

# Struck by Enlightening

- Weather Wind & Woo

AVN in trouble
Divining Test
Conspiracies





# Skeptical Groups in Australia

#### **Australian Skeptics Inc** – Richard Saunders

www.skeptics.com.au PO Box 20. Beecroft, NSW 2119 Tel: 02 8094 1894; Mob: 0432 713 195; Fax: (02) 8088 4735 president@skeptics.com.au

Sydney Skeptics in the Pub – 6pm first Thursday of each month at the Mezz Bar, Coronation Hotel, Park St in the city (meeting upstairs)

Dinner meetings are held on a regular basis. Next dinner- July 27, Kathy Marks on "The Dark Side of Paradise". Bookings online or contact nsw@skeptics.com.au

#### **Hunter Skeptics** – *John Turner* Tel: (02) 4959 6286 johnafturner@westnet.com.au

Meetings are held upstairs at The Cricketers Arms Hotel, Cooks Hill (Newcastle) on the first Monday of each even numbered month, commencing 7.00pm, with a guest speaker or open discussion on a given topic. Visitors welcome. Further information from the secretary at: kevin.mcdonald379@bigpond.com

#### Australian Skeptics (Vic) Inc – Terry Kelly GPO Box 5166, Melbourne VIC 3001

Tel: 1 800 666 996 vic@skeptics.com.au

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

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

#### Borderline Skeptics Inc – Russell Kelly PO Box 666, Mitta Mitta, Victoria 3701 Tel: (02) 6072 3632 skeptics@wombatgully.com.au

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

#### **Queensland Skeptics Association Inc** – Bob Bruce PO Box 3480, Norman Park QLD 4170

Tel: (07) 3255 0499 Mob: 0419 778 308 gskeptic@bigpond.com

Meeting with guest speaker on the last Monday of every month (except December) at the Red Brick Hotel, 81 Annerley Road, South Brisbane. Dinner from 6pm, speaker at 7.30pm. Qskeptics eGroup - www.egroups.com/list/qskeptics Hear Bob on 4BC Paranormal Panel - 9.30pm-10pm Tuesdays

#### **Gold Coast Skeptics** – *Lilian Derrick* PO Box 8348, GCMC Bundall, QLD 9726 Tel: (07) 5593 1882: Fax: (07) 5593 2776 Iderrick@bigpond.net.au Contact Lilian to find out news of more events.

#### **Canberra Skeptics** – *Kevin Davies* PO Box 555, Civic Square ACT 2608 http://www.canberraskeptics.org.au Tel: 0408 430 442

mail@canberraskeptics.org.au (general inquiries), arthwollipot@gmail.com (Canberra Skeptics in the Pub).

A free monthly talk, open to the public, usually takes place on the 1st Saturday of each month at the Lecture Theatre. CSIRO Discovery Centre, Clunies Ross Rd (check website for details of the current month's talk). Skeptics in the Pub gather at 1pm on the third Sunday of each month at King O'Malleys Pub in Civic. For up-to-date details: www.meetup.com/ SocialSkepticsCanberra/

#### **Skeptics SA** – Laurie Eddie 52B Miller St Unley, SA 5061

Tel: (08) 8272 5881 laurieeddie@adam.com.au

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

#### **WA Skeptics** – Dr John Happs

PO Box 466, Subjaco, WA 6904

Tel: (08) 9448 8458 info@undeceivingourselves.org

All meetings start at 7:30 pm at Grace Vaughan House, 227 Stubbs Terrace, Shenton Park Further details of all our meetings and speakers are on our website at www.undeceivingourselves.org

#### **Australian Skeptics in Tasmania** – Leyon Parker PO Box 582, North Hobart TAS 7002 Tel: 03 6238 2834 BH, 0418 128713 parkerley@yahoo.com.au

Skeptics in the Pub - 2nd Monday each month, 6.30pm, Ball & Chain restaurant, Salamanca Place

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



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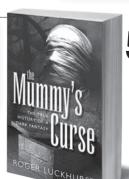




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# Better days

Will we ever see a rational world, one that totally rejects pseudoscience and the paranormal in favour of rational and critical thinking?

This is a question that pops up regularly in skeptical circles, and probably always will.

Although that is, of course, the question: will it "always will"?

A letter on that theme can be seen in the relevant section of this issue. The topic was also raised at a Skeptics in the Pub in Sydney a few months back - the informal vox pop survey can be heard on *The Skeptic Zone* #229. And, as these things seem to happen, I gave a talk at a more recent pub night in which I asked the question "How successful have we been?", and I kindly and convincingly(?) answered it.

I'll kick off immediately by saying that I'm not nearly as pessimistic as some. I am enough of a realist in that I suspect there will never be a complete rejection of such topics, but I'm also an optimist in that great strides can and will be taken, and probably within the lifetime of many readers of this publication.

As evidence of general rational thinking, let's look at a few social changes that have totally turned the tables of what was previously accepted morality for many decades. Since the 60s (some later, some earlier) we have seen unmarried couples living together ("living in sin"), open homosexuality and gay marriage ("an affront to god and nature"), and children born out of wedlock ("the wrong side of the sheets")!

These aren't issues of moral decay, whatever some may think. These are basic issues of fundamental human rights and attitudes to social mores and, some more than others, have been generally accepted by society

as acceptable behaviour.

If these attitudes can change in such a relatively short time, and at the same time atheism can step out of the shadows of the less-thansavoury dinner table conversation, then who knows what will happen to superstition and belief in pseudoscience and the paranormal.

Gosh, I can remember a time when the Skeptics were seen as a humorous endnote to the evening news, akin to the cute dog down the drain story. "But do the skeptics really believe in themselves?" Happily, that is no longer the case.

But does that mean that we will eventually see a complete end to superstition and woo-ism?

No, in the same way that we haven't seen the total demise of prejudice and fear of the unknown.

But as the edges of the unknown world shrink – as they inevitably must – through increases in our understanding of what makes the world go round, and as prejudice is reduced with increasing knowledge of and acquaintance with that world, then we should see an increase in a rational approach.

To me, the question then is, not whether, but when. Will this move happen in our lifetimes? Will we ever ask "What on earth was that all about?" when confronted with historical superstition and claims of the paranormal?

I doubt if this will happen in my remaining days. But I would love to come back some time in the future as a spirit to review what has happened. I'd discover that no-one believes in me, and I will then happily fade into the realms of fairy tale, along with the other misguided beliefs and unsupported concepts that we currently see all around us.

- Tim Mendham, editor

# THE SKEPTIC

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**Editor** Tim Mendham

Editorial Board Steve Roberts Eran Segev Martin Hadley Barry Williams

**Design Services** Nova Consulting P/L

All correspondence to: Australian Skeptics Inc PO Box 20 Beecroft NSW 2119 Australia

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

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

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Editorial submission deadline for the next issue:
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# Around the traps... Politicia

For regular news updates, go to www.skeptics.com.au

#### **Shaman sings the Blues**

**AUSTRALIA:** Once upon a time it was a specific colour of underwear that would bring sports players luck. Then it was a Power Balance wristband to bring strength and durability. But it seems that Rugby League footballers have hit rock bottom when they call in the services of a shaman to help them win a game.

The New South Wales Blues have lost the last seven series of the annual State of Origin games against Queensland (being played as this magazine goes to print). So the Sydney-based *Daily Telegraph* decided they needed some assistance.

The paper describes Rachal A Lui Williams as "a full-blooded and documented grand African shaman", though "not really the bone-rattling, foot-stomping trance type".

"Sacrificing live goats is not really her cup of blood." In fact, she'd probably prefer a cup of tea as she has a decidedly non-African accent.

Actually it's not clear if Williams was brought in by the team or the paper: the latter says "In a desperate bid to finally bring some good fortune to the Blues and the win-starved minions, *The Daily Telegraph* sought her help to determine if, in fact, we are as we think we are: A cursed mob.

"To ensure fair play, we sourced this shaman, a woman identified as a natural healer as a child and with 30 years experience, from a town well versed in the 'evil arts' (read AFL) - Melbourne - and her knowledge of State of Origin



was between non-existent and vacuous.

"The NSW State of Origin team's karma is changing for the better," Andrew Carswell of *The Telegraph* reported her as saying. "At this point in time they are destined to win the State of Origin.

"However, that doesn't mean that their destiny will manifest as there are multiple negative energy blocks in place which will greatly impede their ability to win," Williams said. "Various members of the team need to have these blocks removed and I would recommend a shamanic blessing focusing on stimulating their creativity."

This blocks includes "habitual negative expectations"

A newspaper stunt? Possibly. A joke? Definitely.

#### **Seeds of doubt**

**DENMARK:** In a bid to confirm harmful radiation from some IT equipment, a group of girls from Denmark have carried out a science experiment with garden cress seeds placed in 12 tubs and split into two batches. Both batches were placed in different rooms that remained the same temperature, and were given the same amount of water and sunlight over the course of 12 days.

But one set didn't even germinate. The reason? They were placed next to two routers.

Apparently the girls had found it difficult to concentrate during the school day, as if they had slept "with a phone next to our heads", explained one of the young researchers.

But the skeptical *Doubtful News* website suggests there are obvious errors with the test - the girls already perceived that radiation was causing them issues and it is not noted how much of a double blind (or even single blind) test this was.

"The experimenters need to learn more about controls and experimenter bias," the editor of the site says.

### **Politicians with visions**

**JAPAN/IRELAND:** Reports indicate that politicians from either side the world - Japan and Ireland - are both having trouble with visions and ghosts in their official residences.

Unconfirmed believer in the paranormal and full-time prime minister of Japan, Shinzo Abe, still hasn't moved into the Koutei, a Tokyo mansion where prime ministers of Japan are supposed to live, since coming into power in December. His political opponents are now mocking Abe for being afraid of ghosts.

A letter published by Agence France Presse and sent by "an unnamed opposition member to Abe's cabinet" says "There are rumours that the official residence is haunted by ghosts.

Is it true? Does Prime Minister
Abe refuse to move to the official residence

because of the rumours?"

These rumours include apparitions of men in uniforms, and "several former prime ministers have reported experiencing unusual phenomena at the mansion which was centre-stage for two failed but bloody coups in the 1930s."

Meanwhile, the Lord Mayor of Dublin, Naoise O Muiri, who resides in the 300-year-old Mansion House, thinks the building may be haunted after his four-year-old reported seeing a young girl watching TV in the building in the middle of the night.

The Fine Gael councillor who has been living in Mansion House since his election last June says he never believed in ghosts until his daughter did that "freaky thing that you think kids only do in movies and said she saw a girl with curly hair sitting watching TV at 3am.

"I was sceptical coming in but there is definitely stuff happening," O Muiri told the *Irish Sun*.

The previous Mayor Eibhlin Byrne also thought the house had other worldly occupants, "because her bulldog refused to walk past a particular door".

#### Stonehenge's dragon

**UK:** A recent press report, based on a suggestion leaked via an unnamed student from an unnamed university, has it that the skeleton of a

sizable dragon was
found recently near
Stonehenge. The
unnamed scientist
who uncovered the
fossil contacted
a major unnamed
university requesting
more funds to continue
the dig on the basis
that the university
would be given
the honour of

cataloguing and photographing the skeletal remains and preparing them for

exhibit.

The report says that the excavation was originally funded by a "small

businessman" [whose height shouldn't really be an issue] who requested to remain anonymous.

"This is the first time any dragon skeleton has been unearthed in the United Kingdom," the report helpfully adds.

The undescribed fossil is currently at the unnamed university for further study. The unnamed scientist who made the discovery requested the when the skeleton is unveiled for the general public that the unnamed community that has given him so much support be the location for the first unveiling.

Local residents and business in a community just south of where the discovery was made "believe that people will travel from all over the world to get a glimpse of the fossils once they go on display. Interest in Stonehenge and tourism is expected to increase due to the discovery."

We can't wait, though we remain unnamed.

#### A date with the devil

**UK** A dating agency called Spookydate is offering matchmaking services for those who believe in the paranormal.

"These are just normal people with not-so-normal interests", says Spookydate founder Tony Hart-Wilden. He says they take long walks on the beach and gaze at the sunset, just like anyone else. [No mention of pina colada, however.]

"But the difference is they may be looking for UFOs at the same time."

Part of Spookydate's profits will go back into its own community to support anything from cemetery restoration to financing independent horror films.

Spookydate's categories of members include those with an interest in zombies, vampires, horror movies, the general paranormal, unexplained mysteries, UFOS, monsters, and urban exploration (presumably for zombies, vampires, horror movies, etc).

#### **US Conspirators**

**USA:** Sixty-three percent of registered voters in the US buy into at least one political conspiracy theory, according to results from a recent phone poll carried out Fairleigh Dickinson University.

The nationwide PublicMindPoll asked Americans to evaluate four different political conspiracy theories: 56 per cent of Democrats and 75 per cent of Republicans say that at least one is likely true. This includes 36 per cent who think that President Obama is hiding information about his background and early life (64 per cent of Republicans and 24 per cent of Democrats are 'birthers'), 25 per cent who think that the government knew about 9/11 in advance ('truthers'), and 19 per cent who think the 2004 and 2012 Presidential election involved fraud.

The survey analysts say that the more people know about current events, the less likely they are to believe in conspiracy theories – but not among Republicans, where more knowledge

leads to greater belief in political conspiracies.

"It's easy to discount conspiracy theories about 9/11," said a researcher, "but this isn't some fringe belief. 'Trutherism' is alive and well in America, and is only going to get stronger as memories of the actual event fade.

"Groups that feel more distanced from the political process are more likely to believe that sinister forces are at work. These figures tell us more about a lack of trust in the political process than acceptance of particular conspiracies."

#### New broom for Witches

**SA:** Witches who fly their broomsticks in Swaziland above 150 metres will be subject to arrest and a hefty fine of R500,000, civil aviation authorities are reported to have said.

Witches' broomsticks are considered similar to any heavier-than-air transportation device that is airborne, reports *TimeLive*, quoting a report in the South African newspaper, *The Star.* 

"A witch on a broomstick should not fly above the [150-metre] limit," Civil Aviation Authority marketing and corporate affairs director Sabelo Dlamini told the newspaper.

No penalties exist for witches flying below 150 metres.

The report said it was hard to say how serious Dlamini was, but witchcraft isn't a joking matter in Swaziland, where the people believe in it.

Swazi brooms are short bundles of sticks tied together and do not have handles. Swazi witches are "known to use them to fling potions about homesteads", the report said, though they are normally not used for transport.

The statute also forbids toy helicopters and children's kites from ascending too high into the country's airspace.





Canberra will be hosting the Convention this year. It is timed to coincide with the 50th anniversary of the assassination of JF Kennedy.

The Convention runs from 22 to 24 November 2013

Further details can be accessed at www.nationalskepticsconvention.org

We look forward to welcoming our fellow skeptics in Canberra – and hearing what you have to say!

# Readers' indigestible

Tim Mendham looks at those 'other' publications, where skepticism is a dirty word.

This issue we add a slightly different flavour to our study of "them" — one magazine and two websites. While printed magazines are rife and easily spottable on newsagents' shelves, websites are often only seen by the cognoscenti, those in the know, so to speak. So we thought it would be a good idea to shine a little skeptical light on these interesting exercises in digging the dirt on government conspiracy and revelling in the wonders of woo for our readers' digital enlightenment. While all the sites we cover are a little on the eccentric side, some, let's face it, are downright nutty. We have one of those. Enjoy, and happy reading.



# **CONSCIOUS LIVING**

**Here's a magazine** that takes you on a journey from the organically sublime to the out-and-out ridiculous.

Actually a "journey" is a good metaphor for *Conscious Living* (A\$9.95), a quarterly publication that comes out of Perth, and has been doing so since 1989,so it must have found its audience.

Virtually all of the editorial is about how to take you through a specific process to improve your life, harmonise your balance, tap into your energy and generally eat well and be kind to Nature.

Let's start with the editor's column. The issue under review is Autumn 2013, and the editor kicks it off with: "Autumn Colours Create Flow. It is autumn and we have just picked the last of the blueberries and satsuma plums revelling in their rich purple array. The early Royal Gala apples have already coloured up a radiant red and we have been enjoying juicing them with deep purple beetroots. In the veggie garden our tomato plants have been producing a riot of sunny little yellow tomatoes. They spill out over the bed and are already into their third batch of fruit. We have discovered

they are delicious cooked with eggs or any other vegetable and make yummy chutney."

