people who called upon God to help them would be relieved of these problems. 'People with pain' were called forward:

... and there they were, falling like nine-pins as Margaret prayed for each one individually while grasping them by the shoulders, rocking them slightly and periodically chanting incomprehensibly.

Suddenly, some of these people began to claim that they could straighten their afflicted leg, that their back pain had vanished, etc. Court then told people on lifetime medication that God would become their medication if only they believed.

Robert Bertoz noted that limping people continued to limp and that wheelchair-bound people remained in their wheelchairs, even after



Brian Baxter is a Melbourne based commentator on religious fringe movements.

Court's 'miracle' treatment, but that everyone seemed pleased with the whole experience.

So what's going on here?

Pentecostals

According to the 2006 census, Pentecostalism is the fastest-growing Christian denomination in Australia, increasing by 26% in the 1996-2006 period. However, there still aren't a lot of them around, about 220,000 Australia-wide, which is about half the size of our Buddhist population (also growing fast). By comparison, there are over five million Catholics. Another way to look at it is that for every three Australian Pentecostals, there are also two Hindus.

If someone tells you that they're a Pentecostal, your first question should be, 'What sort?' If you wanted to show off, you might add, 'Are you a Holiness Pentecostal, or perhaps a Classic Pentecostal or a Restorationist? Are you a One-ness or Jesus Only Pentecostal, or are you merely a charismatic who belongs to one of the larger denominations?'

If you asked Margaret Court this question, I suspect that she wouldn't answer you directly. But if you kept at it you'd finally discover that she is a 'Word of Faith' Pentecostal. To quote Humphreys and Ward's (1995) *Religious Bodies in Australia* (p. 176): *The teaching of evangelists like Kenneth E. Hagin [1917-2003] and Kenneth Copeland (b. 1937) began to have an impact in the early 1970s with Hagin founding Rhema Bible Training Centre in Oklahoma in 1974. Deriving from Romans 10:8 (Greek: rhema - word of faith), these televangelists speak of the power of positive confession as bringing into existence what is stated with the mouth. Whatever is spoken by faith becomes immediately inspired and dynamic in the situation.*

The authors add that the 'Word of Faith' (often simply called 'Faith') teaching is fundamental to the 'prosperity gospel' which holds that temporal prosperity here and now is a divine right for believers.

To sum up, preachers like

Margaret Court think that if you sincerely believe in God's Word, ie, the Bible, and you claim what you take to be the promises of God with your mouth — yes, you have to speak your prayer out loud, as well as basing it on 'the Word' — God will most certainly grant your desire. Note that this won't work if you pray for something evil, as that would be inconsistent with the Word. But health, wealth, contentment — all yours, buddy. I've been unable to discover how mute people can speak their prayer out loud but perhaps you can ask Margaret.

Now, you may be thinking, 'Haven't I seen all this somewhere before?' — New Thought, Christian Science, Amway, Norman Vincent Peale and *The Power of Positive Thinking*, Rhonda Byrne and *The Secret* etc — all variations on the same hokey theme? Well, if you were thinking that, you're not alone. No less a conservative evangelical Christian than Bill Muehlenberg (ex-Australian Family Association and currently an independent blogger) had this to say when reviewing Byrne's *The Secret*:

... [It's] not just New Agers and occultists who have been into all this stuff. Some Christian groups have taught these things as well. Much of the positive confession movement, the health and wealth gospel, the name it and claim it theology, the word of faith movement and the prosperity gospel teachings all nicely fit in here as well ... Kenneth Hagin says, 'You will never be a conqueror until you confess you are one ... You have to confess [ie, speak your desire] first to become one. Faith's confessions create reality.' (CultureWatch site, 23 May 2007)

Just in passing, this is a very good example of the permanent tension existing between fundamentalist Baptists like Muehlenberg and significant segments of the Pentecostalist movement. The two denominations may form temporary alliances to battle abortion or homosexual rights, but deep down there is a mutual antagonism involving the crucial question of what constitutes true Christianity.

Margaret Court's odyssey

So how did Margaret Court become so deeply involved with the 'Word of Faith' or 'positive confession' movement in Australia? The process began in 1973, before she retired from world tennis, when she was sitting in a French church and suddenly realised that the Catholic tradition in which she had been raised no longer held any meaning for her. Her biography explains that:

[Margaret's] heart was zealous for God, but it had long been blinded by religious traditions which made the religious way of life — the deeds, penances and good works — more important than the simple truth of the written Word of God which glorifies Jesus alone.

(Margaret Court with Barbara Oldfield (2006) *Winning Faith* [WF], 42)

Shortly afterwards, a friend took Court along to a 'charismatic-style' meeting in Australia, where she 'responded to the altar call' ie, publicly acknowledged that she had been 'born again'. (p.37) But this was only the beginning of Court's odyssey. After retiring from her international tennis career in 1976 and while raising her young family, she slipped into a period of deep depression, feeling 'guilty, unworthy, fearful and totally insignificant'. (p.46)

Court began listening to Pentecostals who taught a practice called 'inner healing', involving the identification of 'suppressed memories' of people and experiences that may have adversely affected her in the past. She reacted very badly to this process, especially when a 'deliverance team' diagnosed demonic influences at work in her life, including the 'demon' of pride in her tennis career. Her depression grew worse, she had great trouble sleeping and in 1979 she was hospitalised and treated for a variety of conditions including a torn heart valve. (pp.45-51)

But then she watched a videotape featuring Dr Frederick K. Price. Price is a leading Word of Faith teacher (have a look at the mountain of Christian critiques of him on the Web!) and this story tells us a great

deal about why Margaret Court is where she is today:

[In a meeting Court had attended in Hawaii several years earlier], *Dr Price, acting on a word of knowledge, prophesied that God was healing someone in the audience of stomach ulcers at the very time he was speaking. That someone was [Court's husband] Barry, who told Margaret about it some hours later ...* (52)

According to Pentecostals, a 'word of knowledge' is an insight given by the Holy Spirit to an individual, often for the benefit of another person, although it may be as prosaic as reminding you where you left your keys. (This is one of nine such 'spiritual gifts', which include the better-known ones of healing and speaking in tongues.) Shortly after leaving hospital in 1979, Court watched a Fred Price video, recalled his 'word of knowledge' at the meeting in Hawaii, and suddenly:

... heard clearly for the first time that the Word of God was the only way to grow in faith and to overcome the areas of defeat in life. She sat transfixed ... (53)

So we have a history of great success followed by depression, a period of increased stress, a desperate wish for deliverance, the memory of an apparent miracle and a formula for happiness all sloshing around together. Combined with elements of Court's personality, a pretty good recipe for what happened next, I'd say.

Margaret Court Ministries

Court's next step was to start talking to herself. Of course, as far as she was concerned she was talking to God, but we're reminded of positive thinking techniques often associated with pyramid selling - sorry, 'multi-level marketing':

The scripture Margaret found was in 2 Timothy 1:7: 'For God has not given us a spirit of fear, but of power and of love and of a sound mind.' The discovery of this scripture at that time turned her whole life around forever ... Over and over she said it; day and night, night and day ... (54)

She began to attend 'a newly-formed church in Perth' — the

Rhema Family Church which opened its doors in 1979 — as it 'taught along the same lines as Dr Price'. Meanwhile, she kept discovering helpful scriptural texts, and lo and behold:

The more she said [these texts], the more she started to believe [them] and the stronger she became. (57)

In 1982, Court enrolled in the newly-formed Rhema Bible Training Centre (WA) and 'began to understand the incredible power of her own words'. She started refusing to listen to bad news, accentuating the positive at every opportunity, and another supernatural healing suddenly occurred: her heart valve was checked again and pronounced OK. Some people might have opted for natural explanations such as an initial misdiagnosis, but Court was happy to 'give God the glory', especially as she had earlier been healed of 'a spinal curvature and scoliosis' in a 'laying on of hands' ceremony.

She graduated from Rhema in 1983 and spent the next seven years raising her family and actively participating in church activities. During this time:

... [She] began to observe that anyone who genuinely knew how to apply faith and the Word of God to their problems always overcame them. (64)

In other words, Court convinced herself that she had backed a certain winner, possibly by ignoring the weasel word, 'genuinely', in the preceding quote. Early in 1991 she was ordained a minister by a South African Rhema Church pastor and went on to form Margaret Court Ministries Inc. Her biography notes that:

Officially Margaret now bore the title 'the Reverend Margaret Court'. But like anything that hinted of ostentation, she preferred to leave the title on her ordination certificate. (76)

This is no longer true (if it ever was), as Court frequently signs herself 'Rev. Dr Margaret Court MBE PhD LL.D (Hon.)', as in her foreword to Pentecostal Pastor Danny Nalliah's *Worship Under the Sword* (2005). Her doctorates seem to consist of an honorary Doctor of Laws degree from Oral Roberts

University in Oklahoma, USA (Roberts has strong Word of Faith connections and is noted for having told his supporters that he would die if they didn't donate millions of dollars to his organisation); and a PhD of uncertain provenance.

As well as assisting the poor, Margaret Court Ministries (MCM) held public meetings and generally operated as a full-tilt Pentecostal outfit:

... [Scores] of people began to give their lives to Christ ... Hundreds more were baptised in the Holy Spirit, with the evidence of speaking in a new tongue ... A woman with severe depression was healed ... A young man who took a morning off work to attend a meeting was healed of a longstanding back ailment ... (77-82)

Readers familiar with the work of James Randi and other debunkers will recognise conditions such as depression and back pain as the faith healer's bread and butter. They seem to have more trouble curing terminal cancer or restoring lost limbs, although, as we'll see below, Court claims spectacular success with girls' bits!

Although Court's 'spiritual antennae were finely tuned to the Holy Spirit', she never claimed personal credit for healings and other miracles, but gave the credit to God who worked through her. All Pentecostal faith-healers do that. Other 'gifts of the Spirit' granted to Court evidently include both prophecy and the ability to speak in tongues (glossolalia).

Victory Life Centre

A few years later, Court began to think that there weren't quite enough 'solid' churches around Perth to handle all her new converts so she decided to form her own. God personally told her to do this while she was washing the breakfast dishes one day:

I want you to start this work. Step out [ie, in faith] and I will show you how to do it as you go. It was clear and it was definitely God. (92)

To cut a long story short, it all came to pass. Victory Life Centre came into being in 1995 and is now one of the most well-attended churches in Perth. Its aim is 'to take

the city and the nation for Jesus'. Court has her own Christian television show, her own Bible college, missions and youth departments and basically everything else that the well-dressed Pentecostal pastor is wearing. Word of Faith champions from various corners of the globe speak at Victory Life Centre, including heavyweights like Richard Roberts (son of Oral), Jesse Duplantis and Kenneth Copeland (the last two have their own shows on Australian free-to-air television, but at an ungodly hour).

The rub, of course, is that Margaret Court has a lot of funny ideas deriving from her Word of Faith philosophy. And the ideas don't just seem a little bizarre to the secular mind, but to most Christian minds as well. I've already referred to Baptist Bill Muehlenberg's contempt for Word of Faith doctrines, and to the widespread evangelical criticism of Court's mentor Dr Fred Price, (Google his name or that of Kenneth Hagin or Kenneth Copeland and see how many times you can count the word 'heretic').

We can lead a heavenly existence right here on earth if we simply follow Court's Word of Faith precepts:

We can live here on earth as it is in heaven, for Jesus has already won the battle for us to live in victory. (93)

Contrary to the majority evangelical view, God never wills illness or poverty on people to punish them for their sins. This is all Satan's work. Jesus' sacrifice on the cross vanquished not only death but all other afflictions of humanity by taking them upon himself:

The price Jesus paid 2,000 years ago included not only forgiveness for my sins but also deliverance from every other effect of evil in my life ...

(Margaret Court [1999] *Winning Words* [WW], 86)

... [We] can walk in health all the days of our life ... [I've] learned enough about the power of God's Word to say, 'Hip trouble: you're on Jesus' hips, not mine. You can't stay in this body.' ... I've got no hip trouble today. (ibid., 33, 85)

Notice how you have to keep speaking out loud to God if you want results. This is how Court explains the process of recovery from her torn heart valve:

I got a picture of a healthy heart from an encyclopedia and left it open on the hall table ... Every time I passed that open book I would say, 'This is a picture of my heart. I have healthy valves, arteries and blood vessels ... I thank you, Lord Jesus, that my heart is healed today' ... (87-8)

Here's a good summary of her position:

I started to see that [like God himself creating the natural world], I, too, was creating my desired natural world of good health from the supernatural world as I released my faith through my mouth. (88-9)

Almost as an afterthought, and in parentheses, Court adds that readers should keep taking their doctors' medication 'until Jesus' medication overtakes it!'

All this looks very much like primitive magical thinking to me. As does this passage:

I've ... learnt that my thoughts, by themselves, have no power, but once I speak them into the atmosphere I have established either a negative or a positive situation - one in which God is able to be involved or one in which the devil is involved. (WF, 69)

A final observation about Court's Word of Faith theology is that it operates like a clockwork machine, and preachers like Court are often criticised by other Christians for daring to remove God's independent agency. See if you think she's talked her way out of this one:

God is compelled to comply with the demands that we make on Him through our faith. I don't mean we should arrogantly think we can force God to act on our behalf, for He is God and He is sovereign. But we do honour and respect Him when we believe and act on His Word regardless of our situation, and our faith pleases Him ... [because] on the basis of our faith, He can move to bring about everything we firmly believe. (WW, 96-7)

In other words, God can do what he likes, but if you've followed the Word of Faith formula, you've got him by the ... well, by the throat. It seems to work pretty well for Margaret Court, though, as among her healing successes was a young South African girl with 'no right ovary, her left ovary was undeveloped and her uterus was only as big as a thumbnail.' But after Court had finished laying hands on her, 'now there are two fully developed and functional ovaries and a normal-sized uterus.' (pp. 97-8)

Conclusion


It's extremely difficult to get strong-minded people like Court to change their viewpoints. They're obviously capable of incorporating virtually any event or situation into their worldview by the simple expedient of appealing to the supernatural.

One wonders, however, what might happen if Court herself or a close relative of hers was to contract a degenerative disease. When all the praying and faith-speaking and laying on of hands has failed, where does this leave the very foundation of your version of reality? According to Court:

Dying can be as simple as sitting down and committing our spirit into the hands of our Father God ... It's possible to die in perfect health at a fine old age. (33)

Other Word of Faith preachers say similar things: you shouldn't really die of a disease or condition, but simply 'wear out' and die when you're good and ready to do so. But often it doesn't happen that way, even to Word of Faith people.