OK, you get the idea – sunny abundant Nature brimming over with goodness. We have a problem with the phrase "and other vegetables": is this referring to the eggs or the tomatoes as vegetables, because neither is. But never mind, the intention is good.

So, then follows a stream of articles, often just one page, that extol a panoply of health lifestyle tips and introductions to this or that particular technology or product that will improve every aspect of your life, but primarily balance, diet and consciousness.

All typical New Agey stuff.

The problem is that very panoply. If you were to follow all of the advice in *Conscious Living*, you would be torn from left to right, head to toe, wallet to purse with so many products and techniques that you would inevitably suffer the stress that each of these concepts is dedicated to relieving.

Going through the magazine in order, there's music for feminine power, a drum maker's experience "from darkness to light", organic wine and various other organic products (including wheat juice, of course), healthy eating from the Gawler Foundation, alkalising your tissues and organs, spa retreats, reversing Type 2 diabetes with a crash diet, personal nutrition genomics, anti-aging ... and on its goes, through mental health, minor diseases, major diseases, green motoring, etc.

Most of this seems to be advertorial - articles written by the provider of whatever product or technique is being extolled, most ending with "for further information visit website XXX".

In among these is probably the only independent non-sales pitch article in the magazine. This looks at the impact intensive oil palm production has on deforestation, and the global efforts that are being made to reform the industry. Quite reasonable and realistic; positive but not gushing.

And then it starts to get weird (or weirder). "wisdom from the PADDOCK" retells the heart warming experiences of a country woman who talks with cows. She discovers that her particular herd is actually made up of "returned monks", of the Tibetan type presumably, that







naturally "had much wisdom to impart", which basically means "be nice, live sustainably and don't eat me".

"mBraining", as you probably didn't know, is the study of "aligning the intelligence of our multiple brains". That's right, there are three, covering your head, heart and gut. We're not sure if these are real physical brains, but understanding them is supposed to stop you "sabotaging your dreams, goals and plans".

Then you have a clairvoyant who works with light, which involves finding the secret codes in the Avebury standing stones; how to using divination tools; channeling the spirit of Edgar Cayce; and how to be positive, written by someone who is "a qualified angel intuitive".

The magazine's own series of mini-Mind Body Wallet style exhibitions features said mBrainer, said anti-ager, and some psychics who read humans and/or animals, a shaman, and Peter Dingle, husband of the late Penny Dingle who died a painful death despite treatment with homeoapthy.

On a final note, there is one ad, on a particular service that goes beyond the curiously weird, and that's the Church of Scientology. No warm sunny satsuma pears there.

## **ONLINES**

**Fairdinkumradio.com** is, it says, all about "defence of individuality, freedom and truth".

Leon Pittard, who runs the site, comes across as your straightforward Aussie bloke, perhaps from the country, the very picture of the common man. He just happens to have a total distrust of anything that smacks of "establishment".

"We are Alternative, Resistance Media," he says. "We will examine and analyse the building of 'The Global Management Plan', a mighty plan to bring all Humanity and all Recourse's [sic] of the Earth under Centralized Governance. We will analyse the Smoke Screens, Tactics and Propaganda that this plan has been employing for thousands of years, to destroy Individuality and Freedom. We document in our studies their own historical statements. These facts are evidence of a well advanced plan of a control state agenda."

There's a lot about the "industrial complex" which is in cahoots with government and running roughshod over most aspects of everyday life. These evil intents include vaccination, fluoridation, wind farms, smart meters ("armed spy devices"), the banks, and global 'conspiracies' such as the United Nations, Club of Rome and Agenda 21.

Most of the site is devoted to hour and half-hour videos and audio interviews covering the topics above, sometimes spoken by Pittard himself and at other times with people who they and Pittard see as 'victims' of the industrial complex/ government thing.

To be fair, some of his interviewees don't come across as quite as zealous as Pittard himself. In one interview, covering a farmer

who was entirely suspicious of the corporate and government process of implementing a wind farm on nearby land, Pittard was what the lawyerly fraternity would call "leading the witness". Definitely putting words in her mouth, and definitely making his position clear, ie "you can't trust them; they're all bastards". In other words, he interviews them to support his position.

But for all of his enthusiasm and occasional lapse in spelling, Pittard is worthy of a Pulitzer Prize in journalism compared with Gene Ray.

Ray, assuming that's his real name, runs **timecube.com**, and has developed what is a quite interesting theory – that there are actually four days running at the same time, instead of just the one we've always been misled to believe.

The cubic nature of the world is his main obsession, and the fact that all of his "wisdom" is being ignored because of corruption and stupidity. That, and his abiding interest in belly buttons.

He has a novel approach to winning support by insulting the reader, such as "You SnotBrains will know hell for ignoring TimeCube. I do not promote or suggest anyone killing you, but you are unfit to live on Earth."

Despite the fact that Timecube is just one loooooooong page – 8467 words of continuous rambling and ranting (yes, we counted them) – the site has developed something of a cult following. That probably accounts for the 274,000,000 hits his site has received, which we daresay is as likely as there being four simultaneous days and that "No man on Earth has no bellybutton", whatever that means.

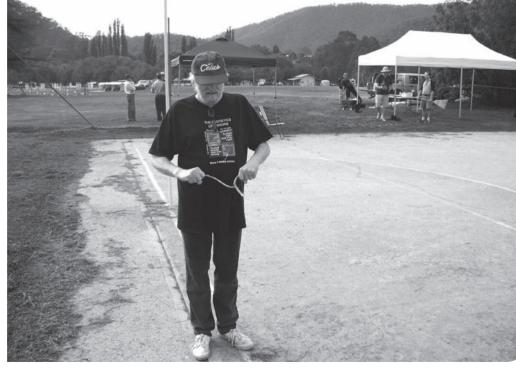
# Divining at Mittal -the scene

The sun beat relentlessly down on a scorching 33° degree day. In the background we could see wood chopping competitors sweating it out in their navy singlets, and riders jumping their horses around an obstacle course. The crowds of thousands enjoyed the many spectacles, from polished hot rods and spluttering antique engines to iron man (or woman) events involving wheelbarrows and sandstone blocks. The kids enjoyed dripping ice-creams, a jumping castle and a waterslide. It was the Mighty Mitta Muster.

This seemed an unlikely setting for a challenge for the Skeptics \$100,000 prize for a demonstration of any event unknown to science. Mitta Mitta is a small town in north-eastern Victoria, situated at the foothills of the Snowy Mountains on the junction of the Mitta Mitta River and Snowy Creek. It is about 80km south-east of Albury-Wodonga, and each year in March the Muster attracts country folk from all over, bringing a good proportion of water diviners, water drillers, their families and believers.

And so it was that the Borderline Skeptics, in conjunction with the Victorian Skeptics, organised their third dowsing challenge, the previous ones being held in 2001 and 2002.

lan Bryce gives an overview of Australian Skeptics' 2013 Mitta Muster challenge to diviners – a good place for a test.



(One planned for 2003 didn't eventuate because of bushfires, which also meant the cancellation of the whole Muster itself.) Australian Skeptics have held other divining tests – one in 1980 at Dick Smith's initiative, which was the progenitor of the Skeptics, and one in 1989 which I organised.

**Top:** The bottles of sand, or was it water, wrapped in calico bags and numbered - no nudging allowed.

**Above:** Skeptic Peter Bowditch tests his divining skills on the Mitta Mitta tennis court. **Right:** Skeptic Martin Hadley explains how to make wine disappear, while lan Bryce pays close attention to the master at work.



The rules said electronic devices were not allowed, and I kept an eye out for any anomalies. There was no sign of cheating or disputes.

The targets for diviners consisted of 20 bottles containing either river water or sand, concealed in calico bags, and placed randomly at premarked locations around a tennis court. As a control, each diviner first 'calibrated' his/her equipment on visible bottles of each type, and then on concealed but known samples. All final participants said their divining rods (or whatever tools they used) responded in these cases. Then they divined the 20 unknown samples, with an escort recording their pronouncements.

About 40 people took the challenge, around half of whom were professionals calling themselves diviners or drilling bores as a business, and the others were casual visitors.

After about an hour we stopped

and I asked many how they went and perhaps why they failed. Finally the bottles were randomized again and the next round commenced.

The dowsers were an interesting crew. Most were from northern Victoria or southern NSW. One said he is from the West. I asked did he mean Perth? No, near Wodonga! Well, it's all relative.

One from Bendigo had participated in the 2001 test at Mitta. A husband and wife team from a drilling company competed. The husband hoped to do well but did average. The wife just hoped to beat her husband, which she achieved.

A family with a son and a daughter also competed. Their business clearly relied on divining, and they regarded

this as an important test. The daughter scored 13, 15 and 13 – above average but unfortunately within the range of chance alone.

**66** Excuses aside, all of

the diviners accepted

performance was no

better than chance. ""

the results showing their

One entrant let his twoyear-old son (perched on his shoulders) pick the samples, asked "water or sand?". His

first 17 were all "water" by which time we wondered if perhaps the child was thirsty, or had need of a bathroom!

Each skeptic also had a go. My forked stick did not respond at all on its own, so at each sample I had to make a conscious decision and bias it accordingly. I scored 11.

As for implements, the serious diviners brought their own, mainly bent rods or wires of steel, aluminium or brass. One had an intricate pattern fastened to his rod, like an antenna. Another preferred pendulums, including a cricket ball on a string! We

provided a range of wires and forked branches for casuals.

The physics of dowsing is interesting. Diviners typically hold a bent wire in neutral equilibrium, with a very low-friction grip or even in a loose tube, so that any tiny disturbance will turn it. Even so, movements of their hands are often visible before the rod swings, supporting the ideomotor

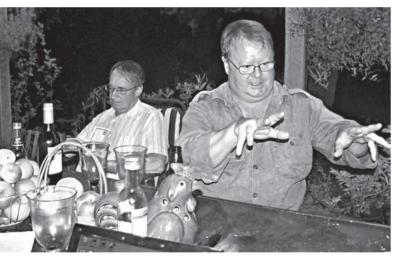
reaction theory. A pendulum is in the same category. A forked stick is held under stress so that it is in unstable equilibrium, and even random or chaotic stimuli will affect it.

When results were revealed, the histogram of 79 runs showed an approximate bell-shaped curve, as expected by chance. The average score was 9.85 out of 20, very close to the 10 expected by chance alone. None reached the 18 set as a potential success which would give the right to a more careful test at a later date for the prize money.

I made a point of asking how they expected to fare at various stages. Most entrants at the start expected to do well, and after their run were equally confident (eg "spot on"). When the results were revealed, they were clearly disappointed, and excuses often appeared. Most opted for a second or third try (where possible) in the hope of doing better. Most, however, felt it was a reasonably fair test.

In summary, it was a very successful event. Most diviners were complimentary, and enjoyed the friendly atmosphere. Excuses aside, they all accepted the results showing their performance was no better than chance.

Many Skeptics and locals contributed to the success, but special thanks are due to Borderline Skeptics Laurie and Eden Smith, and Russell and Robyn Kelly, whose hospitality to visitors is legendary. Steve Roberts from Melbourne was in charge of developing the protocol, and Dr Krissy Wilson provided publicity.



the test and revealed the bottles. Diviners were able to revisit the site, and many of them carefully re-divined bottles on which they had failed. (In the 1989 tests, we uncovered the bottles in real time while the diviner was demonstrating a positive response, and it was revealing to see the rod, once dipping solidly, start to hesitate and then waver to nothing. This showed conclusively that the rods respond to the diviner's expectations rather than the actual water.)

Each diviner's score was tallied,

Divining at Mitta 2

The annual Mighty
Mitta Muster takes
place at Mitta Mitta,
a town near AlburyWodonga - well, two
hours' drive, so it's not
really near anywhere. In
March 2013 the Skeptics
repeated their tests of water
dowsers first held there in
2001 and 2002.

This time, we made several changes to the test protocol to accommodate practical considerations, and to present the challenge to the dowsers in the fairest way possible.

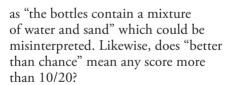
A lot of dowsers and locals do not think scientifically, and it was an interesting and relevant challenge for us to offer our tests in a way that could be easily understood and seen to be fair.

We had the free use of the Mitta Tennis Court and surrounding grassy areas; we had a lot of volunteers not only from the local group (Borderline Skeptics) but also from Melbourne and Sydney. We had to devise ways of preparing and setting out the samples that were practical and fair, without revealing the contents.

With \$100,000 of Australian Skeptics Science & Education Foundation money at stake, the temptation to cheat had to be accounted for and avoided. We were gratified not to see any attempt to cheat and none of the dowsers complained that our test was unfair, except for one gentleman who protested that our sand had "minerals" in it.

#### THE TEST SET-UP

An immediate obligation for us is to have clear wording for the challenge. Problems arise with such phrasings



We decided to present two-litre plastic milk cartons, each one full of either water or dry sand. The containers were wrapped in canvas bags so one couldn't see the contents. The sand ones were carefully made the same weight as the water ones, and you could not distinguish them by sloshing them about, though you could still tell the contents by squeezing them or seeing how they bounced. It followed that whoever set out the containers on the ground had to be kept away from the dowsers, or at least should not be able to claim the prize!

As dowsers have whinged in the past (and did so again) about impure water, city water, etc, we used local sand and took our water from the foaming rapids of the Mitta River at the site; this freezing cold water gave problems with condensation, but we managed to wipe the cartons enough to hide it.

Steve Roberts reports on

Australian Skeptics' 2013

Mitta Muster challenge to

diviners – a record number

of people if not a record of

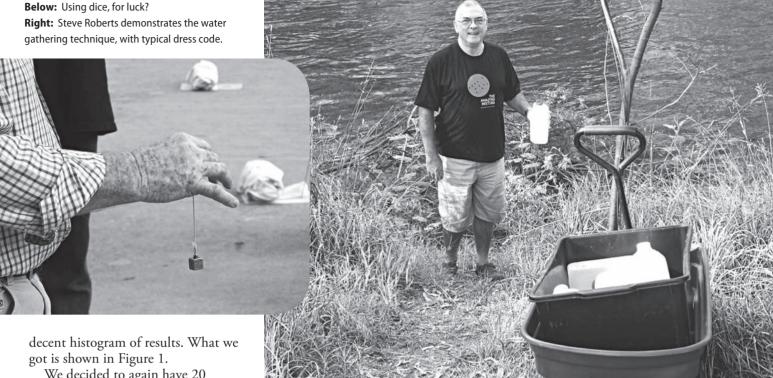
success.

Now, how many containers should there be, and at what odds? In 2001 we had used 20 samples randomly filled - 13 sand and seven water. In 2002 we tried to be fair to the dowsers by having 25 samples and letting them discard five attempts and choose what they thought would be their best 20 results. This was impossible to explain and caused more chaos and disputes, as well as making it harder for us to analyse the results. If there were 10 sand and 10 water samples, and the dowsers knew this, then their scores could be biased towards getting a 10-10 result and this makes it harder to analyse; but in 2001 with 13 sand samples, anyone who guessed 20 sands would have got 13/20 right!

This year, we wanted to do more than one test - we were trying to get as much data as possible to make a



**Left:** The diviners at work, checking the bottles in bags scattered around the site.



We decided to again have 20 samples, but to conduct multiple tests with rearranged samples, and to guarantee that there would be between eight and 12 sand (or water) samples out of the 20. This was accomplished by preparing 28 samples - yes 28, bear with me - of which 14 were sand and 14 water. Two of each were laid out at the start of the course as known samples, one unwrapped and one wrapped in the same canvas bags we were using. These had to be

dowsed correctly to avoid dowsers simply saying they were unable to perform, for whatever reason.

The remaining 24 samples were then dumped into a wheel barrow at random (in privacy), which was taken out onto the tennis court by two of us, one of whom then drew a playing card to determine a location 1-20. The other person grabbed any sample off the wheelbarrow and put it there, handling

it carefully to avoid visibly shaking it. The dowsers were then let out one by one, each with a clipboard-bearer who wrote down their results, in two copies one of which was given to the dowser.

After the dowsing, the samples were visibly tipped out of the bags to show what they were; the dowsers then all felt the need to re-dowse and see where they went wrong - and

they all did, none scoring above statistical chance.

The exposed samples were then collected, and in privacy re-bagged and put back into the wheelbarrow. In this way we could clear the whole field and set it up again in 10 minutes, and we ran three separate tests, with the samples not correlated across tests.

Doing this was simpler than it sounds, but a lot of work went into working it all out! From past experience we knew there would be havoc and uncontrollable crowds on the day, and we had to work within that.

For this reason, it was not possible to exhibit our \$100,000 prize (plus \$10,000 added locally for the day) on the day. The crowds of people that sort of money would attract would have disturbed the dowsers and presented risks of cheating and theft. It's our money and we make the rules.

#### **CHECKING THE ODDS**

We decided to set up odds of about 1000 to 1 against succeeding by chance on the day, and this performance would have to be

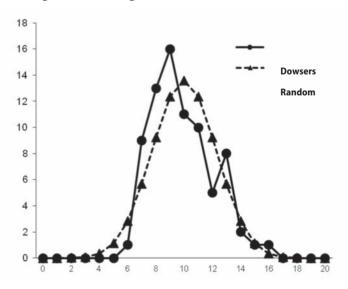


FIGURE 1: CORRECT ANSWERS OUT OF 20 (MITTA 2013)

# Divining at Mitta 2 Continued...

repeated on another day to claim the \$110k. Allowing factors for costs involved and the odds actually being a bit less than 1000:1, it was fair for the dowsers to pay \$1 to play, and all the money we raised was donated to the Mitta Muster.

The odds against a score of 17/20 or better in a single trial would be about 776:1, and the odds against a score of 18/20 or better would be about 4970:1 - "about" because the distribution of samples is not exactly random, and for practical factors.

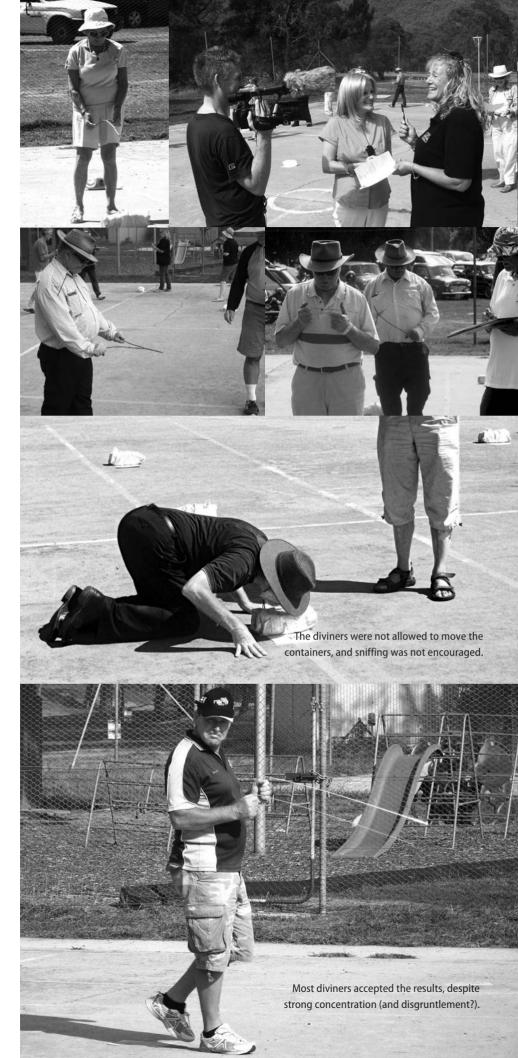
Since we encouraged the dowsers to have several goes, we decided to take a score of 18/20 or more, on any trial they chose as the criterion for 'success'. We initially thought that if someone got say 10, 11, and 18/20, we would add these to make 39/60 which is 73:1, an insignificant score when there are dozens of competitors. The dowser, however, would view this as a success of 18/20, ignoring the other poor results - and want the prize.

(One of the 52 dowsers in 2001 scored 13/20 and then tried to argue that as he had dowsed 13 samples as sand, and there were 13 sand samples in total, even if they weren't exactly the ones he had identified, he considered that he had won and would we send him the cheque. He then tried to litigate against us, with comparable success.)

So we decided that the only way to explain this fairly and visibly to non-mathematicians was to allow a free choice of any set of 20 results in exchange for making the required score as high as 18/20. In the event, nobody achieved this.

#### THE BEST SCORE

Despite the heading above, it is actually a serious mistake to use the phrase "the best score" unless it is statistically significant, which none were all day, but I'll do it anyway. The highest scoring was by a young girl who got 13, 15 and 13/20 - the best result that can be made







**General caption:** Krissy Wilson interviews a diviners, while some of the 40 practitioners do their thing, each with a skeptic to take score.

of this is 41/60 = 322:1. Her dowser father, bristling with paternal pride, himself got 8, 9 and 16/20. Choosing the score of 16/20, that is 169:1 against chance. These figures are nowhere near significant, given that these results were freely chosen from the 79 independent trials we conducted. For example, taking the two best scores we get 31/40 = 2943:1, but there were 79.78/2 = 3081 ways in which we could choose two scores. Choosing three scores from everyone can be done in 79.78.77/2.3 = 79,079 ways, and the best result is 45/60 = 15.000:1.

So, another year, another dowsing test, another bell curve of results, closely fitting the Gaussian Normal distribution to be expected by pure chance (see Figure 1).

Why did we do this, when as Skeptics we were pretty sure what the results would be?

Well, it was great fun: we stayed at Mitta Mitta a couple of nights, we

had beer and BBQs, we toured the area, and we met with old friends and made new friends from interstate. But most of all, it was to be able to conduct a fair scientific test in the real world, and to

demonstrate to ourselves and everyone else how to do that.

We ourselves learned a lot about devising a practical, explainable, cheat-proof protocol and calculating real-world odds. And if anyone had performed above chance, \$110k would be nothing to what could be made on the back of that sort of success (I

would willingly employ such a person). Several of the dowsers came from a nearby valley, which the locals know as a place with - how do I say this - not many rich people.

A good closing comment is from one of the dowsers chatting with his family, saying he did well to get 12/20 which is sort of above average. Being within earshot, I pointed out that due

to the number of tries he'd had and the randomness inherent in reality, his score was not better than average. "Well, I don't mind being average" he reasonably

concluded.

"If anyone had

performed above chance,

to what could be made on

\$110k would be nothing

the back of success. ""

I wish to add that all the dowsers were nice people, generally with a constructive attitude, and I wish them well; I don't want the Skeptics to keep picking on dowsers for all our tests, but the charlatans out there know that we are serious in our challenge and they have been warned.

#### THE MITTA TEST - THE EXCUSES

#### ust when you thought you had heard it all!

What strikes any observer about diviners is the fascinating and often quite wonderful way their minds seem to work when the all important results from the tests are revealed. Even in 1980 Randi was making the point to Dick Smith that water diviners will rationalise their failure (although the same is true for many who believe in paranormal claims). Dick had been quite concerned that, seeing their poor performance, the diviners would be devastated. Randi reassured him that, don't worry, they'll find a reason why they were not at fault .... often within minutes or hours of the tests. This we see again and again and the rationalisations are as entertaining as the diviners themselves.

#### Excuses offered in 2013 include:

- The water has dirt in it. [Doesn't ground water?]
- The sand has water in it. [Doesn't natural sand?]
- The sand has minerals in it. [!]

\$......

- Too many people got to be in a relaxed state.
- The water is not flowing. [But they responded to the calibration bottles.]
- This is not how I normally divine. [He did not complete a trial and left.]
- There is a stream under the tennis court here. [Puzzling,

- because the local skeptics had a ground-penetrating radar scan done beforehand.]
- There is a pipe system here. [There was, but in a totally different place.]
- lan's favourite: Have you heard of spontaneous human combustion? Their legs burn off up to the knees. That proves humans are made of one third water, one third minerals and one third static electricity. The metal fence around the tennis court is "earthing out", and sparks are jumping off it onto my legs. [Fortunately none of the contestants combusted spontaneously or otherwise!]

#### And over the years:

- The water in the hidden bottles was stagnant. I need running water.
- The water in the hidden bottles was tap water. I was testing for river water.
- The water in the hidden bottles lost its electricity.
- Tall wire fences interfere with my abilities.
- There are too many underground streams on the testing site.
- The sand in the hidden bottles was damp and that confused my rods.
- The film crew were using walkie-talkies that interfered with my abilities.
- You cannot test water divining. [Not a very creative excuse.]
  - Ian Bryce and Richard Saunders



eople often ask me why I became a skeptic. There are many reasons, but towards the top of the list is the work of James Randi. No surprise, I know, but one area of Randi's work stands out for me in particular. Around 1980 at the invitation of Dick Smith, Randi travelled to Australia to conduct the now legendary water divining tests. (The documentary of these tests, "James Randi in Australia", is available on Youtube - http://tinyurl.com/ d7bvf99.) It goes without saying that this is a classic of skeptical investigation and a must see for any skeptic young or old. But putting the actual testing aside for a moment, I would like to concentrate on the real stars of the show ... the diviners.

We all may have an idea in our mind of what a classic Aussie water diviner might be like. A 'bushie' in their 50s to 70s, broad Australian accent, a nice sort of bloke (or from time to time a woman), someone who comes across as

# Richard Saunders looks at the people behind divining – why do they do it, and why do they continue to do it?

**1** I found them honest

and sincere, with a real

expectation they would

collect the money. ""

honest with an air of worldly wisdom gained from years of life in the real countryside. Well, I must say that this time the stereotype is spot on. We first encounter these wonderful Aussie folks in the documentary from 1980,

we meet them again, albeit completely different people, nine years later when Australian Skeptics tested water diviners near Sydney, and then again in 2001 and 2002 in Mitta

Mitta for more tests. (The 2002 test is also on Youtube at http://tinyurl.com/cu39pa6.)

This brings us to the most recent tests at Mitta Mitta in March 2013. Although none of the water diviners

from 2002 were back (or from 1980 or 1989 for that matter), their 'spirit' is alive and well in what we might call the next generation of water diviners.

The colourful crew who turned up this time would have been in their

mid-20s or 30s in 1980. (A few of the younger ones wouldn't even have been born then.) But by and large you could pluck any of them out of time and place them

back in one of the tests from the past and no one would know the difference. They have a certain look and outlook, a way of dressing, a way of speaking and a way of thinking that has not changed in all these years.

Far Left: Roberts, Laurie Smith, Bryce and Hadley look for water Left: Richard Saunders put to work on the bottle transport Below: Most diviners, young and old, used bent rods, though a cricket ball made an appearance.





at once be looking for the 'trick' or the reason as to why you suddenly failed to

in the head of the water divers when they fail the tests. To them, water divining is real, it's something they do, it's beyond question that it works.

I understand why they need to find a reason to explain their lack of success on the day.

For me one of the tell-tale signs that someone is honest in their belief is the length and creativity they will go to in order for them to preserve their world-view. You can see it in their faces as they study the situation and come up with what to them explains the failure. This explanation then becomes a certainty and satisfies a vital need they have at the time. They have found a reason to justify their lack of success and that reason has nothing to do with whether water divining works or not. In fact, the question

The water diviners at Mitta

of whether it works is not even

entertained.

Mitta in 2013 behaved exactly as predicted and they thought along the same lines as their predecessors. I found them to be honest and sincere with a real expectation that they would succeed and collect the money. They are a genuine part of the Australian landscape, no matter what we may think of their paranormal claim.

But why do they do it and how can they be so creative with their responses to failed tests?

To understand this question, we must try and put ourselves into the mind of a believer. This is not as hard as you may think.

Say, for example, you play the piano. Every now and then you belt out a tune, people sing along and you even make a few bucks out of it. Now imagine that one day someone tells you that if you can play a certain tune on the piano for them in their house, they will pay you \$100,000. It seems all your Christmases have come at once! You turn up, inspect the piano, have a look at the house and all seems fine. But when you sit down and start to play, what comes out of the piano is awful! Your fingers seem





In the December 2007 issue of its now-defunct *Doing the Rounds* online newsletter, the Australian Vaccination Network ran a news item on the launch of the Brisbane-based Church of Conscious Living. The church had the self-avowed proposal that "we have decided to create a 'religion', so, amongst other things, we can claim 'religious exemption', if the need ever arises, for ourselves and our children".

Despite the cynicism evident in the church's use of the word "religion" in quotes, little more was heard of it or the AVN's endorsement of it until late May this year, when a flurry of publicity following a tweet from Meryl Dorey, erstwhile president of the AVN, promoting the church again highlighted the relationship. While the relevant NSW government legislation allows objection to vaccination on the basis of religion, the NSW Health Minister Jillian Skinner referred the AVN's promotion of the church using the legislative 'loophole' to the Health Care Complaints Commission (HCCC).

NSW Opposition Leader John Robertson described the Church of Conscious Living as a "sham" and that its "credentials... as a genuine religious organisation are completely The Australian [anti]Vaccination Network is feeling intense and unprecedented pressure from Skeptics groups, the media and government. Tim Mendham reports.

dubious". But he added his concern at the church's members taking advantage of the exemption inherent in proposed legislation regarding restrictions on non-vaccinated children attending childcare centres.

He said the "loophole" was large enough for anti-vaccination supporters "to drive a truck through".

"This loophole ... is a victory for the AVN," he said. "It's clear that members of the AVN and their supporters will use any means available to avoid protecting children from whooping cough and measles."

The AVN has been in operation for close to 20 years, and for most of that time it has had a relatively untrammelled time to promote its anti-vaccination message. But activity over the last few years by Australian Skeptics and the Facebook-based Stop the AVN group has raised awareness that the AVN is not a "free speech" organisation promoting a fair discussion of the vaccination debate.

Rather they have shown that the media should be extremely wary of referring to the AVN and Meryl Dorey as responsible and reliable sources of information on immunisation.

Pressure on the AVN has now ramped up considerably, with not only the Skeptics' activity but state and federal governments and the media taking up the cause.

Federal Health Minister Tanya Plibersek has replaced the term "conscientious objectors" in government communications with "vaccine refusers". There is also a move to make the same change in legislation. Plibersek is on record as rubbishing fear campaigns about the risks of immunisation.

#### NAME CHANGE LATEST

In the previous issue of The Skeptic, we reported on the NSW Office of Fair Trading's ordering the organisation to change its name to truly reflect its antivaccination stance.



Dorey appealed the proposed change after having several equally anodyne alternatives rejected. These included "Australian Vaccination Information Network" and "Australian Vaccination Choice".

The original date of February 21 for a hearing on the issue in front of the Administrative Decisions Tribunal - which oversees any appeals against departmental decisions - was moved back to March 21 following claims by the AVN that it needed more time to promote a name change to its membership. Further delays have meant the (final?) hearing will take place on June 13 & 14, shortly after this issue of The Skeptic is published.

We'll keep you informed of developments on that front.

#### **NSW PARLIAMENT & HCCC DECISION**

Meanwhile, a new Bill has been passed by the New South Wales parliament which will enable the HCCC to investigate a "health service provider" not only where an individual has been adversely affected by the provider, but also when they deem the advice or treatment offered by the provider is likely to cause harm. In other words, allowing a proactive investigation procedure.

The legislation came off the back of the AVN's legal action with the HCCC in the Supreme Court in 2011. That action challenged a public warning issued by the HCCC in response to a complaint made by a member of the public about misleading health information distributed by the AVN.

The HCCC deemed the AVN's website "provided information that is solely anti-vaccination, contains information that is incorrect and misleading and quotes selectively from research to suggest that vaccination may be dangerous" and, as a result, directed them to publish a disclaimer indicating their information is purely anti-vaccination and should not be construed as medical advice. When the AVN refused, the HCCC issued a public warning.

But, in fact, the HCCC legislation

did not have the scope to accept generalised complaints from the public—it only covered complaints from those whose health has been adversely affected as a direct result of advice from an unregistered health practitioner. Consequently the AVN challenged the HCCC public warning and won.

The new Bill amends Section 7 of the Health Care Complaints Act to make clear that a complaint can be made against a health service if the health service affects, or is likely to affect, the clinical management or care of an individual client.



Gone are the days when the AVN was seen as a reputable organisation and, along with its reputation, the AVN's own days may similarly be numbered.

During the various debates on the Bill, a range of comments were made about the AVN, including calling its supporters "nutjobs" and "flat earthers". Dr Andrew McDonald, the NSW Shadow Minister for Health, described how "When provoked, Australian Vaccination Network's fellow travellers can and do behave reprehensibly. The police have been called to my office on one occasion following threatening emails after I raised concerns about the practices of the AVN."