However, Margaret Court will have none of this defeatism:

In the future she sees large healing meetings being held in the Perth Entertainment Centre, with lines of ambulances outside and people lining up with all sorts of stretcher-bound and wheelchair-bound cases, waiting by the thousands to get inside where they finally find God's healing and leave praising Him for His goodness. (WF, 108) 

How to Write a Really Bad Science Story

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There are many good science writers and press officers around. This post is not for them, as they will certainly reject all of its key points. Nor is it for the members of the media who are already adept at producing sensationalistic, inaccurate, or downright ridiculous science news stories. This post is for those writers somewhere in the middle who sometimes get it wrong but can't quite master the art of atrocious science reporting.

Here, then, is a concise guide for how to write really bad science stories.

1. Choose your subject matter to be as amenable to sensationalism as possible.

Some scientific studies may be considered elegant and important by scientists, but if they help to confirm previous thinking or provide only incremental advances in understanding, they are not newsworthy. What you need is something that will generate an emotional rather than intellectual response in the reader.

(If you're stuck on this step, try coming up with a topic that fits into Science After Sunclipse's handy list of categories for science stories.)

2. Use a catchy headline, especially if it will undermine the story's credibility.

The headline is what draws the reader in, and it is very important

that this be as catchy and misleading as possible. Try to focus on outrageous claims. "Such-and-such theory overthrown by this-and-that discovery" is a good template. If possible, have an editor who has not read the story or knows very little about the topic come up with a headline for you.

3. Overstate the significance and novelty of the work.

Do your best to overstate the importance of the new discovery being reported. This is especially relevant if you are writing a press release at a university or other large research institution. The discovery must, at the very least, be described as "surprising", but "revolutionary" is vastly more effective. Indeed, the reader should wonder what, if anything, those idiot scientists were doing before this new research was conducted (see step 4). Avoid implying that there is a larger research program underway in the field or that the new discovery fits well with ideas that may be decades old. Also, if the discovery — no matter what it is — can be linked, however tenuously, to curing some human ailment, so much the better.

(For writers reporting about genomics: if your story is outrageous enough, you may be eligible for an Overselling Genomics Award; note, however, that competition for this distinction is intense).



T Ryan Gregory is an evolutionary biologist specialising in genome size evolution at the University of Guelph in Canada.

4. Distort the history of the field and oversimplify the views of scientists.

Whenever possible, characterise the history of the field in which the discovery took place as simplistic and linear. It is very important that previous opinion in the field be seen as both monotonic and opposed to the new discovery. If there are signs that researchers have held a diversity of views, some of which are fully in line with the new finding, this will undermine your attempt to oversell the significance of the study (see step 3). For this, there are few better examples than recent work on so-called “junk DNA”. Here, authors of news stories have managed to convince readers that “junk” was unilaterally assumed to mean biologically irrelevant, and that it is only in the face of new discoveries that stubborn scientists are being pushed to reconsider their opinions. The fact that both of these are utter nonsense shows how effective this approach can be.

5. Remember that controversy sells, and everyone loves an underdog.

If the results of a new study do not contradict some long-held assumption or incite disagreement among scientists, then readers will have little interest. As a consequence, it is important to characterise science as a process of continual revolutions (see steps 3 and 4) rather than one of continuous improvement of understanding. Refinement and expansion of existing ideas should not be implied. If there is no real controversy, invent one. And, whenever possible, set it up as a “David vs. Goliath” conflict between an intrepid scientist and the stuffy establishment.

6. Use buzzwords and clichés whenever possible.

It doesn't matter if the words are used inappropriately or appeal to common misconceptions (see step 7), if it is catchy or well known, use it and use it often. This is particularly

important if you would otherwise have to introduce readers to accurate terminology and novel concepts. “Genome sequencing” should be dubbed “cracking the code” or “decoding the blueprint” or “mapping the genome”, for example, even though these clichés are quite inaccurate.

7. Appeal to common misconceptions, and substitute your own opinions and misunderstandings for the views of the scientific community.

It is important that readers' misconceptions not be challenged when reading a news story. In fact, the more a report can reinforce misunderstandings of basic scientific principles, the better. This can be combined with step 6 to good effect. It is also helpful to insert your own views and misunderstandings as though they were those of the scientific community at large. For example, if you find something confusing, mysterious, or (un)desirable, assume that the scientific community as a whole shares your view.

8. Seek balance, particularly where none is warranted.

A primary tenet of journalism is that it present a balanced view of the story and not make any subjective judgments. The fact that the scientific community has semi-objective methods for determining the reliability of claims (such as peer review and the requirement of repeatably demonstrable evidence) should not impinge on this. It is therefore important to present “both sides” of every story, even if one side lacks any empirical support and is populated only by a tiny minority of scientists (or better yet, denialists and cranks). This does not necessarily conflict with step 5, because a false controversy can be set up using an appeal to balance. For example, a productive strategy is to provide one quote from someone at the periphery of the field and one quote from a

recognized expert to make it seem as though there is debate about an issue within the scientific community. Under no circumstances should you explain why the scientific community does not accept the views of the non-expert. This has proven very effective in stories about issues that are controversial for political but not scientific reasons, such as evolution and climate change.

9. Obscure the methods and conclusions of the study as much as possible.

Try not to give many details about the study. A simplistic analogy is much better than actually describing the methodology. Better yet, don't discuss the methods at all and simply focus on your own interpretation of the conclusions. Be sure to describe said conclusions in terms of absolutes, rather than the probabilistic or pluralistic ways in which scientists tend to summarize their own results. Error bars are not news.

10. Don't provide any links to the original paper.

If possible, avoid providing any easy way for readers (in particular, scientists) to access the original peer-reviewed article on which your story is based. Some techniques to delay reading of the primary paper are to not provide the title or to have your press release come out months before the article is set to appear. An excellent example, which also combines many of the points above, is available at www.sciencedaily.com/releases/2007/08/070831180409.htm

This list is not complete, but it should suffice as a rough guide to writing truly awful science news stories.



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genomicron.blogspot.com/2007/09/anatomy-of-bad-science-story.html

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Now Hear the Word of the Lord

If salesmanship is next to godliness, you have a dyslexic dictionary

As an infamous Austrian once said, if you're going to tell a lie, make it a biggie, and the Answers in Genesis' Kentucky Creation Museum is a testament to that idea: a big, very expensive lie (total cost, factoring in voluntary work, around US\$100 million).

The man most responsible for this 'Museum of Misinformation' is an Australian and a former high school science teacher, Dr Ken Ham. Some have called it a "creationist Disneyland" and "fascinating nonsense", while to Ham it's "Bible-fulfilling".

Fittingly, the chief designer is Patrick Marsh, the man who did the animatronics for *Jaws* and *King Kong*: he, like everyone else who works at the CM, must sign to say that he believes that there were 6 x 24 hour creation days, the Earth formed before the Sun, birds were created before the lizards, and those pesky dinosaur "kinds" arrived on day 6.

It'll cost you US\$14.95 to go in (oddly, an 'adult' is redefined as at least 13yrs old — add extortion to telling porkies!) but you can save time, money (an extra \$5 for the planetarium) and a world class parade of untruths by taking an Internet walk, through, www.answersingenesis.org/museum/walkthrough/.

A most inauthentic graphic of a dinosaur appears in Room 3, 'found' at the bottom of the Grand Canyon, drawn as an upright lateral-view 'x-ray'. Clearly, the artist and/or the 'geologists' who directed him or her have never visited a fossil exposure!

This museum is a gross insult to the intelligence of the public, particularly children, and has themes such as the Tower of Babel, Noah's family of eight surviving 371 days (Room 29 explains how they and all *Genesis* "kinds", including, says Ham, just 50 kinds of dinosaurs, survived on the briny), and The Fall. Apparently, these kinds (*Genesis* 1.11) later evolved by geographical separation and natural selection (?), despite the YEC timescale not allowing enough time.

How one family managed to round up pairs of Australian megafauna, as well as Ham's (albeit in truncated numbers) dinosaurs requires some explanation. And, regarding Adam, why God would create him with all reproductive equipment, when originally there was no Eve, an afterthought we're told, due to Adam's 'loneliness', remains a mystery. Ham and others have developed a slick grab-bag of 'stock answers', ones that satisfy the need for an instant answer, deflect,

PREPARE TO BELIEVE

Sign at the entrance of the new Creation Museum



John Williams is a Welsh-born South Australian teacher. He is not related to the Editor.

flummox, imply the questioner's a know-nothing, and deter further questions.

Pseudo-geological chicanery

This museum aims to stupefy a visitor's critical thinking by relentless misinformation: ironically, teachers in nearby states are likely to face accusations of telling lies from students who have visited the museum. No doubt they'll parrot the false geological analogy of the changes wrought by the 1980 Mt St Helens explosion in a matter of days being compared with the formation of the Grand Canyon (GC) in a similar time frame. Only young impressionable minds and credulous literalists will swallow this, but even the well educated may be taken in, since they probably have little understanding of geology, let alone the specifics of the GC's stratigraphy.

Wikipedia gives a useful summary: the GC represents about two billion years of Earth history, while the gorge was cut in the last six million years, most intensively in the last two million. The 1.6 km thick strata range from the lowest, the Vishnu Schist (2 billion years) to the Permian Kaibab Limestone at the top (230 million years), thus the Mesozoic 'Age of Dinosaurs' (Triassic, Jurassic and Cretaceous) is not present! However, it's one of the most complete geological columns on Earth, even allowing for a one billion year uncomformable gap between the rocks aged 500 and 1.5 million years.

Predictably, AiG has lined up tame academics to give ersatz weight to its spin. Dr Georgina Purdow, a molecular geneticist at an Ohio university is also, it seems, an expert on the historicity of the Bible:

If you can't believe Genesis, then why believe any other part of the Bible? You can't pick and choose, this is right, that is wrong.

A clever argument not easily countered without a long complex argument about its inconsistencies, the rewriting of history by the

winners, and the presentation of promotional spin by those creating new myths out of the old. Obviously it's much simpler to give the whole Bible exactly the same 'truth rating'! (My stock answer: *from full fiction to faction-the Bible rocks!*)

As Ham says, "*God's word is true, or evolution is true* (the either/or fallacy). *No millions of years. There's no room for compromise.*" The lies must hang together or fall in this house of (marked) cards, requiring a disciplined Orwellian groupthink, all literally singing from the same hymn-book. The CM is to history what a casino is to investment, or tobacco promotion to health, or astrology to astronomy.

Facile one-liners

Highly skilled and well-practised YECs like Ham are facile at using one-liners that can 'throw' even the most articulate scientist, implying that 'origins science' outranks non-observed inferential science. Watching Ham appearing on a US radio station with Lord Winston recently, I had to 'admire' his "Tell me one thing you know about evolution", which left his guest understandably nonplussed. By contrast, YEC 'explanations' are unequivocal, simple and upbeat, offering the chimera of hope, and well suited to the age of the succinct sound bite!

Ham then refers to two palaeontologists, each with a dramatically different interpretation of the same evidence. He argues that "we must all begin with assumptions", referring to Dawkins' claim that there isn't a God. In science, as Dr Ham knows, an assumption is known as a hypothesis, and it's tested by the available evidence. And where is the evidence that humans coexisted with dinosaurs? AiG create their 'evidence' to deceive and confuse, when all they'll ever need do is find just one fossilized human bone in dinosaur-rich strata.

The closest they've got to this is in the Paluxy River Limestone, in which are found dinosaur tracks over 120 million years old. Some of

the track marks are smaller, and they were once construed as human, then a widely distributed video called *Footprints in Stone* showed the desired but speculative connection. Further study revealed that the footprints were weathered dinosaur toe prints, and the video was withdrawn.

We say change of mind or *volte-face*, while Americans prefer flip (-flop), and comparing AiG's *The Answers Book* (1990) with the same publisher's *Revised and Expanded Answers* (2000), we can observe the 'stock answer' technique over time. Examples need have no scientific credibility (since few people have the background to debunk them), and it's a useful add-on to quote the work of 'doctors' (whether of divinity, letters or science, matters little) to imply a spurious expertise and to intimidate critics.

- **1990** Continental drift is wrong.
- **2000** Evidence (?) of Biblical plate tectonics during The Flood in 2348BC and beyond.
- **1990** The speed of light has slowed down (based on the work of South Australian creationist, Barry Setterfield and others).
- **2000** "None of the speed of light theory's defenders has been able to answer the problems raised."
- **1990** Loch Ness monster a plesiosaur?
- **2000** No mention of "Nessie": NZ 'plesiosaur' carcasses are acknowledged as being those of basking sharks.

(Source: *Institute for Biblical & Scientific Studies (OEC) site*)

No matter the widespread disapproval and criticism from scientists and Old Earth Creationists, Ken Ham runs a successful business employing hundreds of people, one that seems to adhere to a fast food billionaire's ethos: "Don't try and explain it — just sell it!" The Creation Museum very effectively 'sells' 'junk' YEC ideas, and Ham, a man with several honorary doctorates in

Continued p 42...

A 21st Century Resurrection Hoax

Raising the dead claim raises a
skeptical eyebrow

On December 2, 2001, a miracle was reported to have happened in Nigeria. Daniel Ekechukwu, a pastor in a local church, was allegedly raised from the dead by the German evangelist, Reinhard Bonnke, of Christ for all Nations (CfAN) at a crusade in Onitsha in Southern Nigeria //home.comcast.net/~neardeath/nde/001_pages/95.html

The incident has been documented in a DVD, *Raised from the Dead: A 21st Century Miracle Resurrection Story* and produced in different languages — English, Spanish, Portuguese, French etc.

According to the story, Rev Ekechukwu was involved in a car accident in Onitsha while returning from his village. He hit his chest on a steering wheel and sustained injuries to his head and chest. He was taken to Charles Borromeo Hospital, where he was placed under intensive care. As the wife Nneka narrated, Rev Ekechukwu, at one point regained some consciousness and requested that he be taken to his private physician — Dr Umezuruike in Owerri — around 80 kilometers from Onitsha, if they did not want him to die.

Daniel was discharged from the hospital, and on their way to Owerri he started having breathing problems. He urged the wife to take care of the children and the ministry. In Owerri, Rev Ekechukwu was taken to the Federal Medical Centre, but they couldn't attend to him. He was

later taken to St Eunice Clinic in Akwakuma, where Dr Josse Annebunwa pronounced him dead.

The body of Daniel was taken away and deposited at a mortuary in Ikeduru near Owerri. The mortician, Barlington Manu, said he wanted to embalm the body but desisted due to some unusual manifestations and experiences. He was pushed away and one of his hands was frozen.

On December 2, family members came and collected the body of Daniel. The wife claimed that God directed her to take the husband's body to Reinhard Bonnke's Crusade in Onitsha. They took the body to the crusade ground, and after some massaging and praying, Daniel came back to life. When he got up, he was asking for his file — which he said contained some messages, which God said he should deliver to the world. According to Rev Ekechukwu two angels took him to paradise where he saw a multitude of worshipping people in white garment, then to the mansion which Jesus promised his followers, and at last to the gate of Hell where he heard awful sounds of people screaming and weeping.