Ironically, the AVN's own action against the HCCC triggered the legislative change that will now seriously impact on them. Not to mention that all charlatans and quacks in NSW also have Dorey to thank for making them subject to HCCC investigations.

#### APPREHENDED VIOLENCE ORDERS

Last year, Dorey instituted AVOs against three individuals who had criticised and supposedly made threats against her.

Though one defendant settled on the charge, two others have defended their position.

The cases were strung out for a long period through a series of claims and supposed new evidence submitted or to be submitted by Dorey. She continued her promotion of the AVN causes over the intervening period, including a tour across regional areas, seemingly unconcerned by any supposed threats to her physical wellbeing. Dorey provoked observers to consider her grip on reality when she stated publicly that only a biased court could find against her. Her case against Peter Bowditch was dismissed, without the faintest hint of magistrate bias, as far as we can see. (See Peter Bowditch's article in this issue for more details on the case.)

She has appealed that dismissal, indicative that she is nothing if not persistent.

#### **MEDIA CAMPAIGN**

Following the three issues described above, the News Ltd papers the *Daily Telegraph*, the *Sunday Telegraph* and the *Herald-Sun* have been running an ongoing series of news items, articles and comment pieces on the vaccination debate. While primarily looking at the issue of allowing (or not allowing) non-vaccinated kids to attend childcare centres – "no jab, no play" – the various items also took a direct swipe at the AVN and Dorey.

Referring to the AVN and its followers as "anti-vaccine zealots" and "bullies", the stories included interviews with parents who had lost children to vaccine-preventable

## **Under Pressure**

Continued...

diseases, including Toni and David McCaffery whose daughter's death from pertussis and their subsequent

campaign set much of the current activity into action.

Not surprisingly, Dorey responded on her blog that the media criticism of the AVN amounted to "whipping the public into a frenzy with their hate speech and outright vilification".

She adds that "Unfortunately, many Australians believe only what they read in the newspaper". This never seemed a problem when the media were much more sympathetic to her point of view, as wrong-headed as that might be.

Tony Abbott, leader of the Federal Opposition, has leant his support to the "no jab no play" policy, but has nonetheless endorsed exemptions based on medical or religious grounds.

#### **MIDWIFERY TEXTBOOK**

Jo Benhamu, a registered nurse, committee member for Australian Skeptics Inc and one of the board of management of the Friends of Science in Medicine, pointed out that *Midwifery: Preparation For Practice*, a core nursing textbook used in NSW universities, directs midwifery students to the AVN's website as a legitimate source of information.

Chapter 33 of the book deals with the midwife's role when parents are discussing vaccination, and students are then directed to the AVN as a "non-government" source of alternative information for Australian and New Zealand.

Health Minister Skinner

immediately called for the text to be withdrawn when the reference was brought to her attention.

Professor Hannah Dahlen of the Australian College of Midwives said the New Zealand authors were unaware of the AVN's stance on vaccination when the textbook was written in 2009. "The textbook



"The media still go to Meryl Dorey for comment, something which at the moment she refuses to do."

is being re-written now and that reference will no longer be in the new edition," she said.

In June last year the College apologised for promoting an event run by the AVN. The College emailed 1000 invitees to its NSW event inviting them to a series of information evenings organised by the AVN. Again it was Benhamu and

Australian Skeptics which pointed out this unfortunate oversight.

(On a similar note, the *Sydney Morning Herald* revealed that the Royal Australian College of General Practitioners had provided Continuing Personal Development courses which used material from the Australian College of Natural and Environmental

Medicine that referenced the long-discredited research by Andrew Wakefield as well as associating autism with the MMR vaccine.)

## BLACK SALVE & FREEMAN OF THE LAND

"Black Salve" is an alternative-medicine concoction containing sanguinarine - which comes from Bloodroot (Sanguinaria canadensis) - and sometimes zinc chloride. It has been sold in Australia as an alternative treatment for cancer, including skin cancer. It is highly corrosive, highly dangerous, does not discriminate between cancerous tissue and healthy tissue, and relies on the user to self-diagnose, selfprescribe, self-administer and self-monitor. The Therapeutic Goods

Administration (TGA) has issued a warning advising consumers against purchasing or using Black Salve.

Despite these concerns, Black Salve has found favour in the alternative medicine milieu, and Dorey and the AVN have recommended and publicised it. Some of that publicising involved selling a DVD from the AVN shop and spruiking it on radio.

Once the TGA were informed that Dorey and the AVN were on the Black Salve bandwagon, they issued a recommendation to them to stop such irresponsible behaviour. Dorey contested that, invoking the "Freeman of the Land" defence. This unusual



approach is the theory that a person can declare themselves to be, in effect, a sovereign nation and not subject to law.

We are not aware of this idea gaining any traction in Australian judicial circles.

Not surprisingly, the TGA ignored that 'defence' and issued an order to retract the endorsement.

#### **UPDATE ON AVN PRESIDENCY**

In January, the presidency of the AVN changed from Dorey to Brisbane-based AVN board member Greg Beattie.

At the time, Dorey announced that she would be working on "several very important projects". What these are is still unknown – there have been no indications of any particularly spectacular activities by either the AVN or Dorey, outside of trying to respond to the recent barrage of criticism.

The current president Beattie has been curiously low-key in this whole

process. The media still go to Dorey for any public comment, something which at the moment she refuses to do, outside of her own tweets and Facebook entries.

#### THE FUTURE

Most of the above issues will come home to roost shortly, with Dorey and AVN currently facing up to the NSW Health Care Complaints Tribunal, the NSW Office of Fair Trading, the NSW Administrative Decisions Tribunal, the Therapeutic Goods Administration, not to mention the NSW and Federal government, the media and, increasingly, the opprobrium of the public.

Still to come are the results of investigations into the incorporated set-up of the AVN, its scheduling and reporting on its AGMs, its liabilities re subscriptions for a magazine not published, and concerns over expenses, asset listings and various payments. These issues have been raised with

Fair Trading, and have resulted in the receipt of numerous documents under Government Information (Public Access) provisions for further review. Following detailed assessment of these documents have led to further investigations by Fair Trading.

It is obvious that the days when the AVN was seen as a reputable organisation are gone. And along with its reputation, the AVN's own days may similarly be numbered.

**Note:** Portions of this report were contributed by Dr Rachael Dunlop and Ken McLeod.





#### THE HOLOCAUST CONNECTION

eryl Dorey, former president, public officer and media frontperson for the AVN, has not always been restrained in her suggestions of the dire consequences of vaccination.

Apart from a list of disproven or unproven medical side effects, she often takes her diatribes further, into political and social arenas, despite always claiming that her arguments are scientifically-based.

In January 2011 she described a court's decision in favour of a father who wanted his child immunised as "Court orders rape of a child. Think this is an exaggeration? Think again. This is assault without consent and with full penetration."

Naturally, there was outrage and strong criticism of her comments, even from within the AVN community.

Now Dorey has compared the argument for giving childcare centres the right to restrict attendance to vaccinated children to "historical social conflicts such as the McCarthy Era in the US and Hitler's vilification of the Jews during the 1930s and 1940s. At least with these issues, there was plenty of public debate going on."

Naturally enough this too raised a furore. Apart from contributions by regular critics of the AVN, Rabbi Baruch Stone, from Cambridge Massachusetts, added to the discussion: "6 million of my people (and 11 million

Ī.....

innocent people total) were brutally and mercilessly murdered by Hitler and the Nazis. They were rounded up and exterminated in gas chambers, then cremated in the ovens. There is NO COMPARISON WHATSOEVER between vaccination legislation and the extermination of all the 'undesirable' from Europe. I sincerely hope the world recognises Meryl for what she is - out of touch with reality, warped, and very dangerous."

Dorey responded by saying "The comparison is most obvious in the blatant incitement of hatred and vilification that is being promulgated by both the government and the media."

She then quoted 12th century Jewish philosopher Maimonides: "Do not consider it proof just because it is written in books, for a liar who will deceive with his tongue will not hesitate to do the same with his pen."

Stone himself responded: "Your insistence that there is a valid comparison ... is so mind-boggling that I have literally lost sleep over it. Your quote from Rambam (Maimonides) would make him turn in his grave. As a rabbi I condemn your position and your comparison as inconsistent with Judaism. May G-d have mercy on your soul."

Dorey herself is Jewish, and you would hope that would give her an insight into such topics, but sensitivity, along with accuracy, has never been a prime concern for her.



# Your Stars: JUNE 2013

With our Astrologer, Dr Duarf Ekaf

#### Aries: 21 March -19 April

When the heavens fall, we'll see shooting stars. Roger Moore is a good example of a shooting star ... or a star that shoots. I wonder if he reads this astrology column?

#### Taurus: 20 April - 20 May

The por peepl of your star sin ah not very good spellars. I know this as I too suffa from poor spleeing. The message is neva gia ushd alsd and yous asqp ohdf a!

#### Gemini: 21 May -20 June

Owing to a strike, no black cats will cross your path today. The cats are demanding better conditions and will be replaced by strikebreaking rats. Those rats are really rats!

#### Cancer: 21 June - 22 July

You cannot undo what has been done but sometimes you can do it again unless you want to undo it then you cannot undo it again once it's been done.. again. Look, it's not me saying this, it's the stars, I promise you.

#### Leo: 23 July - 22 August

Your father's father's father was your grandson's great-great-great-grandfather ... I think. I better asked the stars. Hmm, nope. They are not sure about this one. Maybe he was your great-great-grandmother.

#### Virgo: 23 August - 22 September

Today is not yesterday but it will be tomorrow. Tomorrow for you is another day. Make sure you live for today and not for tomorrow that will be yesterday the day after tomorrow. If you are reading this tomorrow then ignore this wisdom until next week.

#### Ophiuchus: 0 - 0 - sorry

Like sands through the hourglass, so are the days of lives. I bet there are more grains of sand in an hourglass than the days of your life. Time to stop watching daytime TV. Record it and watch it at night.

#### Sagittarius: 22 November-21 December

Your lucky dice are loaded against you.

Not very lucky, eh? If you roll two
7s you know something has
gone wrong.

#### Capricorn: 22 December - 19 January

The last word of this sentence is something you'll see in the future. Oh, too late, now it's in the past. It's amazing how the universe works isn't it!

#### Aquarius: 20 January 18 February

Someone you know is having a birthday this month, or last month or next month. Yes, I too am staggered at the insights given to us by the stars.

#### Libra: 23 September -22 October

People born under your sign sometimes suffer from 'writer's block'. I lived in a writers' block once. The noise from other writers clacking away on their computers stopped me from writing.

#### Scorpio: 23 October - 21 November

The stars have related to me the secret of winning the lotto. If you buy all the lotto tickets on sale you are sure to win! Makes sense to me.

#### Pisces: 19 February - 20 March

You used to be a skeptic, but now I feel you are not so sure. I used to be a believer but I think being a skeptic is more fun. Does believing you are a skeptic make you less of a skeptic? Not even the stars know the answer to that.



# Wind Barriers

Simon Chapman rides the three horsemen of the Australian wind farm health apocalypse



2002, more than 20 years later.

Those travelling in places like
Denmark, Netherlands, Germany,
France and Spain will have
encountered wind farms in many
parts of those countries, yet my
European public health colleagues
look at me blankly when I ask
them if they are aware of claims
about turbines causing health
problems.

being circulated from around

Readers who have not been up close to a wind turbine should look at this video to get an understanding of how noisy turbines are: https://t.co/jRuyHXW4oO

In Australia, the first wind farm opened in 1992. There are no records of complaints until 2004 when Dr David Iser, a rural Victorian GP, undertook an unpublished survey of 25 households within 2km of the local 12 turbine, 21MW wind farm, which had commenced operation in October 2002. Three respondents to the survey reported what Iser classified as "major health problems, including sleep disturbances, stress and dizziness". The unpublished report provides no details of questions asked, sample

selection, whether written or verbal information accompanying the delivery of the questionnaire may have primed respondents to make a connection between the wind turbines and health issues; whether those reporting effects had previous histories of the reported problems; nor whether the self-reported prevalence of these common problems were different to those which would be found in any age-matched population.

For example, sleeping problems are very common, with recent Australian and New Zealand estimates ranging from poor (34%), to moderately poor (26.4%) and very poor sleep quality (8.5%). A German study undertaken to obtain benchmark reference data

## Wind Barriers

Continued...

on common symptoms and illnesses experienced in the past seven days in the general population for comparison with those experienced by clinical trial enrollees presents data on several problems most often attributed to wind turbines. These include headache (45.3%), insomnia (25.6%), fatigue and loss of energy (19.1%), agitation (18.4%), dizziness (17%) and palpitations (8.6%) (47)

#### **THOSE AGAINST**

Australian complaints moved up a gear from 2009, coinciding with a decision of those opposed to wind turbines to shift their focus onto health, instead of NIMBY arguments that they just didn't like the look of them.

The activities of anti-wind farm groups are having serious social and economic consequences. Victoria has introduced a 'setback' limit of 2km from any residence, with NSW looking like it might follow. The implications of this are crippling the roll-out of this important form of clean energy. Deep pockets with mining and fossil fuel interests are supporting anti-wind advocacy for their own purposes.

Three prominent Australian voices arguing that wind farms cause health problems give a flavor of the anti-wind farm debate.

#### Case 1:

Sarah Laurie, or "Doctor" Laurie as she frequently identifies herself, is an unregistered general practitioner from South Australia who has been unregistered longer than she actually practised medicine. She is the most public of Australia's anti wind

echo chamber and a prolific writer and speaker on her preoccupation. Unfortunately, Laurie's writing has never extended to any publications

(on any topic) in a peer-reviewed research journal. But her claims over the web.

Laurie has published laundry lists of health symptoms that

she argues are linked to wind farms. She has also made and not retracted the following claim: "The Waubra Foundation have focused most of

our attention on the issue of infrasound and low frequency noise, however there may well be other toxic agents involved, which some researchers have identified are present in these environments, including EMF, ground borne vibrations, and rapid fluctuations in barometric pressure, sufficient to explode bats lungs and at times

with sufficient energy to perceptibly rock stationary cars even further than a kilometer away from the nearest wind turbine." (Sarah Laurie http://tinyurl. com/n8rkmo4)

Laurie also believes that wind turbines can make people's lips vibrate "as from a distance of 10km away".

> (http://tinyurl.com/ mw6we6g)

Laurie told an enthralled anti-wind farm audience in 2012 that wind turbines cause a spectacular increase in the need to urinate. She described staying overnight with others adjacent to a wind farm and that "just about everybody ...every five or ten minutes needing to go to the toilet". Assuming people went to

bed at 11pm and woke at 7am - eight hours of 'sleep' - toilet frequency, at six to 12 times an hour, means urinating 48 to 96 times a night! Is Sarah Laurie

> taking the piss? (http://tinyurl.com/ jw4jg42)

I have compiled a list of health claims that now number 216: http://tinyurl. com/b7gdjhx

Old Testament accounts of

pestilences and plagues seem mild compared to the effects attributed to wind turbines.

The opponents to wind about health are all turbines shifted their focus to health instead of arguments that they just didn't like the look of them."

#### Case 2:

George Papadopoulos

is a pharmacist from Yass who also has a commercial interest in Geovital (http://tinyurl. com/mhcse5u) which sells blankets, shields, paints and pillows to protect gullible people from the evils of electromagnetic radiation. Their website has a statement from

Noble (sic) Prize winner Ivan Engler Dr.med.univ.,PhD saying "With almost all of my [roughly 300 patients] with a cancerous disease, their bed was placed for years on an energetically unfavorable place in a Geopathic Zone". No one called Ivan Engler ever won a Nobel Prize.