First Investigation

In 2002, I received a copy of the report of the resurrection story published in the *Charisma News Service*, (February 20) by Andy Butcher. The report says that Pastor Ekechukwu was "certified dead",



Leo Igwe, who runs the Nigerian Skeptics, is
a regular Skeptic correspondent

injected with embalming fluid and revived three days later.

In April 2002, I traveled to Onitsha to investigate the story. I visited the Church of God Mission International where Rev Bonnke held the crusade, where some church officials confirmed the resurrection story. I also visited the home of Rev Ekechukwu, but he was away. Family members told me that Daniel actually rose from dead. They showed me some pictures of Daniel while he was lying in a coffin and during his resurrection.

As I did not meet or interview Rev Ekechukwu, the physician or the mortician, I based my report on the information received from officials at the church of God Mission International and the family members of Daniel. So my investigation and report were incomplete.

Then in March I traveled to Owerri to meet with the physician and the mortician. I went to 108 Orlu Road Owerri, but found that St Eunice Clinic was no longer there. I was told that Dr Josse had moved to a neighbouring town Amakohia. On getting to Amakohia, I was told that St Eunice Clinic was no longer operating; that Dr Jose Annebunwa took ill (he went blind) and the hospital was closed down. No one knew where the physician was currently staying. In Akwakuma, most people I told about the resurrection story said they were not surprised that such an incredible incident was associated with Dr Josse. St Eunice Hospital, they said, was a roadside clinic noted for shady medical practices.

I left for Ikeduru, and after some inquiries, located Inyishi Community Hospital Mortuary. I met with the mortician, Barlington Manu, who confirmed that the body of Daniel was brought and deposited at the hospital mortuary late on November 30, 2001. He said on two occasions he tried to embalm the body of Daniel, but was pushed away. So he decided to abandon the process. In the night, he said, he heard some people singing as in a

church and when he came out, he noticed that the singing was coming from the direction of the mortuary. As he approached the mortuary the singing stopped. He went into the mortuary, flashed his torch toward the section where the body of Rev Ekechukwu was lying, but the torchlight ceased. He looked at the body of Daniel and noticed that the face had turned white. Out of fear and nervousness, he left the mortuary, and resolved to get in touch with the family of Rev Ekechukwu so that they could come and collect his body. On the morning of December 2, family members came to take Daniel's body away. The wife said that God revealed to her in a dream to send the body of her husband to Reinhard Bonnke's crusade in Onitsha for prayers. The mortician said he couldn't believe this, thus he joined them in the ambulance that conveyed the body to the crusade ground where, after some prayers, and massaging, Daniel came back to life.

Was Daniel's Body Embalmed?

I asked Mr Manu if he had had this kind of experience before. He narrated the case of a woman whose corpse was being conveyed home in an ambulance for burial. At some point the woman came out of the casket and sat on it. He said it took a lot of pleading and incantation for the woman to get back into the casket.

Such stories are not uncommon in Nigeria, and they are all based on fear, superstition, occultism and spiritual nonsense. Mr Manu is not a formally trained mortician. He dropped out of school and lacks basic knowledge of medical science. Like most morticians in Nigeria, he learnt to embalm corpses using the traditional method, which is an admixture of herbs and occultic rituals. But, nowadays, Mr Manu said he mixes some chemicals to produce the concoctions he uses for embalment. And more so that he had given his life to Christ. He refused to tell me the name of the chemicals he uses for embalment.

One of the most contentious issues about Daniel's death and resurrection is the embalment. There are conflicting reports as to whether the body was embalmed or not. The *CfAN* says the body was prepared for embalment. home.comcast.net/~neardeath/nde/001_pages/95.html The mortician told me that Daniel's body was not embalmed. He said when he wanted to pierce the right femoral artery to inject the embalming fluid, he was pushed away. That he injected some embalming concoctions into the fingers and toes. Medical experts say that this cannot constitute embalment. But Reinhard Bonnke claims that Daniel's body was embalmed. www.cbn.com/700club/features/bonnke_raisedpastor.aspx In the video, Rev Paul Sr of the Church of God Mission claimed that he perceived the smell of embalming fluid when Rev Ekechukwu came to visit him after his resurrection. Pastor Ekechukwu also said something similar www.greaterthings.com/Polemic/Daniel_Ekechukwu_Resurrection_Hoax/index.html And if the body of Daniel was not embalmed where was the embalming smell coming from?

I asked the mortician why without embalment, the body of Daniel did not smell over 40 hours after his death. He told me that it happens whenever people do not die a natural death, as in the case of Rev Ekechukwu.

The Reasons Behind the Miracle

The Daniel Ekechukwu resurrection story is filled with many gaps, flimsy excuses and suspicious omissions and commissions, as in all cases of miracle. Everything that transpired, from the time he was discharged from Charles Borromeo hospital — at his request — until he was 'resurrected', seems to have been engineered and manipulated to produce this 'miracle'.

A critical look at the story reveals why this miracle happened at all. It is the reason why Rev Ekechukwu asked to be discharged from the hospital where he was said to be

Letter from Nigeria

under intensive care, and be taken to a private physician far away in Owerri. Anyone who knows Onitsha very well would agree that somebody in a critical health condition who asks to be discharged from Charles Borromeo Hospital and be taken to a private hospital in Owerri must have a skeleton in his cupboard — this time a skeleton of a miracle. Mind you, it was on the way to Owerri that two angels came and lifted Daniel up to heaven and hell. And they never brought him back till he resurrected in Onitsha.

That is the same reason why Daniel was not admitted at the Federal Medical Centre in Owerri or at any other reputable hospital in the city. It was only at a backstreet hospital that he was confirmed dead.

And this is not unconnected with the reason why the mortician could not embalm Rev Ekechukwu's body and why the body was not smelling — had not started decaying — two days after his death. The reason behind this miracle is the same reason why God revealed to Daniel's wife that she should take the body of the husband, not to any church in Owerri, but to Bonnke's crusade in Onitsha — a city where Daniel was serving as a local pastor. And it should not be unrelated to the reason why Daniel's 'corpse' — and no other dead body — was ushered into the crusade venue for prayers. It is the same reason behind all instances of resurrection — of Lazarus, Jesus and other real or mythical figures in history. It is the

same reason why 'miracles' happen — ignorance, superstition, unreason, blind faith, gullibility, deceit, dishonesty, occult nonsense, foolishness and fraud.

In conclusion, I totally agree with Sterling D. Allan www.greaterthings.com/Polemic/Daniel_Ekechukwu_Resurrection_Hoax/index.html that Rev Daniel Ekechukwu's 'back from the dead' story is a hoax drummed up by some smart and control freak ministers in Nigeria to delude the world. 'Raised from the Dead' is a typical case of a 21st Century resurrection scam. It is sad and unfortunate that Rev Bonnke and his ministry (CfAN) are marketing this piece of Christian skullduggery to promote their mission in Africa.

What a shame.



... Hear the Word p 39

Divinity and Letters (two received from the late Jerry Falwell's Liberty University), is a super-salesman for dumbed-down biblical literalism.

The question is, does he deliberately mislead his vast radio and book-reading audience on science and theology, or is he a sincere but deeply deluded fundamentalist who believes he's doing God's work? Whichever, I'm sure that the controversy over the Creation Museum will be great free publicity, and it will become a must-see magnet for tourists who require 'faith-strengthening'. What I find most objectionable is the way that children are misinformed, misled and 'mind-washed', with the support of their parents, to believe lies that their parents believe and want them to believe too, a form of child abuse, in my opinion.

Maybe I've assessed Ham harshly, because he says things like:

When you're talking about origins, you're not talking about science, you're talking about faith.

Yes, but why not talk in the universal 'Esperanto' of science, Ken?

But he also 'signed-off' on this:

T rex (a vegan) lived in the Garden of Eden (where nothing died) and became the terror that Adam's sin unleashed!

Hey, that sentence has one thing that actually existed, but which never peacefully grazed the grassless Upper Jurassic Park!

A Flood of creationist museums?

The Big Valley Creation Science Museum in Alberta is a new (7/7/07) Canadian version of the Creation Museum, though it's smaller and much less expensive (US\$300,000). The owner, Harry Nibourg, says:

Evolution is a theory, as is creation: they are both based on faith. Fossils are

profound evidence of Noah's flood, and dinosaurs are God's greatest creations. (See www.brcsm.com/)



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A Question of Thought

It's all a matter of opinion

Quick question; what is greater than God, worse than the Devil, the dead eat it and if the living eat it, they die?

Give up?

The answer is 'nothing'.

At least, that's the answer according to the Evangelical Christian Fellowship who handed me a flyer last week with the proud and slightly misleading header of 'IQ Test'. I'm not convinced that the ability to answer smarmy riddles of dubious grammatical orthodoxy should be considered a legitimate test of one's intelligence, but since there is something deeply unsatisfactory about their answer, I'll have a crack at providing my own. Where to start?

I could be semantic and point out that the dead don't eat nothing, they don't eat anything. It's a technical point I know, but these things rankle me. Or perhaps I could launch myself into a tedious debate on the allegorical or non-allegorical existence of evil? I could cite motifs of rebel demi-gods from religions much older than Christianity. I'd cry "There's your devil!" and like a prince finding a foot dainty enough to fit a glass slipper, I could rise up cradling the *onus probandi* to my chest, revelling in the saccharine of its ideological simplicity.

But then again, why bother?

Evangelicals have heard all the arguments before. We've tested their

inability to think logically and it's proven to be Teflon coated. Logic, thought experiments, evidence! It's all lost on them. Religion has retarded the ability of the faithful to think subjectively. But in the greater scheme of things, that's OK, it's fine. Just because the devout lack the psychological makeup to engage in an intelligent discourse on religion, (debating with them sometimes feels like you're playing badminton by yourself) doesn't make the questions they ask unanswerable.

What is greater than god?

That's easy, I'll tell you. Opinion is greater than God.

Now opinion gets a bad rap in this world of mass media consumption. We most readily identify it with 'shock-jocks', with random vox-pops with Alan Jones or his American high profile equivalents, Fox News' Bill O'Reilly and his ilk. We shouldn't be surprised; media constriction has placed most newspapers and networks in the hands of rich white businessmen with rich white businessman values.

In the UK, for example, the overwhelming national opposition to the war in Iraq was poorly reflected in the print press of the nation. Just 12% of the British population supported the war and it's no real surprise that media barons Rupert Murdoch, Lord Rothermere, Richard Desmond and the Barclay twins fit



Ian Jackson is completing a PhD in Politics at Murdoch University.

succinctly into that minority. For those of you who care, these media luminaries wield a combined circulation of over 12 million newspapers. The slightly less impressive figure of 2.6 million can be attributed to the combined circulation of the *Mirror*, *The Guardian* and *The Independent*. These papers expressed themselves as being unconvinced by the case for war, though they too swung behind the 'war effort' when combat began.

But there's a background of opinion that occurs too, rather like the background radiation that any half decent Geiger counter can detect. Simple societal norms become assumptions, assumptions become beliefs and beliefs become sacred.

Take James Cameron's recent documentary *The Jesus Family Tomb*. Between the dubious claims and leaps of logic so vast that any sane man would demand a safety net before he attempted them, one overriding postulation stood above all the others in its patent bias towards mythical beliefs. Jesus, we are told, is Joseph's step son. Because, Mary had an Immaculate Conception right? We all know that! Never mind that it's impossible, never mind that the source is two millennia old, we've been told it and to call Joseph Jesus' dad... why that would be insane!

The background of opinion states quite clearly that Jesus' biological father was the creator of the universe. Cameron felt it was best not to rock that particular cradle by so much as insinuating otherwise. In fact, in my youth I knew of an immaculate conception myself! Marta Imaculata-conceptione Boada-Ariza (great name) came from a particularly Catholic part of Spain. She was born out of wedlock to a mother that claimed virginity! No need for an excommunication there then.

Opinion, it's a powerful thing.

It's also a dangerous tool; opinion should never exist in a vacuum. There are two sides to every story, so they say, but in reality most arguments are far more complex, multi-

faceted affairs. We have a word for what happens when only one side of this gem is displayed to the public at large, it's called propaganda.

By smelting opinion down into a virtual monologue the media has retarded society's ability to engage in serious discourse on almost any given issue. We could list them: religion, abortion, social welfare, politics, it doesn't really matter, any more than it matters whether or not you are for or against those things. What matters is that there are voices out there that will never be heard, radical positions, minority views. Want to bring Sharia law into Australia? Let's hear it! I've got a few dozen constitutional niceties to point out to you up here on the podium and a couple of choice things to say about misogyny but hell, let's debate it if you like. Debate is good.

For as long as I can remember Sunday mornings in the UK have been punctuated with the lamentable *Songs of Praise* TV show, in which the faithful sing hymns for the glorification of God and the entertainment of others. There is no *Songs of Science*, no *Songs of Secular Ebullition*. Many voices, one opinion, one view.

Occasionally someone like Richard Dawkins will get a look in by sheer force of personality, or Tariq Ali will be wheeled in front of the cameras so he can deride Tony Blair as 'Second rate actor with a third rate mind'. But mostly this is just chicken feed; afterthoughts, a nod towards balance and the indignity of being the token atheist amongst a panel of believers.

That's why *You-tube* is of such keen academic interest to me. Browsing through *You-tube* can be an eye-opener, a plethora of cringe-worthy nonsense awaits within: Cute kittens, talking dogs, badly acted comedy sketches, girls in bikinis, funny commercials... cute kittens... the list goes on.

But if you want to know why the site sold to Google for over US\$1.2 billion last year you have to look beyond the sophomoric window dressing and the videos that confuse

rather than entertain, and realise what *You-tube* is really about. It's about community; it's about fulfilling a basic human need to share our passions with each other, to be recognised and acknowledged by our peers and to receive meaningless pats on the back from people we will never meet. That's what *You-tube* is, an expression of our own gregarious egalitarian past — and what better thing to share with one another than opinion? Go on, have a look.

Go to Ashley

You'll still find songs of praise and right wing luminaries, pro-lifers, creationists, cultists, psychics, weirdos and Lindsey Lohan but you'll also find something much more valuable if you look hard enough. You'll find the flip side of the coin. You'll find Ashley Schulte.

I have a confession to make. I first stumbled upon Ashley when I saw her video *Fucking Atheists* on *You-tube* a couple of weeks ago. In it she mocked atheists for thinking they were so superior and launched into some tired argument along the 'somebody had to build this pocket watch' line that I had heard several thousand times before. My response to her video in the comments section was, let's say 'less than polite' and leave it at that. And how embarrassed was I when Ashley messaged me back informing me that she was in fact an atheist? Let's just say I was 'quite' embarrassed... and leave it at that. Her video had been a parody of a typical Christian response of hostility towards atheists. It was spot on.

Somewhat mollified I trawled through some of the 30 odd 'blogs' that Ashley has created over the past few months under her onscreen persona of 'Healthyaddict'. It's all good stuff.