Papadopoulos has written that he believes he is affected by wind turbines up to 100km away (just six kilometres less than the direct distance from Sydney to Lithgow): "There have been two reports [of people being affected by turbines] from Warrnambool, Victoria ... The closest turbines appear to be about 35-50km away with many more about 70km away. ... Where does the problem stop? This is a difficult question to answer. On two occasions when the ILFN [Infrasound and Low Frequency Noise] nuisance was at its worst, I travelled out west. On one occasion I discovered that it appeared to have dissipated at Wee Jasper, 70km away from the closest



turbines. On another occasion, and by far the worst of all days, the problem had dissipated when arriving at Young about 100km from the closest turbines." George acknowledges that "Truly these figures appear subjective, outrageous, and for most, impossible to believe." That's right George, they certainly do. (http://tinyurl.com/n7p33x3)

nervous and respiratory systems, including depression, concentration problems, muscle weakness, fatigue, unsteadiness, narcosis, defatting dermatitis, and nausea." http://tinyurl.com/lxedcaq

There are plans for a major wind farm development with up to 200 turbines on King Island, which has already got five turbines. The anti-

#### Case 3:

#### **David Mortimer**

(pictured at right with his wife) is high profile protestor who has hosted wind turbines on his property in South Australia since 2005. He is championed by the anti's because he is a turbine 'host', still deriving income from having turbines on his property. But in being

a health complainant, he is unique among turbine hosts in Australia because years after complaint-free exposure, he began to complain about health effects after he moved to another property further away. He has stated publicly that his doctor has said he can find no reason to attribute his symptoms to wind turbine exposure.

Mortimer regularly appears at anti-wind turbine meetings and has been interviewed by radio personality Alan Jones. In April he travelled to Tasmania's King Island to address an anti-wind farm meeting. The King Island Courier reported on 24 April that he told the meeting "If my neighbours were on fire and I wasn't threatened, I'd let them burn." Mortimer would appear to have a few 'issues'.

Mortimer is retired, but engages in "manufacturing fiberglass goods at home" (http://tinyurl.com/lbzptrt)

Working with fibreglass can cause health problems as the resin comes as a solution dissolved in monomeric styrene. When the resins are cured, styrene vapors are released. "Styrene affects the central



wind farm blog Stop These Things recently ran a post from Mortimer. He described spending two nights at a bed and breakfast on the south west coast of the island. On the first night, he and his wife experienced "pulsing in our heads and the associated sense of anxiety. Our sleep was very poor." To Mortimer's reported amazement, the next morning he noticed a group of five wind turbines "about 4km from our B&B!!! The second night, the symptoms were worse."

Now, two things are quite remarkable about this account. First, we are expected to believe that he went to King Island to speak to wind farm opponents, stayed up late in their company and yet no one mentioned that there were already turbines on the island. Second, this is the first report of anyone living or visiting the island who has ever reported being so affected. There are no records of any previous guests at the B&B having problems; certainly none with the owners. Likewise, there are no reports of any of the island's 1600 residents being bothered.

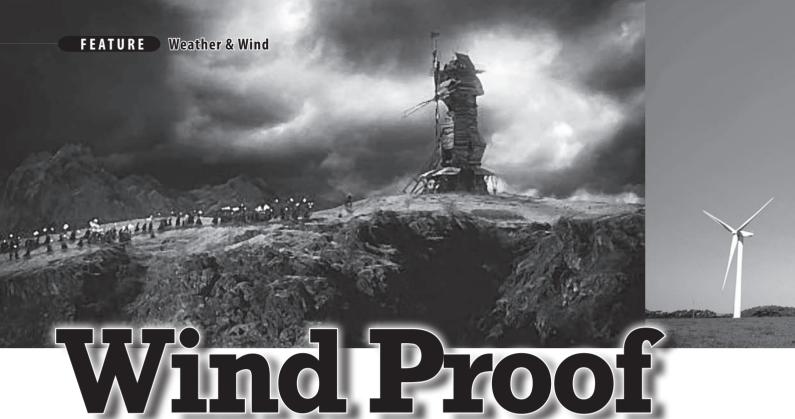
My recent study of the history of

complaints about Australian wind farms (http://tinyurl.com/d86rtkw) found there are large spatio-temporal variations in wind farm noise and health complaints. 33 out of 51 (65%) of Australian wind farms, including 18 out of 34 (53%) with turbine size greater than 1MW, have never been subject to noise or health complaints. These 33 farms have some 21,592 residents within 5km of their turbines and have operated complaint-free for a cumulative total of 267 years. Western Australia and Tasmania have seen no complaints. Only 131 individuals across Australia representing approximately 1 in 250 residents living within 5km of wind farms appear to have ever complained, with 94 (72%) of these being residents near six wind farms which have been targeted by anti-wind farm groups. Only about 1 in 87 (126 out of 10,901) of those living near turbines greater than 1 MW have ever complained. The large majority – 104 out of 131(79%) - of health and noise complaints commenced after 2009 when antiwind farm groups began to add health concerns to their wider opposition. In the preceding years, health or noise complaints were rare despite large and small turbined wind farms having operated for many

years.

About the author: **Simon Chapman** is Professor of Public Health at the University of Sydney





have a bad habit of playing with my phone while I wait for my coffee. I fiddle with its corners and pick away at its plastic outer shell. One morning, I was being particularly cruel to it as I impatiently waited for my double-shot cappuccino, adorned, as per usual, with two servings of artificial sweetener.

"You know, that stuff gives you tumours", opined the blasé barista. I sighed, slowly. "The European Food Standards Agency reviewed the science this year. They didn't find any credible evidence that aspartame is carcinogenic."

Torn between challenging the myth and procuring my lusciously sweet coffee, I picked away at my long-suffering phone. "Of course they'd say that", he said. "They're in bed with the industry." He smirked, satisfied in being the victor of our fleeting parry.

My first instinct was to dismiss the barista's assertion, because it didn't sound scientific. But that instinct warrants caution, because sketching solid lines around the field of science can be problematic. As most scientists will acknowledge, the edges are blurred and amorphous.

To make matters more confusing, science can mutate over time. Alchemy, comically implausible in the context of modern science, had a significant influence on the foundation of modern chemistry. Astrology continues to be

Ketan Joshi looks at the inverse science of 'wind turbine syndrome' - engraved conclusions and causal gaps.

one of the most amusing and irritating parts of my daily media serving, yet it played an undeniable, proto-scientific role in the science of astronomy.

All is not lost. Though edges blur and concepts mutate, this demarcation problem is not as catastrophic as we might fear. There are some core features of the scientific method that are consistent, and can serve us well as we try to feel our way through a viscous sea of information.

#### HYPOTHESIS AND EVIDENCE

Induction is a type of reasoning used to form hypotheses. It is loosely defined as a probabilistic guess, using information you already have. Your data may be correct, but you might still draw false conclusions. Inductive claims are usually tested, through 'deduction' – an attempt to generate a reliable and well-tested inference.

These two concepts form the basis of hypothesis testing, a feature of science that lies nowhere near those blurred, shifting edges.

Hypothesis testing separates the signal from the noise, and empowers scientists to draw conclusions, while

minimising the probability that they are mistaking random patterns for meaningful trends. It also ensures that common cognitive biases, such as 'confirmation bias', are removed from the equation. Hypothesis testing is a vital organ in the body of science. The level of adherence to hypothesis testing can help us identify fields that may be professing scientific worth, but failing to deploy the scientific method.

"The weight of the evidence should be proportioned to the strangeness of the facts," pronounced Pierre-Simon Laplace, French mathematician and astronomer, in the 17th century.

This truism continues to nip at the heels of those attempting to spread a veneer of validity over implausible claims. Instead of residing in that inexorably slow cycle of induction, testing, deduction and revision, those invested in pseudoscience tend simply to assume the correctness of their conclusions from the outset. Procuring a small quantity of cherrypicked data to support that assumption is an afterthought. Relying merely on inductive reasoning removes the unpleasant burden of acquiring







empirical evidence and testing hypotheses. Conclusions are engraved in stone, and guarded ferociously. This approach has been deployed on a large scale in Australia, Canada and America, by groups attempting to stifle renewable energy development. This feature goes back to the very moment their approach was conceived.

Five years ago, Calvin Luther Martin hated the wind industry. 'Hate' in the palpable sense – a frothing, unchecked revulsion that cannot be feigned. He remarked, in 2009: "The wind sharks fabricate their own [evidence], using whorish little companies to perform noise measurements and do environmental impact studies ... companies often consisting of four guys with sweaty balls and BS degrees from nondescript bullshit state colleges."

Martin stated that he had been "fighting the wind bastards well over four years", which would place the commencement of his activism in late 2005. Incidentally, his wife Nina Pierpont, an NYU-trained paediatrician (with a PhD in ornithology), put out the following advertisement in early 2006: "Dr Pierpont is asking anyone living near wind turbines and suffering ill health effects of whatever sort which he/she suspects are a result of the wind turbines - asking these people to contact her."

#### WIND TURBINE SYNDROME

With these words, Pierpont placed a flag firmly in the venerated soil of pseudoscientific endeavour. Pierpont uses the term "wind turbine syndrome" in the advert, and specifically requests to hear from individuals who have attributed their ill-health to wind turbines. From the very inception of wind turbine syndrome, the conclusion was scratched deeply in stone.

Pierpoint wrote soon after her study was released: "I never set out to prove that wind turbines cause wind turbine syndrome. This was already obvious. Instead, I chose to study and document

the observations made by people who had already figured it out and proved it on their science tend simply to assume own."

This ambitious, unashamed inversion

of the scientific method is a major characteristic of her legacy. Pierpont claimed in her 2006 advert that her work "will be published in a leading clinical medical journal sometime within the next 12 months". 88 months later, her work is yet to be published in any peer-reviewed journal. Instead, she chose to self-publish – you can buy the book from her website for the princely sum of A\$18, plus shipping and postage.

The New South Wales Department of Health was unreserved in its criticism of Pierpont's study: "This 'study' is not a rigorous epidemiological study; it is a case series of 10 families drawn from a wide range of locations ... This work

Left: Wind farms are under assualt based more on fear and misinformation than any real evidence - much as mobs might once have attacked creations they did not understand.

has not been properly peer reviewed. Nor has it been published in the peer-reviewed literature. The findings are not scientifically valid, with major methodological flaws stemming from the poor design of the study."

With the inception of wind turbine syndrome, Pierpont and Martin found a viable alternative to profane hyperbole and impassioned vilification. And with a conclusion etched firmly in stone, Pierpont simply had to nominate a

Soon after the self-publication of Pierpont's work, several media outlets picked up on the story. In August 2009, The Independent (an English media outlet) reported that wind farms could cause "nightmares and other disorders in children as well as harm cognitive development in the young". In the same article, Pierpont states the suspected cause of wind turbine syndrome: "It has been gospel among acousticians

> for years that if a person can't hear a sound, it's too weak for it to be detected or registered by any other part of the body," she said. "But this is no longer true.

Humans can hear through the bones. This is amazing. It would be heretical if it hadn't been shown in a wellconducted experiment."

Those invested in pseudo-

conclusions from the outset. "

the correctness of their

Pierpont is referring to a piece of work published in 2008 by Todd et al, in which researchers found that the vestibular systems of fish and frogs were surprisingly sensitive to seismic or substrate-borne vibration occurring at very low frequencies. Yet, there is an important difference between sound and vibration, one that was ignored by Pierpont. This provoked Todd to write in to *The Independent:* "Our research is being cited to support the case that 'wind turbine syndrome' is related to a disturbance of vestibular apparatus

## Wind Proof

Continued...

produced by low-frequency components of the acoustic radiations from wind turbines. Our work does not provide the direct evidence suggested."

Todd's statements were no impediment to Pierpont's rock-solid conclusion. She unambiguously and sternly states that "There is no doubt that my clinical research shows that the infrasonic to ultrasonic noise and vibrations emitted by wind turbines cause the symptoms which I am calling wind turbine syndrome."

Pierpont takes no prisoners in asserting a direct causal relationship, based on her own defective research, and her misunderstanding of Todd et al's 2008 paper. Importantly, Pierpont seems to be implicating the entire sound spectrum as the cause of her reported symptoms. Though Pierpont's scientific validity was utterly illusory, her claims were still reported as scientifically genuine in the media.

The possibility that Pierpont was simply mistaking the occurrence of common symptoms for a green-energy pandemic was not considered in the scattered media coverage of her publication. It was assumed that the wisdom of those she talked to was enough to link the reports with the operation of wind turbines. In writing her conclusion before obtaining her data, Pierpont never considered the difference between meaningful patterns and meaningless scatter.

#### **BAD SCIENCE**

In 2010, Pierpont's inverse science found its way to the shores of Australia. Along with the immovable conclusions of wind turbine syndrome came the propensity for vague, non-specific and implausible causal mechanisms. Though there were scattered mentions of wind

turbine health effects prior to 2009, it was given true Australian heritage by Sarah Laurie, who used to work as a general practitioner. She de-registered for personal reasons, and is no longer practising – now, she dedicates her time to travelling to communities as head of the Waubra Foundation, a group deeply intertwined with the anti-wind farm 'landscape guardians'. As CEO of the Foundation, Laurie serves as the



primary proponent of wind turbine syndrome in Australia. It's incumbent on her to put forward the case that the syndrome ought to be considered as reason enough to ban the construction of wind farms within ten kilometres of any residence in Australia – a setback that would necessarily terminate the development of wind energy in Australia. Laurie exercises no restraint in her assertions of direct causality, evidenced purely by anecdotal reports.

"If this proposed Collector Wind Development is approved, it is inevitable that it will have serious cumulative and predictable adverse effect on the physical and mental health of the surrounding population out to at least 10km, and may even drive some families out of their homes over the life of the project, because of the cumulative effects of chronic exposure to ILFN."

"IFLN" is an acronym for infrasound and low-frequency noise (note the shift away from Pierpont's assertion

of 'vibration' heard 'through the bones' and 'ultrasound'). This is sound energy at frequencies between 0 and 20Hz (infrasound), and between 20 and 200Hz (low frequency sound). At low levels, infrasound and low-frequency noise are harmless and ubiquitous.

The causal mechanism proposed by the Waubra Foundation is predicated on the purely hypothetical effects of infrasound at amplitudes below the threshold of perception. This is based on the work of Dr Alec Salt, a professor at the Washington University School of Medicine. He nominates a sound pressure level for infrasound that he suspects might be harmful to humans, based on experiments he conducted with guinea pigs. This hypothetical threshold, of 60 decibels on a g-weighted scale (dBg), is often cited as evidence that the infrasonic sound emissions from wind farms are harming humans and animals. The G-weighting is a mathematical tool for adjusting sound measurements to the

response of the human ear. 'Linear' measurements (dBLin) are unadjusted measurements of sound pressure level.

The South Australian Environmental Protection Agency (EPA) conducted a comparative study of wind farm infrasound in January 2013. Taking measurements at seven locations in urban areas and four locations in rural areas, the study found that infrasound levels in urban areas of between 60 and 70 dB(G) were common, and that levels near wind farms were often significantly lower than urban and office



environments. In fact, some of the highest recorded levels of infrasound were found inside the EPA offices.

This finding raised an interesting conundrum with regards to the usage of the Salt hypothesis. If environmental infrasound levels occur at amplitudes greater than Salt's threshold, shouldn't the symptoms of wind turbine syndrome be occurring in nearly everyone?

The EPA study provoked an interesting response from Sarah Laurie, interviewed by Timothy McDonald on ABC's Radio National: "The report itself, the authors only measured down to 10 hertz by using what we call the G-weighting. They ignored the frequencies between 0 and 10 hertz. And they're the frequencies that many of us believe are the problem frequencies. So they didn't actually measure those."

Ignoring the fact that Salt himself advocates the g-weighting in his original research, the authors of the report actually measured down to frequencies of 0.25Hz. Additionally, they provided both g-weighted and linear measurements. In response to the EPA report, we see the hypothesis shifting towards frequencies that are significantly lower than previously stated. Thought Salt's hypothesis was damaged, the conclusions were untouched – the catastrophic impact of wind turbines stayed etched in stone.

In addition to constantly shifting hypotheses, the engraved conclusion can compel opponents of wind energy to simply avoid formulating hypotheses altogether.

In these instances, wind farm opponents rely solely on anecdotal reports of health effects, and assume that these reports are caused directly by the wind farm. Unsurprisingly, antiwind groups focus almost solely on the propagation of self-reported evidence — direct testimony from individuals near wind farms that attribute ill health to the operation of wind turbines. An anonymous anti-wind blog films and shares emotional snippets of video, calling them "adverse impact statements".

Court cases and senate enquiries invariably hear from emotional residents

claiming to have suffered health effects from wind farms. These are never annexed with direct medical evidence that their suffering is linked to the operation of wind turbines.

#### **RUSH TO JUDGEMENT**

To explore the theory that wind turbines are automatically assigned blame for maladies in their vicinity, I visited the website *Ill Wind Reporting*, a loose collection of reports of illeffects from wind turbines. I live two

kilometres away from a relatively small wind turbine in Glebe – after submitting a report comprising the normal behaviour of

one of my pet guinea pigs, it was immediately listed on their site as a "verified" report of wind turbine syndrome. When a conclusion is predetermined, there is no need to worry about bridging the gulf between cause and effect.