Part of the appeal comes from the fact that Ashley is beautiful in a very classical sense of the word. We can try to dance around this issue if you like, but there it is, we like to look at beautiful people and most of the top bloggers on *You-tube* have got the 'cute-gene' in spades. At any

A Question of Thought

rate, it's no doubt a blessing and a curse, this is *You-tube* after all, and half of the responses to her videos have come from men who find it appropriate to make crude sexual comments about what they would like to do to her.

But if her looks cause people to pause before moving on to something more visceral it readily becomes apparent that this is not why they keep watching. She holds your gaze, she swaggers, and she exudes confidence. If there's one thing that men find intimidating, and I'm no exception, it's attractive women wearing their confidence and intellect on their sleeve like Ashley does. She invites you to sell her your religion; she challenges you to blaspheme, responds to letters from radical Muslims, delivers us her top 5 crazy religions (Jedi's are in there, yes, there are followers of the Jedi 'religion', I looked it up) and takes us on a tour of a creationist museum.

She wants to engage with you, wants you to disagree, to support her, to mock her so that she can mock you back. And underneath all of this we see something that has been missing from mainstream media for several decades. Opinions, (the pluralisation is important here) discourse, debate! Some of it is idiotic, some of it is offensive, some uninformed and some insightful, but it is there unedited, uncensored, bereft of spin and as refreshing as a shower on a hot summer's day. It's like it never went away.

And for all this resonance, Ashley is only 21. She's lost friends over these videos; she's been labelled a militant, a Satanist! I'm not surprised. From a small town in Ohio of less than 5000 people, Ashley was baptised Methodist, attended a Catholic school, studied the Bible upon leaving, switched to paganism, agnosticism and finally arrived at the blissfully undogmatic atheist position. Her minority opinion is set against the background of one of the most religious countries in the world. The incumbency of Christianity in the USA is hard for even the very intelligent to overcome. And if I'm any

judge of character, Ashley is no slouch in the intellect department either.

Her problems with religion stem not from the religions *per se* but from as she puts it

Its effect on politics, the way that it can suppress people's rights, the way it de-rails critical thought.

She sees it as devaluing life. She adds:

I use You-tube to vent. They put the fear of God into me, oh yeah; I was scared of hell when I was growing up.

The use of fear is nothing new; it's the Kalashnikov of religious weaponry, cheap, reliable, effective and devastating. Fear of God, fear of hell, fear of damnation or even the very secular fear of being attacked or killed for your beliefs. Ashley remains unflappably stoic in the face of e-mails stating that those who insult Islam will be killed, where most journalists would blanch and make arrangements to have the phone placed on the ex directory list.

I pay more attention to the positive. I appreciate criticism but when it is downright negative I tend to ignore it. When someone speaks of anyone (such as your prophet) I can understand initially getting a little pissed off, but pissed off to the point of hatred? Come now. Don't let it get to you. Muhammad didn't let it get to him.

Common sense and clarity are lost on the reverently religious, they will suffer no insult to their belief system and blasphemers must pay the ultimate penalty. Should we even attempt to debate with them? Ashley thinks we should.

This is how I feel about issues, I can be blunt and in your face without being cut off by someone who disagrees with me. I just figure that most of these people use the same arguments over and over again. Whether they listen to me or not is their concern.

What happened to argument?

There are many forms of skepticism. Sure I'm an atheist but I'm also a political skeptic, a media skeptic, I'm skeptical of the need for hairspray and whether women really do want to wear high heels. I'm skeptical of

history, of revisionism, of maxims, of orthodoxy and even at times of science (I'm still not sold on string theory.) But the beauty of skepticism is lost on the Petri dish, we need it out there, we need to question and argue! What ever happened to a good argument?

It's still with us; it's on *You-tube*. They didn't invent the concept of course, forums have been hosting debate for years but there is something to be said for the visual medium, it arrests us.

Top subscribers can get a quarter of a million hits on their videos. While the mainstream media provides an endless diatribe of partisan politics and formulaic wonder drug stories, *You-tube* gives us access to a range of opinions unheard of in human history. Whilst Fox News refines the more insidious aspects of Joseph Goebbels's manipulations, *You-tube* gives us real people with real ideas and even the odd Skeptic or two. Over 500 people receive an email whenever Ashley posts a new video and they take a few moments out of their day to sit and watch her thoughts, interact with others who either support or reject her opines and add their own fuel to the fire of debate. And whilst I don't necessarily agree with everything she says, I have to admit that I am one of those 500 people who look forward to her next spray.

I'll take her reflexive come-what-may journalism over the Evangelical Church's Self satisfied mysticism any day because people like Ashley are asking the right questions to people who need to be asked them. Want to test my IQ?

No problem, because I do know what's worse than the Devil.

A vicious little beast called 'Ignorance'.



Healthyaddict's blogs can be found at www.youtube.com/user/healthyaddict

And if you really want to know more about star wars based religions then head on over to

www.thejediismway.org/

Like Ashley says, almost as bad a scientology...

Ask Your Pharmacist (About Weight Loss)?

A critical look at the role of the pharmacist as a source of reliable advice regarding weight management.

In the previous issue I discussed some of the reasons why the push to sell complementary medicines over the counter may be compromising the reliability of health advice proffered by some pharmacists. For reasons which I will explore in this article, I suspect that the advice some pharmacists offer about weight loss may be just as bad as what they may be giving regarding complementary medicines. This is especially concerning given that many pharmacies appear to be doubling as weight loss clinics of late.

The secret to losing weight

It is estimated that approximately 60% of the Australian adult population are overweight or obese, a figure which has more than doubled over the past two decades.¹ This may sound bad from a public health perspective, but not so from a business point of view, as many overweight people are willing to fork over a considerable amount of money to anyone who offers them a solution. In fact, the average Australian woman spends around \$250 annually on weight loss — many doing so even if not overweight!²

Despite the millions spent each year on unsuccessful weight loss treatments there is certainly no secret to losing weight. Adipose tissue (fat) is essentially our body's way of storing excess, unused chemical energy. Other than by

surgical means, in order to get rid of it, we must force our body to break it down to use as a fuel source, by consuming less energy (kilojoules/Calories) than what we expend through physical activity. In other words, body fat regulation is a matter of energy in *vs* energy out. In layman's terms, if you want to lose weight you need to eat less and exercise more.

Most fad weight loss schemes work because, ultimately, they all result in energy reduction. For example, despite the significant difference in claims made by their promoters, there was not much difference between the effects that all four of the most popular diets in the US (Atkins, Zone, Weight Watchers and Ornish) produced after 1 year³.

Whether it is good for you and whether it is realistically sustainable in the long run, however, are the key aspects that a good weight loss program should provide. For long-term health, the best way to go is the NHMRC's 'Dietary Guidelines' and illustrated by Nutrition Australia's 'Healthy Eating Pyramid' — designed to minimise the risk of other diet related diseases, including (but not limited to) cardiovascular disease and certain cancers.

Tips for budding weight loss scamsters

Telling people to eat less and exercise more is not going to be enough



Stuart Adams, a nutritionist, is concerned about the rise in dubious advice from pharmacies.

to convince them to part with their money. In order to do that, you need to come up with a weight loss method that possesses three essential characteristics:

- 1) it has to be new
- 2) it has to promise rapid results; and most of all,
- 3) the less effort the better.

A typical weight loss customer has probably tried many other schemes before arriving at yours. Despite a lack of true scientific breakthroughs in weight loss over recent decades, you need to provide the market with something it hasn't already tried, which inevitably means bending the truth a bit or capitalising upon the latest fads, depending upon what seems to be popular at the time (low carb, ketogenic diets are all the rage at the moment).

In addition to providing something new, you're going to have to offer rapid results. Despite taking months if not years to pile on the pounds, most people will inevitably want to lose it as soon as humanly possible, with many considering anything less than a kilo a week to be not worthwhile, and usually give up if a few weeks go by without any results. (Nutrition Australia recommends that 1-2 kg a month is a healthy rate to be losing weight.)

The other trick to success in weight loss is to make your scheme appear as effortless as possible; healthy food choosing skills and calorie counting appear time consuming and complicated to many customers. Many fad diet schemes dictate what to eat, how much of it to eat and when to eat it (taking the effort out of food choosing). Some go a step further and actually provide the meals for you, taking even the effort of shopping out of the equation. Some do claim to teach clients healthy food choosing skills, though they usually sell them unnecessary products in the process — prepackaged meals, meal replacements, supplements or gimmicky methods of counting calories. In reality,

however, it is neither difficult nor time consuming to look at the kilojoule content on a label and do a bit of simple adding up.

Any low kilojoule diet will produce weight loss, however, they generally fail (long term), because they aim to provide the market with what it *wants* (something new, quick and easy), rather than something it *needs* (learning how to make healthier food choices). Once a person loses the motivation to follow the prescription — and they will — it's like taking the floaties off a person who never learnt to swim.

Weight loss in the pharmacy

Among the first places a customer will turn to when looking to shed a few kilos is the local pharmacy — a trend that has seen pharmacists cashing in on the obesity epidemic perhaps more than anyone else.

Magic pills are perhaps the most basic example of effortless weight loss. Herbal varieties (promoted as fat metabolisers or appetite suppressants, which has inevitably attracted a plethora of hits due to sponsored google ads, etc) are appealing as they are easy to get hold of, but are mostly useless. This is not very comforting, given that many of them can be found on the shelves in most pharmacies, with customers often assuming that someone as reliable as a pharmacist simply wouldn't sell a medication unless it really worked.

As I mentioned in the previous issue, the first job I had after finishing my nutrition degree was in a pharmacy specializing in nutrition. When I heard they had a weight loss program I assumed it would involve dietetic counselling. As I learnt, however, people don't want to spend money on advice — they want quick-fix products they can buy over the counter. The pharmacy's 'program' involved selling a brand of meal replacement sachets, which the customer was to consume instead of regular meals. Customers on the 'program' also had to buy a bottle of multivitamins, a bottle of mega-dose

antioxidant vitamins as well as a bottle of 'Milk Thistle' to help cleanse their liver and boost their metabolism — all of which the customers assumed must be reliable advice, as it was coming from a pharmacist or his staff.

After phoning many other pharmacies posing as a customer, I soon realised that while many were offering weight loss plans, none included dietary advice. That is, unless I signed up for their entire program, necessitating the purchase of various meal replacements and weight loss pills (such as 'Optislim', sounding conveniently similar to the one used in hospitals). One pharmacist even told me that the reason I was overweight was that all the stress in my life depleted me of vitamins and other nutrients, which had to be replaced only by his special products. He insisted that I could not lose weight without his meal replacements and 'metabolism boosters', all of which would set me back several hundred dollars per month. As it turned out, he was doubling as a 'Herbalife' distributor.

Meal replacements

Meal replacement sachets are made from milk protein, vegetable oils and a few added vitamins and minerals, which are then added to water to make a milk shake. Depending on the brand, they generally contain around 150 Calories per shake. They do not contain any magical ingredients to make you burn fat any faster; they are simply low in energy, so replacing meals with them results in overall energy restriction.

When it comes to the dietary aspects of weight management, meal replacement shakes are the ultimate no-brainer. This is fine for people who actually have no brain, but I'm relatively certain that most people have the capacity to learn how to choose their own meals by looking at a food label and doing some very simple calculations. Essentially, meal replacements take the thought out of choosing food. The problem with this is that the person using them learns absolutely nothing

about how to make healthy meal selections. They are too nutritionally inadequate to survive on for long, so commercial schemes that sell them aim to gradually wean the customer off them and back onto real food. In my opinion, if promoters of these schemes were serious about teaching people food choosing skills, there would be no need to use meal replacements in the first place. They are simply a quick-fix product for which people are willing to open their wallets (unlike dietary advice alone, as I have been told by many pharmacists). Furthermore, they may give the impression of teaching food skills, by making dietary recommendations for when the patients cease using the meal replacements. However, I think it unlikely that anyone would actually stick to the “wean-off” diet for long anyway — especially given that replacing real food with milkshakes just makes the food choosing process even lazier.

To the best of my knowledge, none of these programs has ever been studied observationally. Given the number of people I have spoken to who can list meal replacement schemes among the many weight loss methods they tried and failed at, I think it is safe to say that they are utterly useless when it comes to long term weight management. While meal replacements, such as ‘Optifast’, are used for morbidly obese patients in hospitals, they are generally used as a last option when the patient has shown they are incapable of following an energy restricted diet. I can see no legitimate use for these things to be sold over the counter, especially without medical supervision; the potential for retailers to make questionable claims about them and promote them as part of a faddish diet scheme, is another matter. This is most definitely not an isolated problem.

Weight loss programs

Among people to whom I have spoken, by far the most popular pharmacy based meal replacement

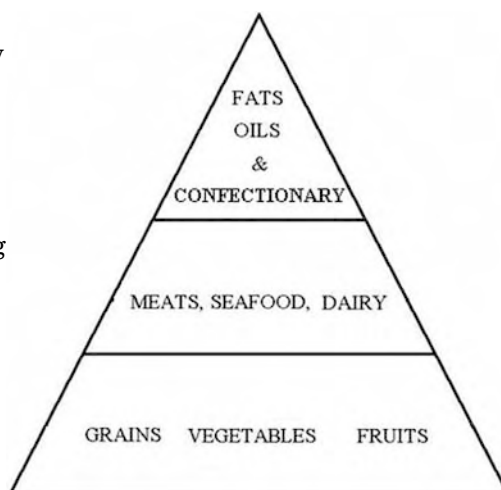


Fig. 1 Standard food pyramid.

schemes they had tried without success, is the one marketed as ‘Tony Ferguson Weightloss Program’. If this company’s website is to be believed, their clientele has increased from approx 50,000 people to over 250,000 in the last year. The ‘Ferguson’ program is sold through both its own Weight Loss and Wellness Centres and the Terry White chain of pharmacies around the country.

Like all meal replacement schemes, this capitalises on people’s desire to lose weight rapidly with minimal thought and effort. What makes the Ferguson scheme so attractive, however, is that it uses a combination of various weight loss



Fig. 2 The Tony Ferguson’s “new” food pyramid.

fads rolled into one, to create its own ‘new’ approach. As far as popular fads are concerned, the ‘low carb’ craze is probably number one at the moment, now with an added buzz word called ‘ketosis’ — both of these form part of the Ferguson program.

Low carbohydrate diets

Given that most of our energy intake comes from carbohydrates, restricting carb intake results in considerable energy reduction and subsequent weight loss. “Low carb diets” tend to produce a rapid weight loss in the first few weeks, but it is largely due to fluid loss (dehydration). Studies have shown that after several months they produce no greater weight loss than do other diets of the same energy value.⁴ Restricting carbohydrate intake, however, would require a dietary intake very different from that shown in the Healthy Eating Pyramid which lists grain foods among the most important (especially wholegrains, which population studies show decrease the risk of CVD and certain cancers). Moreover, low carb diets generally result in an increased intake of animal foods which, in excess, are associated with an increased risk of diet related disease, which is why they are listed higher up in the pyramid (Fig 1).