The Waubra Foundation's CEO, Sarah Laurie, is clear in her assertion that the question is already settled. Recently, Sarah Dingle of the ABC's *Background Briefing* spoke to Laurie regarding her involvement in a proposed wind farm in Tasmania. Coalition energy spokesman Ian Macfarlane states on *Background Briefing* that, if elected, the Coalition would instigate a full-scale national scientific investigation into the claimed health effects of wind farms.

When asked if she would accept research that cleared wind turbines of causing adverse health effects, Laurie tersely states: "The adverse impacts have been shown by a number of studies, both overseas and in Australia."

There is little doubt that a largescale scientific investigation into the empirical truth of the matter would fail to erode the solid, pre-determined conclusion touted by the Australian anti-wind lobby.

The question of whether the various complaints of ill health are directly attributable to wind turbines seems well worth addressing. A well-designed empirical investigation into the issue

would be a welcome return to a basic scientific principle. We have to work hard to separate the signal from the noise. Though the anti-wind lobby will only ever scrape their conclusion deeper into stone, it would certainly work to remove the uncertainty used by these groups to inspire fear in communities considering wind developments.

The instigation of epidemiological research seems necessary, but it may not be sufficient in fighting the overvaluation of wind turbine pseudoscience

"In addition to constantly

shifing hypotheses, wind

opponents simply avoid

hypotheses altogether."

by society and media. Smart meters, vaccines, wi-fi and several other technologies have been subject to spurious health scares that have

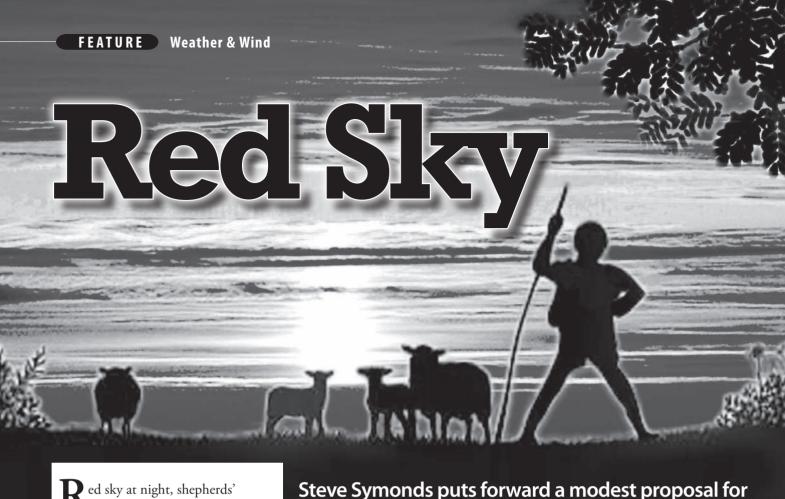
often proven immune to the publication of evidence clearing them of health issues. Dogmatic adherence to an engraved conclusion will arise without fail, but the influence of this philosophy may be minimised not only through research assessing the truth of their claims, but also through a concerted effort to communicate scepticism, scrutiny and critical thinking – attitudes that underpin the strength of scientific inquiry.

As the barista smirked proudly at me, on that frosty May morning, I grabbed my coffee, took a quick sip, and asked him a question. "Would anything convince you that artificial sweetener is safe?" A troubled frown fell over his face, and he wordlessly stared past my shoulder, deep in thought. In addition to giving the right answers to those taken in by pseudoscience, there is vital worth in asking the right questions to those who unhesitatingly impart it.

About the author: **Ketan Joshi** has a degree in neuroscience & psychology from Sydney University.

He works as a research and communications officer in the wind industry, focusing on issues of community, health, science & research.





Red sky at night, shepherds' delight; red sky in the morning, shepherds' warning. Or, if you are more nautical: red sky at night, sailors' delight; red sky in the morning sailors take warning. Both versions are well known and one or other is taught to us from childhood and we teach it to our children.

The concept has been well known for a very long time. In the Bible, Matthew 16:2-3 has Christ speaking: "He answered and said unto them, When it is evening, ye say, It will be fair weather: for the sky is red. And in the morning, It will be foul weather to day: for the sky is red and lowering. O ye hypocrites, ye can discern the face of the sky; but can ye not discern the signs of the times?"

Shakespeare in his poem *Venus and Adonis* says "Like a red morn that ever yet betokened, Wreck to the seaman, tempest to the field, Sorrow to the shepherds, woe unto the birds, Gusts and foul flaws to herdsmen and to herds."

But is there any truth to it?
Weather forecasting is an important science but it is relatively new. To forecast the weather you need to know what is happening elsewhere so you can draw a picture of the weather in

an area and determine how the picture will change in the next few days. We use weather maps to draw the pictures. To construct a weather map you need

finding the truth about red skies. Now it's up to you.

observations taken at the same time over a large area and those observations need to be sent, speedily, to a central office.

Rapid communication over long distances has always been a problem. Pheidippides ran from the Battle of Marathon to Athens to announce that the Greeks had won and then according to legend, collapsed and died. The wild west had the pony express. Battlefield generals had runners and gallopers to convey messages and orders to different parts of the battle. Napoleonic France used semaphore towers to get messages across the country reasonably quickly. None of these methods of communication was of use to meteorologists as the weather would arrive before the observations.

In 1838 the telegraph was invented and revolutionised rapid communication. At last it was possible to know what was happening somewhere else within minutes of it

happening. One of the first to see its potential for weather was Rear Admiral Robert FitzRoy of the Royal Navy. As a young lieutenant, Fitzroy made a name for himself as one of the greatest navigators, surveyors and map makers in the navy. His voyage in HMS Beagle, mapping the coast of South America and the Galapagos Islands, produced navigational charts unsurpassed until satellites arrived. On that particular voyage he had a passenger who was to become famous some years later.

Fitzroy was always concerned about storms at sea and particularly close to land. Ships could ride out even the severest hurricane if they had sea room but close to land they could get into trouble very quickly and the coast of Great Britain is littered with shipwrecks. He realised that using the telegraph he could find out what was happening around the British Isles and also along the coast of mainland Europe. If he knew what was going on, he could, perhaps, forecast what was going to happen. He invented



the method for scientific weather forecasting, established a series of cone signals to be hoisted in harbours to warn of impending bad weather, and founded the Meteorological Office. FitzRoy's Forecasts were published

Any rule of thumb was

going to be useful if it made

good predictions. Red Sky at

Night was one such rule and

has stood the test of time."

in *The Times* and Queen Victoria consulted him on a number of occasions.

But what, you might well ask, has this to do with red skies at night, interesting

though it may be? Scientific weather forecasting was not possible before the invention of the telegraph and it wasn't until the 1850s that FitzRoy took his first tentative steps. Before that there was nothing except experience and rules of thumb. Navies around the world kept logs in which they recorded a wealth of meteorological information. These were studied ashore and useful information was gleaned from the observations.

Francis Beaufort (later Rear Admiral) compiled his scale of wind forces in 1805 based on his own observations and the recordings of others. The Admiralty adopted the scale officially in 1830 and the first captain to use it was our friend, Robert FitzRoy on the 1831 voyage of the Beagle.

William Ferrel (American) in 1856 and Buys Ballot (Dutch) in 1857 both published the same observation but, as Buys Ballot verified it, it is now called Buys Ballot's Law. It states that with your back to the wind in the Northern Hemisphere, the low pressure will always be to your left. This is a very useful rule for sailors as you can use the wind direction alone to steer the ship away from trouble.

Sailors were particularly concerned about weather, but so were shepherds and farmers and any rule of thumb was going to be useful if it made good predictions. Red Sky at Night was one such rule of thumb and it has obviously stood the test of time.

The saying is very specific with its directions. Red sky at night means a

red sky at sunset while red sky in the morning means a red sky at sunrise. This means that the rule is accurate when the weather comes from one direction but not another. As the rule is well established in northern

Europe where the weather comes from the west, we can presume that the rule applies to westerly wind regimes. We should not be too hasty, however, because of the

Biblical reference. The Sea of Galilee is about 33°N. Newcastle in NSW is about 33°S but a more reasonable comparison would be just south of Perth where the sea is to the west just as the Mediterranean Sea is west of Israel. Both Israel and Perth are under the influence of the sub-tropical ridge and have easterly winds in summer but westerlies, off the ocean in winter. Newcastle has easterly winds most of the year, the southeast trade winds, but westerlies in late winter and spring.

The red sky is caused by the dust particles in the atmosphere scattering the light from the Sun when it is low on the horizon or just below the horizon. If the sky is red at sunset it means there are clear skies to the west and the air is dry. If this is the case then you are unlikely to get storms in the next few hours. If the red sky is to the east, it means that the clear, dry air is to the east and the cloud and possible storms are approaching from the west. When you have no other form of forecasting the weather, it is a useful rule.

But does it work in Australia? Everyone knows it from Brisbane to Broome and Horn Island to Hobart and we all teach it to our children or they learn it in school. It cannot possibly work everywhere in Australia. At least I don't believe it does because I cannot see how it could. That, however, is speculation. I have done no study of the phenomenon and cannot, therefore, state categorically that Red Sky works in Perth but not in Sydney. Nor can I state that it works at all.

#### YOUR HELP IN A STUDY

To this end, we return to the subtitle of this piece. "A Modest Proposal for Finding the Truth About Red Skies".

What I would like people to do is to keep an eye on the sky and the weather. I do not expect people to get up at dawn day after day to check the colour of the sky (if you want to, please do, but it is not expected). But I would ask those who are up and about at that hour to help. And those viewing sunsets could help too. What is needed is a series of observations from different parts of the country taken over specific periods.

We need to know the colour of the sky at sunrise and sunset and the ensuing weather. Rain of itself is not bad weather for farmers or sailors but a combination of rain and wind can cause difficulties for ships and shepherds. It is that combination, or just high winds which is the weather we are looking for.

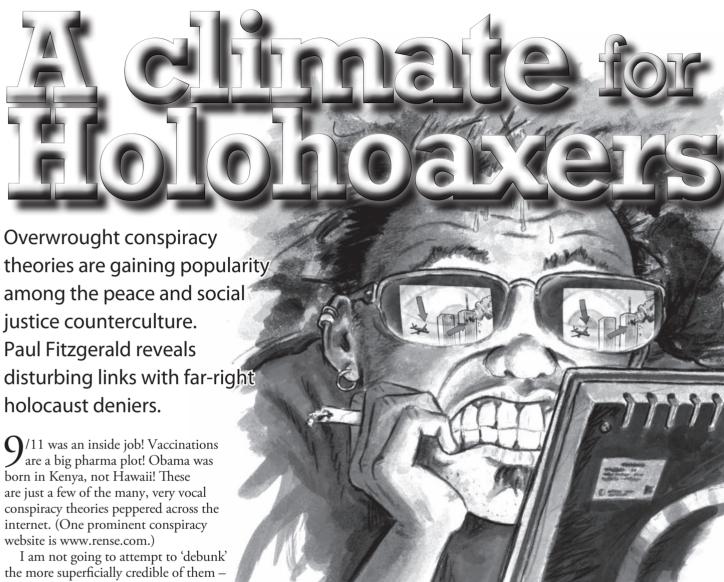
If you are willing to take part, the information I need is:

- Location
- Do you have a good view of the horizon to the east or west or both. If not good, is it "reasonable"?
- Date
- Time of day (sunrise/sunset)
- Sky colour red: yes/no
- Weather in the next 12 hours. Storms, high winds, wind/rain combination, otherwise "not significant"

If you could keep your records for two fortnights during the year, say one in August and one in February I would collate the data and see what we come up with. I may need more data but that would be a good preliminary set and should not be too onerous on those taking part. If you would like to take part, please email me at redskystudy@outlook.com and we'll go from there.



About the author: **Steve Symonds** is a retired meteorologist who has written previously for The Skeptic on weather myths and 'chemtrails'.



I am not going to attempt to 'debunk' the more superficially credible of them — that's a lengthy, point-by-point process, and there's already a wealth of websites robustly dismantling each claim.

Nor am I claiming that no conspiracies exist. A conspiracy theory suggesting Abu Ghraib was the site of systematic prisoner abuse by the US military would have been completely true. The only distinguishing factor between a real and false claim is the quality of the evidence.

Conspiracy theories are usually hallmarked by their reliance on ambiguous, hotly disputed 'facts', their use of vague and blurry 'anomalies' that allegedly reveal the shocking truth, and, usually, the lack of a coherent, logical, internal narrative. They focus exclusively on those facts that appear to support the claim, and studiously ignore large quantities of well-substantiated and expert contrary evidence. They thrive in

areas of factual ambiguity, and derive their strength from a feeble appeal to our 'it just might be true' suspicions.

What concerns me are the political implications of this 'counterculture within the counterculture'. The 'anything goes, regardless of the quality of the proof' attitude represents a dangerous growth in the politics of paranoia, irrationality and despair, threatening to damage the credibility of all those whose political dissent is founded upon hard fact. The opponents of social change love nothing better than when radical campaigners get their facts wrong, and end up voluntarily handing over a stick with which they can then be beaten in public. This is

the reason why mainstream campaign groups invest so much time and effort in checking their facts before going 'on the attack'.

Conspiracy theories fly in the face of this basic principle, and actively promote and defend the adoption of dogmatic, politically explosive theories on the basis of spurious, soundly refuted or scientifically unsound anecdotal evidence. (For example, "the twin towers fell at freefall speed, which is only possible via a controlled demolition". They didn't, as a simple calculation and stopwatch timing of any footage of the event will reveal. Debris ejected from either side of the towers as they collapsed



did fall at free-fall speed, but not the towers themselves.) Those who then attempt to refute these claims are dismissed as being narrow-minded or, in a spectacular example of circular reasoning, being somehow part of the conspiracy.

## THREATENING THE CREDIBILITY OF DISSENT

This is lazy and self-fulfilling reasoning. When asked why the scientific community (which alerted the public to ozone depletion, the link between smoking and cancer, climate change etc) would simply ignore the alleged evidence for these astonishing claims,

**"** Opponents of social

change love nothing

radical campaigners

get their facts wrong."

better than when

conspiracy advocates immediately accuse them all of collective ethical cowardice, conformist narrowmindedness, and a craven self-abasement to corporate or political power.

The pernicious effect of corporate or political influence on scientific research and priorities isn't in dispute here – but the arrogant, blanket slandering of an entire community is. Scientists simply don't behave like that.

Because conspiracy theorists often occupy such similar ideological territory to mainstream campaigners, they can act as an enormous threat to the credibility of those in political dissent from the mainstream: "Look at the crazy anti-war, anti-GM, anti-consumerist tree-huggers – they think George Bush is a lizard, that there's a secret plot to spray mind-control chemicals out of the back of jet engines, and that HIV was created in a CIA lab to kill Africans! Why should we take anything they say seriously?"

David Icke, a former UK soccer player, TV personality and then Green Party spokesperson, is the man who

**Right and following page:** Posters by arch conspiracist and designer David Dees cover almost every topic and are widely used. Funny or furious? Or a sign of the thinking of extreme conspiracy?

created the bizarre alien lizards theory described above. When he began 'preaching' his theories on national TV, he resigned his Green Party position. Nevertheless, the Green Party still saw its membership levels plummet, a result, according to executive member Gayle O'Donovan, of the association with Icke and his widely ridiculed ideas. Icke continues to mix his lizard conspiracy/new age claims with green and social justice rhetoric that would appeal to green-leaning but not necessarily conspiracy-leaning people.

The Bush family, Queen Elizabeth and Prince Charles, Tony Blair, Kris Kristofferson and American country

singer Boxcar Willie are all members of an elite of Illuminati – shape-shifting, multi-dimensional, blood-drinking alien reptiles, who have been controlling humanity for centuries.