In true low carb, high protein fad-tastic fashion, Ferguson seems to have completely ignored this more conservative approach and instead published an entirely different food pyramid in their instruction booklet (Fig. 2).

Health authorities around the world, including the Heart Foundation Australia,⁵ have warned against low carb diets. To date, not a single Health Authority has ever recommended them.

Ketosis

Ketosis is a metabolic state in which the body relies primarily on oxidised fat as a source of fuel when deprived of adequate amounts of carbohydrate. While this sounds good in theory, it doesn’t actually result in any more weight loss than non-

ketogenic diets of the same caloric value. In fact, a recent clinical trial found the only difference in outcomes between a ketogenic and a non-ketogenic diet was that ketogenic dieters reported feeling greater emotional discomfort (less 'vigour') and exhibited higher levels of inflammation when their blood was tested.⁶

VLCDs vs LCDs

Low Calorie Diets (LCD's) are defined as those providing between 800-1,200 Calories per day, and are usually associated with little or no side effects. Very Low Calorie Diets (VLCD's) are defined as those providing between 400-800 Calories per day, and are associated with a plethora of problems such as dry mouth, headache, dizziness, fatigue, cold intolerance, dry skin, menstrual irregularities, hair loss, constipation, gall bladder problems and even a few reported cases of psychosis.⁷ One of the most common aspects of VLCDs is muscle wasting. In fact, approximately 25% of the weight lost when on a VLCD is muscle tissue; even adequate protein and resistance training does not reduce this much at all.⁷

As is the case with low carb diets, VLCDs are associated with a greater initial loss of body mass. Subjects who start off on them and then switch to a LCD do not lose any more weight after several months than those who maintain a LCD throughout the entire duration of the studies.⁷

Anyone with any basic nutritional education would be aware of these simple differences, which is concerning given the following quote which was part of the second of two paragraphs on Tony Ferguson's (former) homepage:

The program is a combination of VLCD (Very Low Calorie Diet) and the ketogenic principle. VLCDs include pre-processed and carbohydrate and calorie reduced diet of approximately 1000-1,200 calories per day. Benefits of VLCDs in conjunction with carbohy-

drate restriction include: 1) rapid weight loss and 2) the body goes into ketosis. Ketosis happens after 48 hours when the body detects that it isn't getting enough carbohydrates to operate as it usually does, therefore it 'switches over' to a different method of providing fuel for itself — your fat stores. The enormous benefit of this particular method of weight loss is that it preserves your lean muscle mass while you are losing weight.


It's not obvious whether this claim was based on perceived commercial advantage or ignorance. Either way, however, given that these are the most fundamental bases of the program (it gets more complicated as you go further into it) it's not a good sign. Perhaps the saddest part is that it's a classic demonstration of how easy it is to start a hugely successful and rapidly growing weight loss scheme, with little apparent knowledge of the underlying science.

After mentioning this silliness in public seminars, as well as my regular newspaper column, the wording on Ferguson's website suddenly changed. Among other things, the V in VLCD had magically disappeared. I have little doubt that almost no one other than me will ever notice the difference, or think anything of it, because it seems like such a trivial and arbitrary difference. It isn't.

The story continues to change from time to time, though readers can see previous versions by going to www.archives.org and entering 'tonyferguson.com'.

Epitome of pharmacy-based weight loss

This company's nonsense is not that much worse than any other weight loss scheme pushing new, faddish ways to lose weight rapidly with minimal effort, while doing little or nothing to address the actual problem (poor food choosing skills and motivational issues). The concerning thing is that it has used the pharmacy setting as a means of doing it.

Thanks to people who abuse their positions as trusted health care professionals to use pharmacies as a vehicle to push faddish weight loss schemes, one has to question the validity of the pharmacy as a reliable source of information on weight loss or anything nutrition related. I would hope that honest pharmacists out there and others with a concern for the pharmacy reputation would not ignore this. 

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Can a Scientist be Christian?

Asking some hard questions

Although the rate of Christian belief among Western scientists is lower than that in the general population, there are still many people working in scientific fields who claim to believe in a traditional Christian god, with attributes of omnipotence, omniscience and omnipresence. I hope to show that such a belief — no matter how ‘compartmentalised’ — is incompatible with the beliefs necessary to work effectively in science. In particular, science relies on an underlying assumption we can call the Axiom of Consistency, with which any supernatural beliefs are more or less incompatible.

What can a Christian experimenter say?

All science is based on observation and experimentation. Imagine that two scientists, Doctor Tarr and Professor Fether, repeat Galileo’s famous experiment, dropping several bodies of different sizes and weights in a vacuum and measuring the time it takes them to fall a specified distance. Both report on the experiment as follows:

Tarr/Fether: *We recorded that the time taken for these bodies to fall was the same, regardless of their size and weight.*

So far, so good. But so what? Science is not about single observations. The fact that particular bodies fell in a particular way on a particular occasion is of no value to anyone. If Tarr and Fether want to keep their grants and publish their

papers they need to generalize. For the atheist Doctor Tarr this is no problem. She can go on to say:

Tarr: *Therefore, bodies in a vacuum will fall at the same rate regardless of their size and weight.*

But the traditionalist Christian Professor Fether cannot say this, because Professor Fether lacks important information. She has no way of knowing whether her objects fell at the rate they did because of some underlying force of physics, or because God made them fall at that rate. Professor Fether, in fact, has to choose between two hypotheses, with no reason to favour either one:

Fether 1: *Bodies in a vacuum will fall at the same rate regardless of their size and weight unless God intervenes.*

Fether 2: *Bodies in a vacuum will not fall at the same rate regardless of their size and weight unless God intervenes, and God intervened in this case.*

Fether’s God, remember, is omnipotent, omniscient and omnipresent. It requires no more trouble or effort for this God to adjust the speed of any number of falling bodies, any time, anywhere, than it does to leave them alone.

Most Christian scientific workers would, I take it, opt for hypothesis 1 rather than 2, but why? There is no clear evidence (or doctrine) indicating whether or not God takes a day-to-day interest in the workings of physics and chemistry, and there are many occasions on which God or



Jon Jermey is a freelance indexer, website designer and database consultant with a life-long interest in exposing superstition.

God's representatives have been reported to alter what would otherwise have been the outcome of physical or chemical events. Perhaps God is an interventionist, intimately involved in running every process that atheists mistakenly regard as natural; or perhaps God only handles, say, thermodynamics, and leaves the other branches of physics to manage themselves. But this is certainly not something which a practicing scientist can claim to know for a fact. So Fether's choice between hypothesis 1 and 2 is an arbitrary choice, presumably based on her prospects for grant funding and a continued career, rather than on any factual principle.

But this doesn't help her in the long run. Science is not just about discovering facts, it is about applying them. Unapplied facts are just interesting curiosities.

Can Christians apply science?

A ski resorts wants to build a toboggan run. It calls in Doctor Tarr and Professor Fether as consultants to ensure that the run will operate properly. They see the designs and are asked for their comments.

Doctor Tarr has an easy job responding:

Tarr: *From my knowledge of physics I can state honestly and reliably that this run will work.*

But what can Professor Fether, as an honest traditionalist Christian, say in these circumstances? Since all physics depends on God's will:

Fether: *This toboggan run design will work if God either makes it work or chooses not to let it fail.*

The resort manager — another traditionalist Christian — is not impressed. Professor Fether has said nothing that he didn't know already. Of course the run will work if God makes (or lets) it work. What he wants to know is whether God will make (or let) this particular run work or not.

At this point Fether can tell the truth and say:

Fether: *Why are you asking me? I'm not a priest or theologian. I have no idea*

what God's plans are for this particular run.

or she can lie and pretend, despite her Christian beliefs, to have reliable knowledge about what will happen in the future:

Fether: *Physics says this run will work, so it will work. [Please make it work, God!]*

Most traditionalist Christians who are scientists — and want to stay in work — will choose to lie.

In observational sciences like zoology the prospects are no better. The atheist scientist can say:

Tarr: *I observed five bell frogs in this pond.*

The scientist who is Christian can only say:

Fether: *God has allowed me to believe that I observed five bell frogs in this pond.*

But nothing at all can be deduced from this without making assumptions about God for which there is no evidence.

The Axiom of Consistency

Doctor Tarr can generalize with impunity because he believes the universe is consistent. Other things being equal, the speed of light on Tuesday will be the same as it was on Monday; an object weighing 50 grams in Nairobi will weigh 50 grams in Boston; a thrush's egg will hatch out a thrush rather than a dragon. This Axiom of Consistency is seldom formally acknowledged, but it lies behind all science. Sometimes, of course, other things aren't equal, and catastrophes occur or interesting discoveries emerge, but all scientific work relies on the principle that tomorrow's laws of physics and chemistry will be essentially the same as today's.

But Professor Fether has no reason to believe in the Axiom of Consistency, and every reason to doubt it. If God's fingers are on all the levers all the time, then there is simply no way of knowing what will happen in the future. It would be highly impious for her to assume God will make (or let) the future be consistent with the past. Where is

the evidence for this assumption? Arguments which attempt to apply the Axiom of Consistency to God, like this:

God has always behaved this way up till now, therefore God is likely to behave this way in future.

are not valid, since she has no way of knowing what God — who is often claimed to exist outside time — has 'always' done, or what might motivate a change in God's behaviour. And if she believes that God has intervened in the operation of physics in the past, during Biblical times if not at the moment of Creation, she has every reason to believe that God may continue to do so.

In fact the only thing Professor Fether can honestly say on completing any experiment or observation is:

Fether: *God either made this happen or prevented it from not happening, and may choose to either make it happen or prevent it from not happening in the future.*

But this is a statement of Christian faith which has nothing to do with science, or with the experiment or observation from which it is supposed to derive.

Conclusion

Science is betting on the future from what's been observed in the past or present. Atheist scientists believe they have evidence on which to base their bets, but this evidence is not compatible with belief in a traditional Christian God. No traditionalist Christian — scientist or otherwise — can honestly generalize from a particular instance to a prediction or rule. Their stated beliefs about God's all-encompassing powers turn their bets about the future into sheer guesswork.

Thus any scientist who claims to believe in God's omnipresence, omnipotence and omniscience cannot at the same time sincerely claim to be doing science, unless they are deliberately disseminating information that they believe to be untrue. A traditionalist Christian 'scientist' is either lying or misled.



Researching the Surreal Utterance

Techniques for avoiding the unavoidable, or having fun trying

A cacoethes-prone skeptic's tool for subverting cultural interactions and commercial import-unities.

Introduction

The title of this article is pompous, pretentious and misleading. There is a reason for this. I'm hoping that my academic supervisor at Walladump-dung University will simply note the title in my annual report and assume that I have written something which is consistent with my declared research interests (pragmatic skepticism). In fact, this article is about a recreational interest of mine rather than a research interest. The recreational interest? Causing mild consternation and/or confusion during routine verbal interactions. I know this interest sounds shallow and rather pointless, and indeed I cannot defend myself against the charge of being shallow. (I freely concede that deep down, I am in fact extremely shallow.) However my hobby is not pointless — it affords me amusement, and can add spice and purpose to the most irritating, mundane and routine interactions.

Cacoethes is in the title because: (a) some of my friends and all of my family have pointed out that I do suffer from the condition; and (b) my academic supervisor would not have a clue as to what it means. (Just in case my academic supervisor actually retrieves this article and manages to read this far, I will provide

the definition of cacoethes here for his benefit. *Cacoethes* — *an urge to do something inadvisable.*)

The article is in the form of a series of vignettes. Now read on.

Vignette 1:

Dealing with a door-to-door salesman

In my blogger profile, I state that one of my interests is making surreal utterances. The cartoon (opposite) documents an actual incident in which I used a surreal utterance to good effect.

It happened this way. Once upon a time, a young salesman knocked at my door. He was obviously keyed-up and well rehearsed and he began a spiel designed to recruit me to a subscription scheme (which was tied in some mysterious way to car repairs). At first, I uttered mildly puzzling responses. For example, I said I had no need of such a scheme, as I never repaired my cars. When he sought details of this strange, negligent behaviour, I said that I continued driving my cars, ignoring the need for maintenance and servicing until they broke down irretrievably. I then left them at the side of the road, removed the plates and registration, hitch-hiked to the nearest car dealer, and bought a new car.

This type of off-the-wall response is normally enough to send the salesman on his way, but this one persisted, as my strange responses



Jef Clark, when not teaching teachers how to teach, or exposing the inner idiosyncrasies of Academe, is a regular Skeptic columnist.

at least had something to do with cars. In the face of such resistance, I implemented my fail-safe option — the surreal utterance. I looked furtively up and down the street, put my finger to my lips and cautioned him to be silent. I then motioned for him to come closer, and enunciated slowly and clearly (in the manner of a secret password) “the fish has scales which are rough, but when the moon is full, the scales shimmer in April”. He took off up the driveway without a backward glance, and I like to think that he now has a riveting anecdote for his next get-together with other salespersons.

Vignette 2:

Third party haggling via the spectacles cellphone

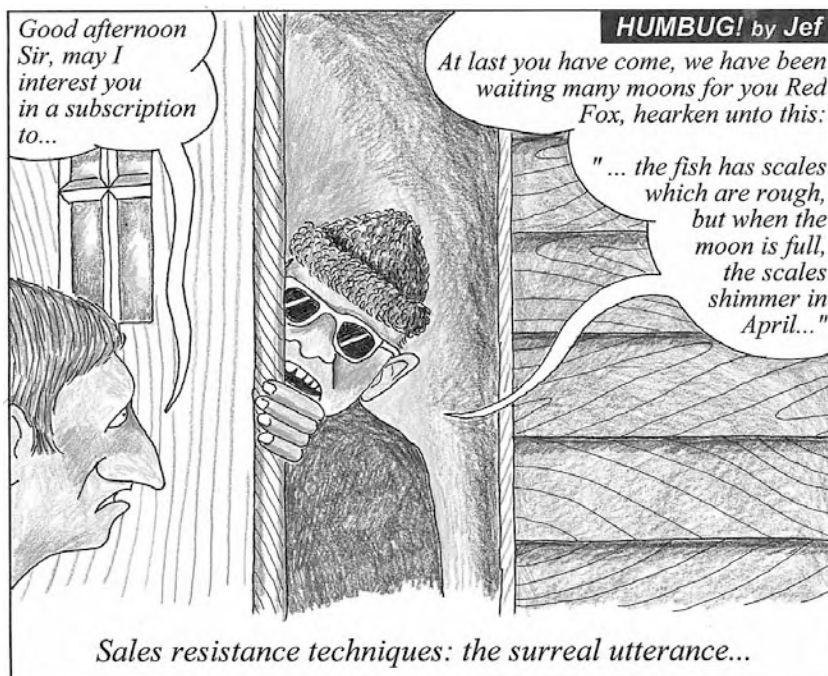
I don't haggle. But from time to time, I seek to purchase something in settings where haggling is expected (for example, a computer store). While I find haggling demeaning and stressful, I don't mind fake haggling via a third party. Recently, I invented the spectacles cellphone as a means of introducing a third party and distancing myself from direct involvement in sordid negotiations on price. It works this way. I enter the store, and express interest in (say) purchasing a PDA. At the point where I have all the requisite information, and price negotiations loom, I interrupt the salesman's spiel by apparently taking a call on my spectacles-cellphone. I don't have one of these — in fact I don't believe that they actually exist. But with the rapid growth in technology these days, my interlocutor can't be sure that I am faking it. I simply press the arm of my spectacles close to the side of my

head, answer an apparent call, and begin one side of a fake, urgent and totally engrossing telephone conversation. If my interlocutor doesn't get it straight away, I hold up my free

ing innovation in coffee vending. Over the last few years, a number of independent, and two chains of, coffee shops in greater Brisbane have brought in the practice of asking the customer his or her first

name when he or she orders the coffee. This startled me the first time it happened, and I meekly gave my name to them. When my coffee was ready, they called out “Jef” and I was required to collect my coffee from the counter.