If this was just an amusing internet freakshow, perhaps it could be ignored. And of course, it's worth remembering that the internet has a strange 'amplifying' effect on the wildest of religious, supernatural or political ideas. But

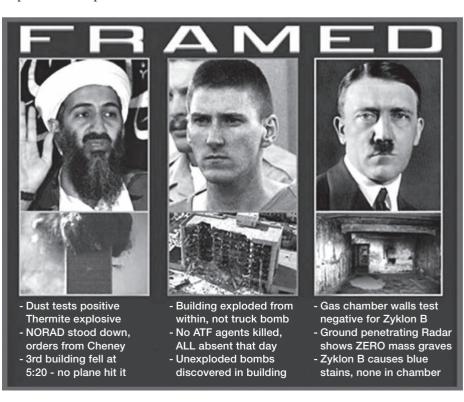
activists, or potential ones at least, are being diverted into protesting against imaginary, fictional injustices. A spectacular amount of time has been absorbed by the claim that 9/11 was an inside job, representing a resource that could have confronted real issues like the arms trade or sweatshop labour. There's no surplus of campaigners out there – what a tragedy that an under-resourced movement is being sidetracked in this way.

Even more seriously, factions of the anti 'New World Order' conspiracy movement frequently claim that climate change is fraudulent, and is actually part of a sinister global plot to introduce a dictatorial world government. This represents an attack from within, from a growing minority whose other political passions we might easily identify with.

#### HOLOHOAXERS AND THE FAR RIGHT

Darkest of all, there's a branch of the New World Order conspiracy movement that seamlessly slides from hinting about how disproportionate an influence Jewish people have within this alleged global cabal to the promotion of blatant holocaust denial propaganda.

This is often done behind a



### A Climate for **Holohoaxers**

Continued...

smokescreen of legitimate anger about Israel and Palestine, or via the squeamish plea that "truth does not fear investigation". The anti-holocaust denial laws of many countries are also cited as proof that 'Holohoax' activists are in fact martyrs to the unbiased

Perhaps holocaust denial should be ignored with contempt. But here we come to the central problem with conspiracy theories. By encouraging people to accept claims based on very low standards of proof, and to view all critical appraisals of the evidence as narrow-mindedness or, in the paranoid mode, as being part of the conspiracy itself, they open the mental floodgates to believing any claim, no matter how vile it is.

Is this a factor that the far right is looking to use to its advantage? It's no secret that neo-Nazi groups constantly reinvent themselves to try to gain respectability and attract new support, and that they've correctly identified the Holocaust as a major block to their unfettered rise. Are they now choosing yet another entry point for their ideas? Have they identified gullible 'radical' activists who believe in multiple conspiracies as being ripe recruits for believing in the

**Creationists** use

patterns of reasoning

and debatting tactics as

conspiracy theorists."

almost identical

Holohoax?

There are striking similarities in the structure of the Holohoax claim and other conspiracy theories a disproportionate

focus on the alleged anomalies in the mainstream account, paranoid suggestions of a gigantic cover-up perpetrated by a secret cabal, and a consistent refusal to acknowledge or refute contrary evidence. Is the conspiracy theory mindset the ideal template upon which such neo-Nazi ideas can easily be printed?

It's worth noting that the creationist movement, so beloved of the American right wing, uses almost identical patterns of reasoning and debating tactics to many within the conspiracy theory movement. It cites no hardnosed, peer reviewed scientific evidence, but cherry picks alleged inconsistencies in the mainstream account articulated by evolutionary biologists, and attempts to blow these inconsistencies out of all proportion.

It habitually ignores and refuses to engage with the refutations offered in response, and as a last (or sometimes first) resort claims that all those who disagree with their point of view have

a hidden motivation, are in denial, or are deliberately conspiring to suppress the truth in order to promote atheistic materialism. This is crying wolf. To suggest that everyone in the opposing

camp has contempt for the truth, low standards of honesty, or is somehow an intellectual, political or moral coward is a huge sweeping assumption to make, and smacks of clutching-at-straws desperation.

If the only way a conspiracy theory can hold itself together is by suggesting that everyone who debunks it is



somehow part of the conspiracy, is that not papering over the cracks in the theory? I've yet to hear from any given conspiracy theory a coherent explanation as to why 95 per cent of the scientific experts in the relevant field, who know what they're talking about, don't agree that anything is amiss with the mainstream account, other than the peevish, insulting implication that they're all somehow blind to the truth or 'in on it'. What arrogance!

More disturbingly, climate change deniers often use the same tactic, and imply corruption on the part of the pro man-made climate change consensus as the motivating factor, hinting that there's now a funds-rich 'gravy train/



trough' available to bribe scientists into agreement. Coming from the anti green, pro-unrestricted economic growth, neoliberal free market right, such a tactic isn't that surprising. But when it comes from a camp that considers itself pro-democracy, profreedom, anti-establishment and anti-tyranny, it's somehow quite shocking.

If, as a political movement composed of those who wish to see a fairer world, we refuse to insist on high standards of evidence, evidence that can survive skeptical scrutiny, as the basis for what we choose to believe or not believe, are we inadvertently responsible for the growth of these conspiracy theories?

And if such slack thinking becomes more and more prevalent, what will stop it sliding in the direction of holocaust denial, as it appears to be doing already.

#### **EMOTIONAL APPEAL**

What might be driving this rise in political irrationality? Is it a symptom of something else?

After decades of campaigning, CO2 levels continue to rise. After the debacle of the 2000 US presidential elections, the blatant ignoring of the majority opposition to the invasion of Iraq, the continuing and very visible consolidation of corporate power and

the subsequent dilution of democracy, it's understandable that people are choosing to express their despair by constructing what are perhaps metaphors for our lack of political control. What better way to vent your contempt for the system than by loudly accusing it of having orchestrated the 9/11 attacks and butchering its own citizens? This has a deep emotional appeal, regardless of whether or not the facts hold water.

Airplane contrails in the sky are in fact secret 'chemtrail' tests, spraying mind control (or population reduction) drugs into the atmosphere, or conducting illicit geoengineering

#### A CONSPIRACY SKEPTICISM TOOLKIT

ost conspiracy theories are superficially convincing, and at first glance resemble scientific or journalistic observation. Here are some 'watermarks' that can help distinguish between what's a valid claim and what isn't.

#### **Responding to critics**

The majority of internet conspiracy theories have mirror 'debunking' sites. Do the conspiracy theorists actually engage with their critics, and respond to counter-claims and critiques?

# Does the conspiracy claim to be based on scientific evidence?

Is it peer-reviewed and published in an accredited journal? Many conspiracy theorists are woefully ignorant of the formal scientific process.

#### **Professor who?**

Most conspiracies will boast several scientists supporting their case – even the holocaust denial ones. But are they experts in the relevant field? A microbiologist's opinion about the structural engineering of the twin towers means very little. Science works through expert consensus, developed via a long process of sceptical scrutiny. Accepting the word of just a few 'lone wolf' scientists implies those individuals are infallible and unbiased

 simply because they're scientists – which is an absurd assumption.

#### Count the cover-ups

All conspiracy theories imply a large-scale refusal of those in the know to blow the whistle. It's worth calculating roughly how many people would have been involved, and asking how likely is it that all of them could be kept silent – particularly after the 'story' has been broken, and in the era of Wikileaks.

#### Where are all the dead bodies?

An agency willing to 'fake' 9/11 wouldn't hesitate to assassinate anyone who got remotely near the truth. Why are the initial breakers of the conspiracy story still alive, and minor celebrities?

#### Is it worth the risk?

Democratic governments murdering thousands of their own citizens will be extremely anxious to get away with it. If 9/11 was revealed to be an 'inside job', it would inflict massive and permanent damage on the US political system, and sweep the neocons out of power forever. Would a sinister all-powerful cabal leave behind an incompetent trail of screamingly obvious tell-tale signs?

#### Watch for circular reasoning

If someone states that the facts needed to verify their claim are being kept hidden by the government, and so therefore the absence of these facts is actually proof of a conspiracy – run away!

#### Are they evoking past coverups as proof of a new cover-up?

Citing previous instances is a logical fallacy. They simply prove how difficult it is to conceal real political scandals like Watergate, or the testing of nuclear fallout on US army troops.

#### **Falsifiability**

Is the theory constructed in such a way that it can actually be demonstrated to be false? Do its advocates state what kind of evidence would actually make them change their minds?

#### Why the silence?

Other than 'they're all in on it/they're too narrow-minded', what explanation is offered as to why the majority of experts don't support the conspiracy? For example, if contrails are so easily proved to be 'chemtrails', why would groups like Friends of the Earth or Greenpeace not speak out?



## **≗Logical Place**

# The David and Goliath Fallacy

The biblical parable of David and Goliath is taught to many children throughout the Western world and the Middle East. Goliath was a huge armoured and weapon-carrying champion, who was defeated by a small shepherd boy using only a slingshot and stone. This parable is often cited to show how an underdog with 'right on his side' can defeat a much more powerful opponent.

In some cases, this parable is extended into a logical fallacy that attempts to paint large and powerful organisations as bad or wrong simply because they are large and powerful. For example, our unskeptical opponents often disparagingly refer to "Big Pharma", implying that the pharmaceutical industry is bad, at least in part, because it is big. Never mind that, in terms of retail sales dollars, the placebo industry (or so-called alternative medicine) is of a similar order of magnitude these days. Similar disparagements are made against medical science, the medical profession and even government agencies on the grounds of their size and influence.

The David and Goliath Fallacy takes roughly the following form:

**Premise 1:** There is a conflict between two organisations D and G.

**Premise 2:** G is much larger and more powerful than D.

**Conclusion:** Therefore, G is bad and/or wrong compared to D.

Like all logical fallacies, this argument is invalid because the conclusion does not necessarily follow from the premises. Small organisations can be bad and/or wrong; and large organisations can be good and/or right.

One of the consequences of this fallacy is that claiming underdog status against a more powerful 'Goliath' can give moral licence to poor behaviour during conflicts, to create a 'more even contest'. For example, small organisations like the AVN frequently make false or unsubstantiated claims, with the lame excuse that they do not have the resources to back up their claims with evidence.

- by Tim Harding

# A Climate for Holohoaxers

Continued...

climate change mitigation strategies, or providing a transmission medium for the alleged HAARP earthquake-inducing superweapon program. (HAARP, the High Frequency Active Auroral Research Program, is a genuine ionospheric research tool in Alaska, funded by the military for its weapons detection potential.)

A conspiracy-based worldview can be very comforting in a complex and chaotic world. Many of us struggle to come to terms with the disillusioning realisation that the callous and apparently self-destructive tendencies of our species do in fact indicate that people are a maddening and heartbreaking mixture of selfish and altruistic behaviour.

Believing that a sinister, ultrapowerful cabal is to blame for it all opens up the possibility that human nature is in fact an innately benevolent thing, capable of flourishing into utopia overnight. If only we could prove that the establishment was involved in a malignant conspiracy of such intense moral repugnance that everyone would find it utterly repulsive, then the status quo would fall immediately, leading to real, profound and rapid social change. Hence the popularity of the 'waking up the brainwashed masses' theme within conspiracy thinking: 'sheeple' is the patronising term that's most often used. What a glittering apple, dangling just beyond our reach!

This is deeply appealing for someone whose political optimism is founded upon a simple black and white moral view of the world. It reassures us that shocking, cruel and random tragedies do in fact have an organised plan behind them, and are therefore not outside of our prediction or control. If the price of believing this is to abandon our

scepticism and logical thinking, does that, for some people, make it a price worth paying?

Finally, conspiracy theory activism has psychological rewards for the advocate. It offers an easy and egotistical route to a heroic self-image, without actually having to do anything in the way of risky protest or original, painstaking research. After all, if you do become convinced that 9/11 was an inside job, what obligations does that knowledge place upon you, other than to try to create more 'truthers', and post yet more videos on YouTube?

Perhaps it would be an ironic touch of paranoia on our part to take the conspiracy movement too seriously. But if we refuse to be vigilant about the erosion of logic and reason, are we ignoring what might be the start of a disturbing slide into a grotesque and damaging era of naive political irrationality?

Note: Article reprinted courtesy of New Internationalist magazine, www. newint.org

About the author:
As Polyp, **Paul Fitzgerald**has been a full-time
cartoonist since the
1990s. http://www.polyp.
org.uk/

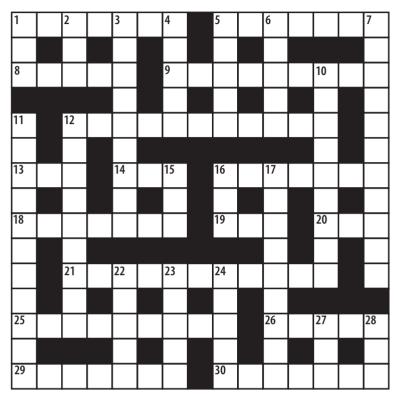






#### **Brain testers**

#### **CRYPTIC CROSSWORD no 18**



Tim Mendham + Steve Roberts

#### **DR BOB'S QUIZ**

- **1.** Samuel Beckett and the wrestler Andre the Giant were friends. Yes really! What did they talk about most?
- **2.** What was the British weather like on Saturday, 24 August 1867?
- **3.** King Mithridates VI (120-63 BC) had the brilliant idea of ingesting small doses of every known poison, to build up immunity. Why did he come to regret doing this?
- **4.** How do you catch a Kakapo (NZ bird)?
- **5.** Amazon can delete books from all Kindles, without asking permission from the people who paid for the books and thought they were the owners. In 2009 whose books were so removed?

#### Answers on page 62

#### **ACROSS**

- 1. Diviners crossed swords around the east. (7)
- **5.** Bob's more properly a divine investigator. (7)
- **8.** Close to being a fight. (5)
- **9.** When sick, we charge a second set of misperceptions. (9)
- **12.** Accused of being profound! What a bomber! (5,6)
- **13.** Stewart used to find water. (3)
- **14.** A long time. (3)
- **16.** Use of deception is not inconsiderable. (7)
- **18.** High praises come in a strange fashion. (7)
- **19.** I'll be dry in a second. (3)
- **20.** Ball or boron? (3)
- **21.** Is a Stoic's son found on a wall of goodies? (11)
- **25.** Amusing or somewhat stupid? (9)
- **26.** Divine investigator caught a short railway in ancient times. (5)
- **29.** Pricey knight who would help pleading orphans and beggars? (4,3)
- **30.** Ingeniously simple solution to a gentle mixture. (7)

#### **DOWN**

- 1. And not the stuff of life. (1-1-1)
- **2.** The West loves the irrational. (3)
- **3.** How malt copes with ghostly sputum. (9)
- **4.** Divine investigator hammers it out. (5)
- **5.** Vomit in a floral philtre. (5)
- **6.** Lower than a starting point, right? (5)
- **7.** Can't suspect bile of being gullible. (11)
- **10.** 144 plus excessive vulgarity. (4,5)
- **11.** Diviner's tool for closing of dock strike. (6,5)
- **12.** Reduce the charge against clear thinking. (9)
- **15.** A longer time. (3)
- **16.** Little sister and I joined the seconds. (3)
- **17.** Former partner mangles seal cub ... but it's OK. (9)
- **22.** Unpleasant giants involved in smog research. (5)
- **23.** Shellfish found in the Gold Sea of France. (5)
- **24.** Just a sample of preference. (5)
- **27.** Group where young people can stay and make hay. (1-1-1)
- **28.** Young Newt is a money-mover. (3)

A spooky mystery from six years ago has come back to haunt us. Ian Bryce and Richard Saunders report on the here and now of the House of Miracles, with similar results ... nothing.



arly in 2007, stories on a so-∡called 'House of Miracles' ran in newspapers and commercial television. The story related to a family in Guildford, in Sydney's west, who claimed their son, Michael, who had been killed in a car accident not far from their house, had become a "messenger from God". Some mysterious phenomena had been occurring in the house, they said oil began seeping through Michael's bedroom walls, and ash appeared on the floor. The case has held its fascination, especially for the masses of the faithful who visit the house most days. Skeptics chief investigator Ian Bryce and the current president of the

Skeptics Richard Saunders were called upon to add their skeptical expertise and point of view. In this article, Ian reprises the past and Richard recounts the latest incarnation of the media's interest in the House of Miracles.

#### THE STORY THEN ...

When I visited the House of Miracles in 2007, at the request of Channel Nine's *A Current Affair* program, I found hundreds of visitors queued up on the footpath. Family members and friends were showing the guests through the house – some of the visitors were on crutches and in wheelchairs, hoping for a miracle.

The Tannous family are Marionite

Christians. Their house is decorated, inside and out, with religious icons (paintings, statues, photographs). A diorama of the nativity was set up outside. Local Catholic priest, Father Michael Melhin, speaks strongly in favour of miracles. Nightly religious services were being held at an improvised chapel in the back yard.