My first considered response to this impertinent question at my hitherto regular coffee shop was to simply give one of two different names every time I went there. Staff who had served me a number of times finally asked why the



hand in the “stop” gesture and frown as I continue the fake conversation.

The subject of the fake conversation is the price of the PDA. The fake call is from my wife. The salesman will soon gather from my one-sided conversation that I am a sucker, that my wife knows that I am a sucker, and that my wife will have the final say on the deal. Thus, when I say such things as “how much discount for cash?” or “will you throw in an extra memory card?”, I am merely repeating instructions from my wife — she is haggling, not I. The salesperson will come to believe that I am taking instructions from my wife, or he will conclude that I have an obscure mental illness. In either case, I will probably leave with the object of my desire, and I will have paid well below the list price.

Vignette 3:

Subverting first-name familiarity at the coffee shop

I am developing an ever-expanding repertoire of responses to an irritat-

two names (Jef and George). In response to the question I exhibited extreme surprise and looked warily around the coffee shop and environs. I then said that they must sometimes serve my twin brother George, and that I wished to avoid running into him at all costs due to a family quarrel. I then scuttled away, hiding my face behind the newspaper I was carrying.

At another of my regular haunts I now wear an earpiece in one ear, and feign a degree of deafness when they ask the standard question. I then speak in an over-loud voice in reply. Then when my coffee is ready and they call my name out, I ignore it. In due course, one of the servers is sure to come over to my table and personally deliver the coffee.

A very simple and convenient tactic is to give an unlikely name. A name that is so unlikely that the server will experience a degree of uncertainty in calling it out. So far, “Rapunzel” has been my most inspired alias. It's certainly a head-turner. I am currently working up

the courage to award myself a knighthood. “Sir Jeffrey” is sure to cause a ripple in the quiet routine of Gloria Jean’s.

A variant on the unlikely name is the insistence on an unlikely or extremely difficult pronunciation. On a few occasions, when asked for my first name, I have replied “Ramone”. However, I pronounce Ramone with a marked “rolled R”. (Tongue vibrating well back on the palate.) When the servers repeat my name (invariably with a standard English R), I protest and correct their pronunciation until they get it right. I have almost wept tears of suppressed laughter on a few occasions when “Ramone” with a rolled R has been called out loudly by a server. It’s sometimes very difficult maintaining composure.

Vignette 4

In which I am bested by a personable spruiker
(This is the first of a series of vignettes set in Sri Lanka, where my wife Kathy and daughter Ashleigh vacationed with me in July of 2005).

On a car journey between Sigiria (famous temple site) and Kandy (elevated and picturesque regional capital) we stopped at a “herbal farm”. The farm is a well-known tourist attraction (and thus to be avoided) but it was also a good place to get lunch. In the course of a flaky and compulsory exposition by the proprietor on the miraculous properties of various herbs (which according to him didn’t contain any chemicals!!) he offered us a bottle cap filled with a herbal concoction that “promotes energy”. To my retrospective astonishment I was caught unawares and took a sip. And so did Ashleigh and Kathy.

It was something of a shock that this spiv’s super-friendliness had the effect he intended, and disarmed us. At the time, refusal seemed churlish, but on reflection it was the only reasonable thing to do. Talking about it afterwards, we agreed that we would be more circumspect and guarded in future, and we were all surprised by our meek compliance.

Lesson learned? Don’t betray your principles or repudiate core aspects of your personality just because you are in an unfamiliar cultural context and wish to be seen as “nice”.

Vignette 5

In which I feign outrage at an indecent suggestion

While staying in Kandy we were pestered by touts from daylight to dusk. Fight or flight is the typical response of a tourist to relentless predatory sales pressure. Thus at first, I remonstrated with pestiferous street touts, or fled into the foyer of the nearest posh hotel. However I soon decided that as touts were an ubiquitous and inescapable phenomenon in cities and resorts in Sri Lanka, I would have to come up with creative and amusing responses or my vacation would be ruined.

My first attempt at a creative response set the tone. A tout came up to me and said: “Oh hello, you remember me from yesterday, I was your hotel porter.” (He wasn’t — I asked him which hotel and his guess was wrong.) Undaunted at being caught out, he then started a conversation during which he expressed admiration for my batik shirt, and this led to an offer to help me locate a good bargain — his brother just happened to own a batik store.

I pretended that I misunderstood every second word he said and this put him off his game. I kept him going for some time with a series of random “misunderstandings”. His exasperation rose steadily, but at one point I really “tweaked it”. I feigned outrage at alleged personal comments on my body. He had said that he really liked my pants, while pointing in the general direction of my crotch. I pretended that I interpreted this as him making a salacious remark and coming on to me. He finally said in a rising panic: “No, no, not that, only clothes, I sell clothes.” I made a sniffy remark about not taking my clothes off for strangers in the street, and broke off the engagement.

Vignette 6

Some skeptical observations

One evening while staying in Kandy we all went to a traditional dance program which also incorporated fire-walking and sword-swallowing. It was a long and tedious program, and I must say that skeptics seem to have had some success with the debunking of fire walking, because the audience of tourists seemed fairly unimpressed — a definite yawn for some.

An incident worthy of note. A beggar outside the dance venue pushed himself forward and with insistent pleas asked for money. His appearance was striking. His right arm was twisted across his back in an unnatural and “impossible” position. It looked awful. His spiel involved frequent use of the word “polio” and pleas for money to help his “polio”.

By this time in Sri Lanka I had resolved to keep my head down when accosted in this way and to forge ahead, but it was difficult in this case because of his frightful appearance. Then I decided to have a discreet but close and dispassionate look at his appearance without being put off by the spectacle itself. I noticed that the muscle tone of his “deformed” and “useless” arm was just as robust and healthy-looking as his normal arm. Polio would not have had this effect, and neither would a useless arm retain apparently perfect muscle tone.

I then realised that his arm was normal in all respects, apart from a dislocation at the shoulder. Remembering that I had heard of individuals who could dislocate their arm at the shoulder whenever they wanted to, without pain or immediate ill effects, I formed the view that his working day involved saying goodbye to the wife and kids, commuting to a suitable sidewalk, and then popping his shoulder. He needed an agent who could advise him on a more plausible disease. Polio was clearly a naive career choice.

Vignette 7

The homeopath and his daughter, the psychopath

Ashleigh and I were approached on the beach by a serial-pest tout who wouldn't take no for an answer. He crossed the threshold, so I stopped and began tout fishing. He asked whether we were interested in lobsters. Without knowing where I was going with this response, I pretended to dry-retch in an extravagant fashion on the beach. He didn't appear fazed (neither for that matter did Ashleigh), and said again that he knew where we could get very good lobster. As he uttered the word lobster I fell to my knees, doubled up and dry-retched on the sand, Ashleigh put her arm around my shoulder, and said some comforting words. I said to Ashleigh in a pleading voice: "Make him stop... please make him stop." I then stood up gingerly and the tout asked what was the matter. I said that whenever I heard that word I vomited because to me the animal he mentioned was just as disgusting as a cockroach. He said: "What? Lobster?" I fell to my knees again and Ashleigh said with feigned anger: "Don't say that word again." Then she started to engage in some terrifying dry-heaves herself.

The tout finally offered to show us (for a price) where we could get medical attention and some medicine from a clinic. Ashleigh said we didn't believe in doctors, and claimed that I was a naturopath. We both straightened up, prepared to walk on, and I said: "Well actually, I'm a certified homeopath but my daughter here is a certifiable psychopath."

Vignette 8

The spaced-out surrealist

On our final day in Sri Lanka I was enjoying a solitary stroll along the beach near sunset. A tout made a beeline for me from his station under a tree. A huge and ingratiating smile preceded the rest of him. I resolved to really experiment with a hyper-surrealist set of responses to the inevitable spiel. Tout: "Hello, what country are you from?" Me (in an abstracted manner): "I'm not from the country, more of an acreage sub-division adjacent to suburban housing estates... I do have some kangaroos loose in the top paddock however, so in that sense your unwarranted presupposition is almost on the money."

The tout was somewhat taken aback at this unexpected response. He set aside my unintelligible answer and resumed the standard spiel. Tout: "How long are you in Sri Lanka?" I pondered for a moment, and then said guardedly (as I had many times before): "Well I think I am the same length as I was in Australia — 177 centimetres." Tout: "Uh... what hotel are you at?" Me: "Well, I don't really know, I left it three days ago and went for a walk, but now that I've been walking for so long... I'm a bit confused... sleeping on the beach..." (while speaking I revolved slowly in a circle). I then abruptly said: "But wait, isn't Sri Lanka an island?" The tout confirmed that it was indeed an island. I then said with relief that if I continued to walk along the beach in the same direction, I would eventually arrive back at my point of departure. The tout backed off at this point.

I then faced in the opposite direction and strode off confidently. I walked about 50 paces and then faltered, turned around and walked uncertainly back to the tout. I then admitted that I wasn't sure what direction I had taken when I set off from the hotel three days ago. The tout asked me if I remembered what the hotel looked like — he could possibly take me there — for a small consideration. I said that it was a large building in which there were many rooms, and that people stayed in those rooms for anywhere from one day to three or four weeks. I said that it had green grass in front of the building, but that the green grass became sand shortly before the ocean. The tout backed off further. I then looked up at the hotel to my right, displayed extravagant joy (along with feigned recognition) and strode into the hotel grounds, giving the thumbs-up to the tout.

Vignette 9

The perfect, pithy, all-purpose response to a tout

I used this often in Sri Lanka, and it always worked. (It has worked since in both Rome and Hong Kong.) In response to an initial spruiking (in English) from a tout, affect incomprehension and say: "Est-ce que vous parlez francais?" When the tout responds in perfect French (they almost always do), say: "I'm sorry, I don't speak French" and walk away. I fancy at times that I can actually hear the synapses short-circuiting as the tout tries to make sense of this, the most perfect of all my surreal utterances. ☹

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Reviews

There's Magic and There's Magic

***Performing Dark Arts: A Cultural History of Conjuring,* Michael Mangan; Intellect Books, 2007**

The basic tricks and techniques of magic have not changed over the centuries. Emerging from locked boxes, pulling objects from manifestly empty containers, and so on, can be found in descriptions and magic manuals from the seventeenth century, and legend has it that even if Ancient Egyptian magicians were not sawing a woman in half, they were capable of decapitating geese and restoring their heads to them. They probably did the “cup and balls” trick, too, mak-

ing a ball show up under a cup where it could not have been or disappearing from under a cup where it just had to be.

The shows may have been the same, but what people made of them differed through the ages. Saw a woman in half a few centuries ago and you'd risk being tried for black magic, for instance, even if it was “just a trick”. The conjurer pretends, and the audience helps him get away with it, that he has special powers. In a famous definition by illusionist Robert-Houdin, a conjurer is “an actor playing the part of a magician”. The role is of a sorcerer with capacities that defy logic and physics, when of course the conjurer is just playing with the minds of the audience.

The boundaries of performance that challenge the spectator's sense of reality, and the changes of those boundaries over time, are the subject of this erudite study by Michael Mangan. You may get hints of how magicians do some of their tricks from this book; if they have been around for millennia, it's to be expected that some of the secrets would slip out. That's not Mangan's point. This is more a study of such tricks as staged illusions in comparison with the “real” spells and black magic that wizards are supposed to be able to do. General opinion has recently gone against such wizardry, but it is still playing a role.

Preceding even biblical accounts of magic is the story of Dedi, who was able to grab a goose, pull its

head off, set the bird's body on the ground with its head separate from it, and then reunite the two with the goose as good as new. Mangan quotes a description of the trick by popular magician David Blaine, a description that emphasises how the trick was a bit of a stage show, a mere entertainment; this is not surprisingly a modern view of the performance. But the decapitation and revivification of a goose is a simple trick (and the mechanics of it are hinted at here). The original accounts go on to claim that Dedi could do the trick on a cow, but more importantly that the king, Khufu, wanted him to make prophesies, and believed that he had an in with the god Thoth. It is far more likely that the king thought that Dedi was working real miracles rather than doing clever tricks.

It is this ambivalence, which Mangan calls “shaman versus showman”, that is traced throughout the book. The magician, he says, “blurs the distinctions between effective magic and entertainment, makes magic into performance and performs magic in the process”.

In the Bible, there was a distinction between the two. In its most famous account of magicians at work, Moses and Aaron go up against the Egyptian magicians, a duel that involves turning staffs into snakes. Both sides would have wanted to have been seen as working real miracles, but by the time of the Renaissance, the Egyptians in the story were held to be mere



Rob Hardy, a regular reviewer for the Skeptic, is a psychiatrist who practices in the USA.

tricksters, and a Victorian account says that the same trick was still being done in Cairo, with actual serpents hypnotised into rod-like stiffness, to resume snake-life when thrown upon the ground. Moses and Aaron, however, were held to have used the real magic, the kind that comes from the real God.

Even so, the condescension of such a god to do magic in performance was not always held in reverence. The Elizabethan playwright Christopher Marlowe had a reputation for being an infidel, and supposedly held that not only did Moses use the tricks he had learned in Egypt for the staff/snake transformation, he also made the Israelites wander in the wilderness for decades for the purpose of allowing those who knew of his tricks to die before he took the rest to the promised land.

Religion constantly is mixed with stage magic through the centuries. Magical transformations were held to be the product of human alliance with “The Father of Lies”, the devil himself. Unfortunately, once Protestantism took hold, churchmen such as Calvin could maintain that the transubstantiation of the Eucharist was merely a play at a magical incantation and transformation. Daniel Defoe wrote that Catholicism was “one entire system of anti-Christian magic.”

Piety and magic may have sometimes been confused, but there was real worry the conjurers had some sort of capacity for black magic. Brandon was the juggler for Henry VIII at a time when “juggler” meant the same thing as “conjurer”. Brandon was able to draw a picture of a dove, stab the picture violently, and then call the attention of his audience to a nearby dove who thereupon fell from the rooftop dead. There is a contemporary explanation of how the trick (and it was a trick) was done, but it did look like “real” sorcery, something like sticking pins in a voodoo doll to get the effect on a real person. In fact, King Henry

forbade him ever to do the trick again, with the implication that Brandon might go on to stab portraits of the powerful.

Sometimes the controversy in magical performances was not that they might effect supernatural changes but that they did effect economic ones. In the eighteenth century, a time of economic bubbles and of the hero-worship for anti-establishment rascals, there was no more famous (or funnier) fraud than that of the Bottle Conjurer, who was



scheduled to perform on 16 January 1749. It was billed that he would enter a quart bottle that was placed on a table on the stage, and would be able to stay in it, and sing from within for the audience. When the performer did not show up, the crowd grew restless, and when they were told by the management that if they would only stay until the performance the next night, the Bottle Conjurer would creep into a pint bottle rather than a quart, there was a riot. The “conjurer” was never revealed.

The “shaman/showman” dichotomy has not left us. There are still those who insist that their illusions are products of the supernatural. In the twentieth century, Sir Arthur Conan Doyle, creator of

Sherlock Holmes, was one of the many believers in spiritualism. He was tricked over and over by blatant phonies, and he insisted that his one-time friend Houdini was performing by means of supernatural aid, although Houdini disavowed such practices and famously campaigned against spiritualism. Mangan admits, however, that in believing in spirits and spiritualists, Doyle was merely on the side of such lights as Marconi, Edison, and Tesla.

The descendants of spiritualists, those who can channel ancient personalities or those who can in front of an audience make it seem as if they are getting messages from departed relatives, continue to earn their livings from insisting that these are supernatural effects rather than the well-known practice of “cold reading” that stage mentalists can perform. Uri Geller claims he is not bending spoons the way other magicians bend spoons, the way that James Randi bends spoons. Randi takes the role of Enlightenment rationalist, effectively debunking Geller’s claims (he also takes on the modern day spiritualists). After all, if Geller is really bending by supernatural means, then modern physics and chemistry will have to be rewritten. Geller’s bending spoons, though, and his “I am really doing this without any trickery” stance have transformed a performer of a simple trick into an international celebrity, which as Mangan writes, is “one of the most powerful forms of twentieth-century metamorphosis.”

There are magicians like Penn and Teller who deliberately call attention to the artificial nature of their tricks, even demonstrating on stage how some are performed, and put on a good show for all that. Conjurers as performers have always had a special niche in exploiting the marvellous or the uncanny and trading upon our hope or fantasy that some real magic may be at work. Mangan’s delightful book shows that they will always be able to do so.

A Call to Action

God is Not Great: How religion poisons everything, Christopher Hitchens, Allen & Unwin, 2007.

It would be like living in North Korea. Christopher Hitchens on what a world overseen by a god would be like.

Christopher Hitchens considers himself to be an antitheist. He not only is content with the idea of there not being a god, but is also of the opinion that life would be less rich and less fulfilling if there was a god. It is this thinking that forms the basis of Hitchens' latest work, *God is Not Great – How Religion Poisons Everything*.

This is the latest effort in Hitchens' long running campaign against religion. It is a stance that

has gained him much notoriety. A journalist and literary critic, he recently sparked controversy by declaring that he was sorry that there was no hell for the late Reverend Jerry Falwell to be going to. He made these comments on worldwide television just days after Falwell's death.

Past Hitchens targets have included no less than Mother Teresa. His book *The Missionary Position: Mother Teresa in Theory and Practice* minced no words in labelling the iconic figure of charity a fraud. The book had such an impact that he was even invited by the Vatican to play the role of "Devil's advocate" in its consideration of Mother Teresa's sainthood.

Devil's advocate is probably the best career title for Hitchens. In books such as *Love, Poverty and War: Journeys and Essays*, he denounces the likes of Winston Churchill and the Dalai Lama. He has also become a leading spokesperson in the world of scepticism, and was one of the star attractions at James Randi's The Amazing Meeting in Las Vegas this year.

Many atheists are of the opinion that their cause needs more loud, zealous speakers to contend with the overwhelming number of loud, zealous speakers on the other side, who grab all the attention. Hitchens can be considered one of the greatest

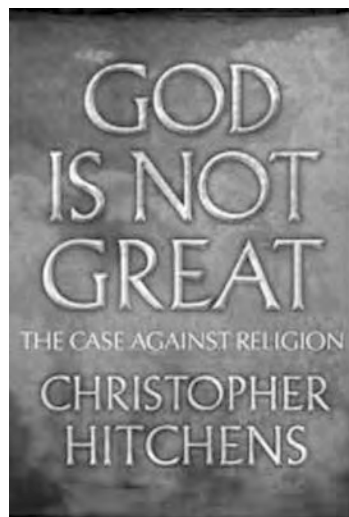
candidates for this role. Penn Jillette described Hitchens as the psychopath of atheism. His tour to promote the book included numerous appearances on American talk shows, including a few on the Fox

News network and he faced every interview with as much zeal and passion as his interviewer or opponent. A video of one of his appearances posted on the web site You Tube received the response, "He is arrogant, but it's easy to forgive, because, he's right!"

God is Not Great is the latest atheist manifesto in what is becoming a fast growing genre,

another recent example being Richard Dawkins' *The God Delusion*. Hitchens' work has already joined Dawkins' book on the *New York Times* best seller list. He writes on the subject with even more passion than Dawkins. Whereas Dawkins expresses some optimism for science and faith coexisting peacefully, Hitchens is of the opinion that there is a war raging between the two that must be resolved.

This is Hitchens' call to action against the intrusion of religion into society. He says it is an intrusion that keeps back stem cell research, allows fairy tales to be taught in schools, and promotes bigotry and hate. He makes it clear that people who make such extraordinary assumptions, including claiming to



Peter Booth is a postgraduate student in journalism at Griffith University

not only know that there is a god but to also know his mind and instructions, and to do all this on the basis of no evidence, are in no way deserving of his respect.

A large part of the book concerns itself with analysing the evil expressed in the Bible, both the Old Testament as well as the apparently more subdued New Testament. However Hitchens, as always, pulls no punches when it comes to analysing all faiths, which he says to be cut from the same cloth. A chapter is dedicated to exposing the Koran, and time is given to ripping apart eastern religions that have found themselves a place on the new age band wagon.

This book also digs up some sorry episodes in the history of evangelism that may have been forgotten by the public, including the case of Marjoe Gortner, one of the most disgusting examples of child abuse ever. Marjoe, as a young boy, was forced by his parents to emulate televangelists and con money from the faithful. The entire tale was told in the documentary *Marjoe*. The image of the boy in a white suit yelling about the decadent, sinful nature of America is truly a disturbing sight. Unfortunately, just like James Randi's expose of the fraud Peter Popoff, this documentary ultimately led to nothing except proof of the relentless stranglehold the faithful can get caught in.

Atheism and scepticism needs Christopher Hitchens. He never gives up ground on a debate about religion, and *God is Not Great* is written with the same passion and conviction that permeates every cause he gets behind.

A Catholic friend of mine recently read Richard Dawkins' *The God Delusion*. She told me that whilst she found the book interesting and somewhat persuasive, she just could not stand Dawkins' arrogance. I hope for the sake of her blood pressure she does not encounter Christopher Hitchens any time soon.



Conspiracies Galore

***The Conspiracy Files: Evidence Behind the World's Notorious Theories*; Kenn Thomas; (2007) Pier 9 Publications (pp 171)**

Thomas' book is a refreshing change from the normal conspiracy books published in the last few years. This book takes on a new look by the provision of high quality colour and photographs, but also addresses the issue of conspiracy evidence from a balanced perspective. The additional boxes within the chapters, dealing with the "heroes" of conspiracy writing are interesting, and provide an insight into some of the main players of the conspiracy theory game.

Thomas is a publisher of the *Steamshovel Press*, a conspiracy magazine, who states that he writes on "parapolitics", or the study of conspiracy theories. As an ardent skeptic, this reviewer tends to stay away from the conspiracy theory angle, as authors tend to push the barrow of their own theory by usually providing less than reliable evidence. Examples of this include *Chariots of the Gods?* author Eric Von Daniken. But Thomas, as previously stated, tends to look at all the evidence regarding a conspiracy, drawing conclusions that are both refreshing and surprising, including evidence from the conspiracy debunkers. It has been claimed that *Steamshovel Press* is the most influential conspiratorial magazine ever produced and a Google search will produce a many entries

regarding Thomas's impact on, and contribution to, the conspiracy genre.

The book is split into three separate sections being Mystery History, New World Order and Science fiction.

The first section looks at such theories as the Lost City of Atlantis, the existence of Jesus Christ and discusses the Freemasons. The second addresses the assassinations of JFK and his brother RFK, the death of Princess Dianna and other 'mysterious' deaths. Finally, section 3 deals with the standard alien conspiracy theories of cattle mutilation, Nazi UFO's and the Moon Landing hoax.

A friend of Australian Sceptics, the Bad Astronomer, Phil Plait, has written extensively on the Moon Landing hoax theories. It should be mentioned that while Thomas does not refer to Plait, he does provide reasons why the moon landings hoax is just that, a hoax. From a skeptic's point of view, this is a welcome change, as this example tends to demonstrate a balance brought to the table by Thomas. In this regard, as a reader, I don't immediately assume that Thomas is a skeptic himself, but he does make the effort to provide all the evidence, irrespective of how silly some of it is.

Of interest is the fact that Thomas had previously written a book on a person by the name of Danny Casolaro. Research reveals that Casolaro was a writer of conspiracy theories who died in 1992 and he is named in the book in the chapter, Tentacles of Global Conspiracy. Casolaro contended that all conspiracies come together as one large global conspiracy. Thomas no doubt has drawn a large amount of information from that previous book to use in this book. Casolaro committed suicide in 1992 and left a suicide note (uncon-

Geoff Cowan is a suicide bomber for atheism and skeptics who like to ride horses and look at the stars.

vincing according to Thomas); he had previously contacted family and friends to say that should he die, his death should be considered suspicious. He was found with deep slashes to his wrists in a bath tub in a hotel room. Thomas suggests that the death was suspicious, but as the reviewer is a former Police Officer, the context of the death suggests that perhaps, just for a moment, Casolaro may have had mental health issues. But this is not considered by Thomas.

Within each of the articles in the book is a review of the main conspiracy writer who has contributed the greater body of knowledge to that theory. One such person highlighted is Michael Moore, well known for his films that openly develop premises of conspiracy theories, especially those relating to the 9/11 terrorist attacks.


In reading some of the chapters in the book, I observed that some

aspects of his writing were excellent, and that it produces a well balanced view and in fact even dilutes some conspiracy theories. But then Thomas surprises the reader by putting forward absolute garbage! An example of this is the "Points to Ponder" section, relating to the death of Princess Diana. Thomas refers to a number of aspects, including the theft of the vehicle involved in the accident and that one passenger was paid a large amount of money by MI6. All of the points have been investigated by both French and British Police, including a current coronial enquiry, and discarded. This unfortunately tarnishes what I consider to be a good book.

One chapter that was of interest to the reviewer (as a born-again atheist) was the article on evolution. Thomas postulates that evolution was not accepted by the Russians because of

the Cold War and puts both Darwin and another naturalist, Jean-Baptiste Lamarck at odds over Lamarck's theories on transformation and acquired characteristics. In reading the article, as interesting as it was, I failed to understand how this was a conspiracy, but perhaps more an acceptance of the wrong theory by a state that was opposed to capitalism.

At the end of the book is an extensive section on additional reading. The list is a Who's Who of conspiracy literature but the absence of such writers as Plait and Dawkins demonstrates that the balance leans towards the conspiracy believer.

Overall, the book provides new data on some of the main conspiracies that have been in existence for decades, but also some new theories of which even the reviewer was not aware. 

In Brief

We receive lots of books to review for *the Skeptic*. Here are two which encourage activities other than reading.

The first is *Secrets of the Psychics* by Massimo Polidoro, a regular contributor to *Skeptical Inquirer* magazine. It is printed in a typeface of such distracting and ornate awfulness that I really couldn't be bothered to read beyond the first chapter or two. Even if the words could be read without grimacing at the curlicues it still wouldn't be worth buying. From what I read and saw in the table of contents there is nothing there which hasn't been said long ago and said better by people like Martin Gardner.


The second book is *The Paranormal and the Politics of Truth: A Sociological Account*, by Jeremy Northcote. From the title one might

assume that this is an analogue of C. P. Snow's Two Cultures applied to what the Australian Skeptics do and what kooks do. The following two paragraphs from the preface to the book are almost as far as you have to read to know that many thousands of words of badly-written drivel are coming.

A major aim of this book is to provide a sociological account of the processes that underlie this debate. Through a detailed examination of the participants, issues, strategies and underlying factors that constitute the politics of disputes over the paranormal, I show how the debate is inextricably bound to wider discursive formations that underlie Western thinking generally. These discursive formations constitute the "truths" that define knowledge of ourselves, of the reality that we experience, and the values that guide us. I also show how participants involved in such disputes serve as vehicles for the expression and proliferation of these

wider discourses, and how the debate as a whole functions in terms of processes of wider sociocultural continuity and change.

The intention of this book is to help the reader understand why certain phenomena — and those who study them — come to be viewed as deviant. There is, however, no attempt to persuade the reader to accept one version of reality over another; for this would be to serve as an agent of the discourses that define the ideological positions of the paranormal debate. What this book ultimately hopes to achieve is to assist in nullifying the destructive politics of truth that continually thwarts a healthy debate on this matter — or indeed any controversial topic — through the achievement of such an understanding. Having said that, overcoming such a negative form of politics is, as this book demonstrates, no easy matter.

Do yourself a favour. If you see either of these books in your local book shop, buy something else. 

Peter Bowditch is Vice President of the NSW Skeptics.

Forum

More on Mind Myths

Reply to responses

David Brookman

Salamander Bay NSW

I have re-read my response to Prof Spillane's article in which he denies the existence of mental illness, and the concept of mind, and its use by lawyers as a defence for social transgression and I really cannot find any item in which I personally attack Prof Spillane as claimed by Mr Peter Williams.

Mr Williams also exhorts respondents to criticise the arguments offered by Prof Spillane and not engage in personal vilification. Again re-reading my letter I thought I had done this, but perhaps my language was too complex. If that was the case then I had better repeat my response in more simple language.

In analysing any assertion phrased as a syllogism it is necessary to clarify exactly what the author means by the words (s)he uses. The history of philosophy is rife with instances of assertions that are apparently paradoxical due to a deliberate, or occasionally accidental, alteration of the generally accepted meaning of the words used.

Spillane commits this error in defining mental illness as a disease of the mind, misusing at least three words;

Mind: — a philosophical concept originating with Spinoza and worked over by many philosophers. The mind is actually the concept of self expressed in the first person. Descartes used a reductionist methodology to strip away learning to be left with *Cogito ergo sum*, but the translation from the Latin, I am told, is "I think, therefore I am". It is of course tautologous — all that is needed is "I".

Disease: — a pathological process that alters an organism's homeostasis. Thus tobacco mosaic virus is a disease of tobacco plants; atheroma is a disease of mammals. It is not to be confused with illness, which is generally a self determined disturbance of equanimity. Illness may however encompass a disturbance of normality where no pathophysiology can be determined, thus the Melbourne Virgin terminal gas panic several years ago was an illness that affected 26 people. No gas was present, no disease was found — but no one would doubt that illness occurred.

Mental Illness: — a group of illnesses that were distinguished from neurological disease by demonstrating personality change, a personality that interfered with the 'Normal' socialisation, or a persisting misinterpretation of what others perceived as normal, when there were no accompanying pathological changes in the brain and spine of the sufferer. This classification has developed over the past 150 years and was distinguished by such great men as Charcot and Bernard classifying behav-

ioural disturbances according to pathological changes that were demonstrable with light microscopy, histochemical staining and mapping Mendelian inheritance. It should be obvious that advances in technology would shift the classification of many illnesses — this however is interpreted as evidence that the whole system is wrong (absolutism vs science again).

The question we must ask is does Spillane do this intentionally? I mentioned in my first letter that the arguments he was offering were identical to the propaganda of the Scientology cult, hence my doubt of inadvertence. Spillane can of course claim to be ignorant of these subtleties, but then his claim of a general denial of mental illness would look somewhat hollow.

We cannot say that animals exhibit mental illness because as yet they have no means of communicating complex emotion to us. We can observe changes in solitary and social behaviour and then anthropomorphically extrapolate these to similar behaviours in *Homo sapiens* — but this does not mean we can observe animals being depressed, or hallucinating or anything else that requires complex abstraction. Thus there can be no animal model of mental illness.

It should be fairly obvious that all cultures that have been capable of recording have a history of random behavioural disturbances in their members. The more totalitarian the

culture, the lower the tolerance. Thus the Holy Roman Empire and hysterical American Protestants burned disturbed women as witches, Hitler ordered gassed those classified as mentally ill, unknown to many of their relatives who were told they died after being moved to a new accommodation. Founders of religions have often been classified as behaviourally abnormal because they have agitated against the social and political status quo.

Medical care is built on classification of physiology, behaviour and self perceptions into groups with common elements (symptoms, signs, pathogenesis, etc). The splitting of neurology and psychiatry left a block of illnesses which did not have a demonstrable pathogenesis (particularly if one ignored the sexual abuse of women and girls), and several people developed competing models of illness that allowed classification (Freud, Jung, etc). Unfortunately human desire for absolutism led to these being reified so that all behaviours were interpreted according to the model, and people came to believe that the model was reality. Fortunately epidemiology and technological change have undermined this mode of mental illness classification (and treatment). Is Spillane attacking the wrong thing? Was L. Ron Hubbard classified as mentally ill by a rigid Freudian psychotherapist? Is this the origin of the anti-mental health disinformation of Scientology?

Of course Spillane denies the existence of 'mind'. This is a far broader claim than the denial of mental illness, but he argues that because philosophers before Spinoza did not have a concept of mind, then it cannot exist. Spinoza and others have a dualist concept of mind — that mind and body are separate. More modern philosophy (Gilbert Ryle, *A concept of mind*) argues that mind and body are one. When we use the word 'Mind' what exactly is meant? Spillane of course denies the existence of mind so there can be no definition from him, just as there is none for 'mental illness'.

What is Mind?

We think in our primary language(s). Our urges produce feelings which we intellectualise — sadness (grief, loss), hunger, fatigue, sexual desire, anger, fear — these may have physiological triggers. Abstract ideas are constructed within our language, objects are defined by our language (all swans are black until you see a white one). Actions are physical activities which may be expressed linguistically (see JL Austin *How to do things with words*). Complex groups of feelings, abstract ideas, objects and actions, which we do not express are said to be occurring in our minds. We all know what they are, but they are unique and private — even when generated through electrostimulation of the exposed brain. They must exist in some neurochemical retrieval system that 'brings to mind' some past thought, urge, object or action, or a complex reinterpretation of that past.

We all use the word 'Mind' to define that abstract space in which our memories, thoughts, recalls, syntheses, imaginings, or any other non-expressed intellectual process (such as reality testing) occurs. It has physical presence as a set of interacting neurons so complex that we, as yet, have not determined exactly where it is or how it is structured within our skulls.

We may describe someone as 'mindless' — does this mean they lack the physical equipment containing the mind? No, simply that their behaviour does not exhibit any application of the mind to their surrounds. We also describe people with the 'locked in' syndrome in which their mind functions but their ability to express themselves is impaired (Motor neurone disease, progressive supranuclear palsy are well described causes).

Does anyone regard mental illness as a disturbance of this space in which we think, feel, imagine, plan, remember, etc? Mental illness can only be defined if the things we express are determined by someone with suitable expertise to be aber-

rant. If we complain of a change in our abilities exercised in this 'space', it may be inappropriate feelings (sadness for no reason, elation when socially inappropriate, poor recall, etc). If we take the brain of someone who expressed such feelings and chop it up we can demonstrate deficiencies of some chemicals when compared with a brain of someone who did not complain about such feelings. If we tag precursors of those chemicals we can demonstrate difference in quantity and distribution between those who express illness and those who do not.

Does this mean that the illness they express is no longer an illness but a disease, as we can now demonstrate pathological changes? Perhaps — increased accuracy is still needed.

How does an individual decide if (s)he is ill? They may exhibit social behaviours which make someone suggest an illness (continual crying, no smiling, suicide attempts, self injury, repetitive behaviours, etc), or the behaviour itself may distress the individual. Sometimes the behaviour is sociopathic (assault, murder). Mental illness always has some element of perceived abnormality of social interaction — it will vary in severity.

Spillane of course argues that this does not exist. He offers no alternative explanation for the observed behaviours, nor for the self perceived disturbances, merely that they do not exist. As no alternative is offered, I am unable to offer a critique of Spillane's imagined world. I presume that Spillane does not deny the existence of mathematics and geometry which also depend on abstract concepts such as straight lines (single dimension), circles (curved straight line), -1 and its roots, etc.

I will not offer a critique of Spillane's interpretation of the legal process. It is sufficient to summarise his logical failings.

Original syllogism.

a. Mental illness is a disease of the mind. (It is not and never has been

because one cannot have an illness of an abstraction, nor, by definition, a disease.)

b. The mind does not exist according to some philosophers. (The mind as a separate entity does not exist, but there is a concept of individual intellectual activity that occurs as a process within the brain of human beings, which is called the mind).

Given that both statements are wrong it is not possible to have a valid conclusion.


Suggested further reading.

J.L. Austin; *How to do things with words.*

J.L. Austin; *Sense and Sensibilia.*

J.L. Austin; *Philosophical papers.*

Gilbert Ryle; *The Concept of Mind.*

Any copy of *Nature Neuroscience*. 

Method in Madness

David Dewhurst

Sandy Bay TAS

Suppose that a psychiatrist tells us that he or she has been treating people suffering from various forms of acute human suffering: depression, anxiety, hallucinations, disorders of thought, delusions, mania, post-traumatic stress disorder and so on. Now those with the appropriate expertise might question some of the psychiatrist's diagnoses. They might assert, for example, that the behavioural criteria presented to us are not sufficient to establish that patient X is suffering from acute depression, say, or a disorder of thought. But they would not say: "This patient cannot be suffering from depression (or a disorder of thought, etc) because: there are no such things as minds". Similarly if we say to the psychiatrist: "But how do you know

there really is a mind, a ghost inhabiting the machine?" The psychiatrist will say, quite rightly in my opinion, that such a philosophical conception is irrelevant to what she or he is doing (cf, David Brookman, *Forum*, 27:1 p.50).

The later Wittgenstein would say that "mind" is here functioning as a "super concept", one which is not "doing any work"; it is a case of "language going on holiday". Or to use an apt simile of Wittgenstein's: "A wheel that can be turned though nothing else moves with it, is not part of the mechanism" (*Philosophical Investigations* para. 271).

Similar considerations apply to the anti-psychiatric use of words such as "freedom", "responsibility", "autonomy", etc. Professor Spillane says that "notions of ...freedom and responsibility have been replaced by notions of healthy and sick (*the Skeptic* 26:4 p.50)." Now it is true that the former concepts may have an important role within psychiatry and, for that matter, other domains of medicine. A heart specialist may tell patients that they should assume some responsibility for diet, weight control and exercise. But this responsibility is only ascribed to them within certain contexts.


Szasz, on the other hand, at least in his well-known book *The Myth of Mental Illness*, applies terms such as "autonomy" and "responsibility" so liberally that one wonders again whether such terms are, in Wittgenstein's terms, "going on holiday". All cases of hysteria, for example, are regarded as cases of game playing and simulation, as involving method and purpose, and hysteria is then used as a model for construing in a similar manner all cases of supposed "mental illness". While the use of hysteria as a model of so-called mental illness suits Szasz's purposes (simulation of bodily illness often being included among hysterical symptoms), this does not justify his holus-bolus extension of this account to all mental illnesses, especially given that such emphasis on hysteria is now anachronistic.

What may happen in a specific case is this. A female patient is suffering from anorexia nervosa. It is communicated to her that she can now cease her behaviour of coercing or punishing her relatives. This is an example where concepts are rendered *a priori* and applied to anorexia nervosa regardless of evidence (it is unwarranted to infer from an illness's having secondary gains that the patient is motivated to pursue such gains, let alone that she is trying to achieve them on purpose). The point is that terms used here such as "autonomy", "responsibility", "game-playing" and so forth are, as Wittgenstein expresses it, "idling". They have no genuine application.

Professor Spillane asks his readers to focus their attention on his formalized argument (*the Skeptic*, 27:2. page 55). This argument crystallizes some of Szasz's main contentions. It is noteworthy that, while Professor Spillane makes historical observations in his previous article, it is a feature of his formalised argument that it is a-historical and uses polarized and rigid dichotomies such as "body" and "mind". I would have thought that scientific discoveries during the twentieth century, along with changing attitudes have led to more flexible, integrated and holistic concepts than those employed in Professor Spillane's argument.

But to consider the argument on its own terms. Professor Spillane's first premise, if he means that illness only affects the body, seems to be assuming what he is trying to prove. His second premise is that the 'mind' is not a bodily organ. If this were stated less crudely as the proposition that "the mind is not a material system", then Professor Spillane is on debatable ground. And the inferences which he draws in his additional argument (propositions 5 to 8) are equally questionable.

Not all philosophers believe that psychophysical reductionism implies the elimination of the mental, or that the use of psychological vocabulary is thereby cast in doubt; nor

would they necessarily conclude, if they adopted this view, that the concept of “mental illness” is invalidated. True, such philosophers do not believe in a “ghost in the machine”. But, as was suggested above, such a concept is irrelevant to psychiatric practice. 

Climate change doubts

*Robert O'Connor
Gorokan NSW*

John Gibbs' version of the 4th IPCC *Summary for Policymakers* seems to be very different to the one available at the IPCC website, which does claim a causal connection between greenhouse gas emissions and warming (page 10 of the WG1 *Summary for Policymakers*, available at: [ipcc-wg1.ucar.edu/wg1 / Report/AR4WG1_Pub_SPM-v2.pdf](http://ipcc-wg1.ucar.edu/wg1/Report/AR4WG1_Pub_SPM-v2.pdf))

John then goes on to cite the Fraser Institute Report, which is

richly laden with misrepresentations and methodological flaws. One wonders about the Institute's reliability in this matter given the amount of tobacco, coal and oil money that it is given and the ideological positions of the report's authors.


Richard Lindzen is a brilliant but extremely non-representative contrarian in meteorology. Svensmark's cosmic ray hypothesis awaits definitive data, but greenhouse gases are a far more obvious explanation for the observed temperature rise.

Invoking string theory is a strawman. It probably is wrong, but that doesn't mean climatology is too!

The canard that “we can't forecast tomorrow's weather, so how can we get climate predictions right?” is very tired. Climate is an average of weather patterns which tend to be stable in a region over a period of years.


Mark Lawson wrote about “the AIDS scare of the late 1980s” The massive prevalence of the virus in Sub-Saharan Africa today shows what could have happened in the First World without containment

efforts and effective drug treatments. I think Mark makes a good argument for precautionary action with this example.

I'm not prepared to gamble my children's future away on the strength of John or Mark's arguments. 

Sequestration safety

*David Maddison
Toorak VIC*

People who believe in carbon dioxide sequestration as a solution to supposed anthropogenic climate change have complete faith that once buried, this greenhouse gas will remain in place for the rest of Earth's history, presumed to be billions of years. It is strange that these same people have no faith in being able to store nuclear waste for mere thousands of years, after which it will become harmless, unlike carbon dioxide which will never decompose under planned storage conditions. 

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Our inaugural Prize in 2006 attracted a high standard of entries from a wide variety of fields. The winner of the \$10,000 Critical Thinking Prize was Dr Martin Bridgstock from the School of Science, Griffith University, who instituted a course, Skepticism, Science and the Paranormal, as an elective for second year students. His course, which encouraged a skeptical approach to many common beliefs, has consistently attracted an increasing enrolment each year since 2003.

We also awarded a runner-up Prize of \$2,000 to Ms Kylie Sturgess, an English teacher at MLC, Perth, for her initiative in devising a course to encourage students to investigate popular beliefs using skeptical principles.

The Prize of \$10,000 is to reward critical investigation of irrational paranormal beliefs or pseudo-scientific claims. Entries are welcomed from any interested Australian, whether involved professionally or by way of private enthusiasm. For example, eligible work includes the contribution of teachers at any level of education, who have devised programs that encourage critical thinking in students, beyond normal curriculum requirements. Similarly we welcome entries from journalists who have promoted critical thinking or exposed threats to it. The work can be in any media and can be one item, a series or an ongoing activity.

Rules for Entry

- ◇ Members of Australian Skeptics state committees and their immediate families are ineligible to nominate.
- ◇ Work submitted must have been undertaken/published/broadcast in Australia by an Australian citizen or permanent resident within the 5 years prior to the closing date for entries.
- ◇ Entries will be judged according to originality, depth of critical thought and public benefit. They may be accompanied by supporting comments from others expert in their field.
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