Signs explain that their 17-year-old-son, Michael Tannous, was killed in a car accident in 2006 – his utility struck a power pole. My enquiries revealed there were two passengers in the accident, the other passenger receiving severe head injuries, requiring a stay in hospital for six weeks.

Michael's parents and the priest



claim the accident was planned and executed by God in order to provide a messenger capable of delivering messages to mankind.

At our visit, Channel Nine could not get in the house, because the family had just given exclusive rights to the competing Channel Seven program, *Today Tonight*.

Nonetheless, I was able to enter the house. I saw some black powder on the hallway floor - it could be anything. The family claimed that when swept up, it reappeared overnight.

In the boy's bedroom, a substance resembling oil was spattered on walls. The letters "MT" and a cross were also written in a similar substance. Spatters also appeared on the study ceiling, with an image that some said resembled the image of Jesus.

The family said the ash and oil first appeared 40 days after the son's death, along with a smell of roses. The oil was still spreading. Buds of cotton wool were being touched to the oil and used to anoint some visitors in the hope of curing diseases. One such visitor has reported being cured of joint pain.

Father Melhin and the parents claim that Michael Tannous had been picked by God from birth for this role. A photo of him at six months of age shows prophetic similarities to Jesus. His schoolbooks were littered with depictions of the afterlife.

The family denied that any financial incentives were involved. "We have not collected any money, no way, we won't accept it," the father, George Tannous, said.

Peter Bowditch from the Skeptics was interviewed by the *Today Tonight* program. He said that, for a miracle to be true, there needed to be evidence to back it up. There are regular religious apparitions and supernatural claims in the Christian world, he said, but none have stood up to real testing and scrutiny. But this does nothing to stem the flow of tourists and the crippled to

**Left:** Oil drips down the internal walls of the house in western Sydney. **Right:** Waiting to get in - the faithful queue for a view of the manifestations.

sites such as Lourdes in France.

Let us examine the scenario put forward by the priest and the parents in this case. The implications are horrendous.

- God, being all powerful, must be capable of sending messages any way he chooses. Why would he arrange for an innocent boy to be raised by his parents, teachers, relatives etc, and then brutally kill him at age 17?
  The claim is that the accident
  - was planned and carried out by God. The driver's actions were overridden. God, in effect, turned the steering wheel towards the

pole. If a man did this, it would carry a charge of dangerous driving.

- Why would God deliberately cause serious head injuries to an innocent third party, putting him in hospital for six weeks? If a man did this, he would be jailed for grievous bodily harm
- The purpose of the whole scenario was to provide a conduit for messages between God and mankind. But in five months, the only communication received has been the boy's initials "MT" (which were already known). This equates to two bytes in five months millions of times slower than the most basic

- modem. God's plan has been a dismal failure. God needs to get broadband!
- The writing on the wall is at a height of 1.4 metres, just the height a person would write on a wall. The thickness of the lines is similar to a finger tip.
- The oil found on walls is claimed to cure arthritis. Why would God place it here where only a few people can benefit? One would think he

would reveal it to a medical research institute, so that many sufferers could receive it. If the claims are true, then the God they worship must be a monster beyond cruelty.

How priests can hold this up as an example of love and caring is difficult to understand.

But oil and ash do not really appear from nowhere. If the apparitions are the work of a prankster, then the tragedy is that the death of a loved one has been desecrated. The memories of the parents have been corrupted by talk of messengers and miracles. What should be a healing process has been hijacked and turned into an ongoing nightmare.

#### ... AND THE STORY NOW

Earlier this year, I was approached by *Today Tonight* to do an interview on the house. They were doing a follow-up



If the apparations are

the work of a prankster,

then the tragedy of the

been descrated.

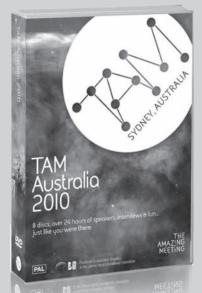
death of a loved one has

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#### House of **Miracles** Resurrected

Continued...

story on the house, six years after their original piece.

As the program reported, "the mysterious incidences at the Tannous' house have created some kind of phenomena. They've had around 200 people a week visit their home. The crowds come to see the oil and receive a cotton bud which has been dipped in the 'miracle oil'. The Tannous family have handed out more than 1.5 million cotton buds to date."

Mr Tannous claims the oil is holy. "No one can touch it. Many times people have seen the oil come alive," he

Today, six years after it first appeared, there isn't a single area of the house that isn't covered with stains from dripping oil. In fact, there is much greater coverage now than occurred initially.

In addition to the oil, the family also claims to have witnessed drawings, significant dates and quotes from scripture since their son's passing.

The oil and other manifestations are still happening today.

In 2007, the oil had been scientifically tested and was found to contain a mix of oil and water. However, the family still say they are unsure of where it is coming from.

Lina Tannous, Michael's mother, said that "Many things have happened here, the oil, the ashes, many people have seen the Virgin Mary, and many miracles have happened ... all the time.

"We saw the Virgin Mary in 2008. She has appeared six nights every night at Easter time. Many miracles happen all the time."

The broadcast segment of the program that dealt with the house included pictures of people crowded around the markings, some loudly ululating.

In 2007, I said to A Current Affair that it was possible that some well-



meaning person was doing this to put the family at ease. "That's very nice, but unfortunately the ramifications of this can be quite serious."

In response to that interview, Brendan Shanahan, a columnist for the *Daily Telegraph* newspaper, heavily criticised what he called the "tragedy of scoffing skeptics", the "god-is-dead botherers". Certainly, he asserted, the Skeptics' own "righteousness … more closely resembles the faithful that the Skeptics criticise."

He admitted that strong belief can have serious negative results, but "Not believing can be just as tragic as believing."

In 2013, I was again asked what I thought of the situation and the motivations of those involved. In my 10 seconds of fame, I said that I think people have a deep need to want and hope that there are indeed miracles. I added that, "Quite frankly, it looks like somebody - and we're not sure who it is - has been running around the house dabbing oil and water on the wall, using cotton buds or their fingers, drawing patterns. They seem to have gone quite overboard with it."

As in 2007, this too elicited strong responses. One person, who wouldn't give his name, phoned Tim Mendham, the editor of this publication and Skeptics' executive officer, to express his opinion, in no uncertain terms. Tim described it as "a lengthy rant replete with short words of an explicit nature".

How dare I imply that the family, or someone close to them, would make the

markings themselves, the person had said. How could I criticise someone's religion, they said, even though I had never made such a comment.

But such is the price we regularly pay for making our skeptical view known on controversial; and often deeply felt situations and claims. We take it in our stride, try to be polite (or at least restrained) and avoid arguing with such people; that's a hiding to nothing.

But back to the *Today Tonight* program this year. When the reporter asked the Tannouses whether they would allow a camera to be put in the house for 24 hours, Lina Tannous initially responded "No", but then added "I don't know, if the church wanted to do it, then yes, do it."

But had the church asked them to do that?

"No, not yet."

We can assume they'd rather not know, or don't need to. Their faith is proof enough for them.

About the authors:

lan Bryce is chief
investigator for Australian
Skeptics, as well as a
physicist and rocket
scientist.



Richard Saunders is president and a life member of Australian Skeptics Inc, and producer of the Skeptic Zone podcast.



#### Clockwise from right:

The queues line up in their hundreds around the suburban house. Chairs set up for a backyard chapel. A shrine and nativity scene at the front of the house.

All photos by Ian Bryce, 2007







Pesky nuisance? Troublesome provocateur? Dangerous stalker? Dr Brooke Magnanti looks at the internet phenomenon of 'trolling' - what it is and what it really is.

# The Secret Life of Trolls

Brooke Magnanti is a research scientist, blogger, and writer, who, until her identity was revealed in November 2009, was known by the pen name Belle de Jour. While completing her doctoral studies in genetic manipulation, she supplemented her income by working as a London call girl. Her diary, published as the anonymous blog Belle de Jour: Diary of a London Call Girl, became increasingly popular, as speculation surrounded the identity of Belle de Jour, and whether the diary was real. Remaining anonymous, she went on to have her experiences published as The Intimate Adventures of a London Call Girl in 2005 and The Further Adventures of a London Call Girl in 2006. Her first two books were UK top 10 best-sellers. In 2007, Belle's blogs and books were adapted into a television program, Secret Diary of a Call Girl. In November 2009, reportedly fearing her real identity was about to come out, Magnanti revealed her real name and occupation as a child health scientist.

The following is an edited transcript of a talk Dr Magnanti gave to a meeting of Australian Skeptics in Sydney in May 2013

The internet Troll, as we all know, is a 19-year-old boy who lives in his mum's basement and who has never seen the outside world because he spends all of his time on the internet. Trolls say provocative things to get attention, they insult other people online, they can also be threatening, intimidating and harassing. They are

also very often anonymous and send messages that are sometimes way over the top.

Sex workers and commentators on sexual topics are regularly victims of trolls.

Laura Lee is an escort – and still is – in Scotland. She's very public about who she is. She was outed by

a newspaper in Oban where she was living at the time, and consequently she received a very great deal of abuse, both online and in real life. Someone put dog shit through her letterbox, and someone else (presumably) told her that, as a single parent and a sex worker, she was an unfit mother and called Social Services.

Similar things have happened to me. Someone walked up to my seven year old daughter and told them "Your mother is going to die of AIDS." I've had emails which suggest that I should be gang-raped or killed.

A US activist Maggie McNeal - she writes the blog *The Honest Courtesan* - *Frank Commentary from a Retired Call Girl* - received a comment that the writer probably didn't expect her to publish. It went "My philosophy is simple – see a whore, exterminate a whore; see a pimp or madam, mutilate it and leave it broken and mewling as a public example of disease control.





Yeh, you won't post this one; it's just for you."

That's the level of really over-the-top threats that can be received if you are someone who talks about sex in the public sphere, and particularly if you're a woman. It can be very easy to read these sorts of things and really take them very personally. I have to say that when I first came out publically in 2009 with my real identity (I'd written anonymously for six years until then), and I started to receive letters and unwanted emails, my first reaction was to be incredibly tense. Oh my god, these people know where I am, they know how to find me, they know how to hurt me and they're coming right now. You start thinking, what am I going to do? And you get into a downward spiral, jumping at shadows, and thinking that these people are coming to get you.

On the internet, such messages and the phenomenon of trolling has allowed this sort of thing to happen on an increasing scale - it is a very common thing.

The wonderful thing about the internet is that people all over the world can talk to each other in a way they couldn't before; the terrible thing about the internet is that people all over the world can talk to each other in a way they couldn't before.

And that includes trolling. So there are a few troll truths that I want to address.

#### Troll Truth #1

We have this idea that the troll is an anonymous provocateur leaving messages in the comment box, sending emails and trying to get a rise out of people.

Actually, trolling doesn't just happen below the line, it doesn't just happen in the comment box, it doesn't just happen to people with a few followers on Twitter, seeking out other people and making threats against

them.

Trolls can be older people, younger people, they could be professionals, they could be academics, they could be people whom you never expected. They can also often be people whom you know or know only slightly, "someone who knows someone".

Tania Gold is a radical feminist, and she is also a columnist for *The Guardian* and *The Daily Mail* in the UK. When my book, *The Sex Myths*,

**Left:** Dr Brooke Magnanti demostrates troll deflection to Sydney Skeptics

came out, she was the obvious person to review it.

She herself is an admitted ex-drug addict, so she likes to write a lot about addiction. She wrote in her review that I am obviously a sex addict.

Now, anyone who has read the book would know I actually spent a lot space debunking the idea of sex addiction as a pathology on its own.

The reason why this qualifies as trolling is that she knew she was making a very grave insult if I was someone who believed in sex addiction, that the first thing someone would do would be to say "Oh my god, I'm not an addict, I don't have this mental illness that you are accusing me of." But of course, as the ultimate provocateur, she knew that I wouldn't respond, she knew that I couldn't respond because how can you genuinely make a complaint about somebody who accuses you of something that you don't think exists. It's just as ridiculous as if she had said "I think you're a giant purple monster."

#### Troll Truth #2

Anonymity is not actually a prerequisite of trolling. There are many who are, but there are also a lot of trolls who aren't anonymous.

Mark Simpson is a UK journalist, he coined the term "metrosexual" and he writes a lot about sexuality issues, particularly LGBT issues. A few years ago an anonymous online troll started tweeting at Simpson about 300 times a day. She did this for months. Obviously he

blocked her, but she continued. She then found people who had some kind of real-life relationship with him – people he had worked with or written about or who she felt she could get to him through, and she started tweeting at them. She maintained a list

#### The Secret life of Trolls

Continued...

called "101 wankers" which was people who had blocked her on Twitter. In fact, there were so many people who blocked her that she started making phone calls to people's workplaces to try to complain about their online behaviour.

She was anonymous for quite a long time, and everyone was wondering who she was, but it's always dodgy ground. Being outed from a position of anonymity is very difficult because you realise that someone might have very good reasons for choosing anonymity.

But this person entered a writing competition organised by one of Simpson's friends and he recognised her. Her entry was turned back, as they explained they didn't allow anonymous submissions to this competition. So she sent him her real name which he then published on Facebook and his blog. As I understand it, she is actually now on bail for online harassment against Mark Simpson.

The funny thing was, though, after

her name came out, you might have thought that that's it. Now everyone knows who she is - it turned out she was a feminist with a PhD in gender studies who works

in academia – you might have thought that publicising her name might make her back off. It actually didn't. It actually made it worse.

"Knowing who your trolls are doesn't necessarily get rid of them. But silencing them definitely doesn't work."

Which goes to show the troll truth that anonymity can be a useful tool for a lot of people; not everyone is using anonymity to abuse. And outing someone in an effort to embarrass them and to get them to stop trolling actually often emboldens people to do more trolling.

#### Troll Truth #3

We are all someone else's troll. Nobody is just a passive sponge for criticism, doing no wrong.

In a room full of Skeptics, you need to think about the extent to which we engage people using what we think is measured and reasonable criticism of some deeply held ideas that they might have. Those people are probably perceiving such criticism as trolling.

Think about the kind of rhetoric you might use in a Skeptics meeting. We're

all coming from a very sympathetic background to particular issues which means we use a certain shorthand among ourselves when talking about them. And then we go out into

the general public with these views. Our activities and comments there can sometimes seem pretty aggressive and provocative and very much like trolling.

#### Troll Truth #4

Sunshine is the best disinfectant

Knowing who your trolls are doesn't necessarily get rid of them. But silencing them definitely doesn't work. And in fact it's a really valuable thing to take these provocative ideas that people have and these sometimes really horrible and abusive things that people say, and let them be out there in the public domain, let people hear about it and let people judge for themselves.

There's any number of conspiracy theories, with believers saying "Why isn't the mainstream addressing this? Why isn't someone investigating this? Why are these people being silenced? We need to know the truth."

Sometimes the way for people to understand just how strange and silly some of these things are is to put the spotlight on them. Tell people to "Go over there and look at that, and is that what you really want to think? Apply some logic." And usually that will have a positive effect.

#### Troll Truth #5

Not all threats are credible. At some point you've got to dial down the panic and sort out which one is someone who is just sitting behind the computer using the most extreme language they can to try to upset me, and which one is someone who is actually going to





turn up at my door.

It can be messages couched in very mild and apparently measured language that might end up being the real threat.

I'd recommend a book called *The Gift of Fear* by Gavin de Becker if you are the sort of person trying to sort out the credible threats from the not-

credible in your life in general. It helps you reconnect with your instincts of being able to tell what is real and what is just bluster.

#### Troll Truth #6

Back to the question of anonymity. Because we keep hearing in the media about anonymous trolls and particularly those on Twitter bothering celebrities, that there is a lot of fear of anonymous trolls. This fear is being hyped up and used

to extend state powers. People want to end anonymity and find out who's behind every piece of communication on the internet.

Is this to stop people getting offended and upset and make the internet a nice and friendly place? Or is it a handy backdoor to try to gain access to everyone's personal information for surveillance reasons?

Teresa May is currently the Home Secretary in the UK and she wants to be able to read every email you've ever sent and every email you've ever received. She'd like to extend the state powers to monitor the traffic of emails coming in to anyone in Britain so that she can make sure that nobody's being abused and no hate crimes are occurring and no-one's doing anything to upset anyone.

Considering she's the head of the Home Office, her views are probably not so benign.

So, back to that original question of what is a troll? Often it's someone who has a different view of an issue than you have. Something they might be equally passionate about. We might share a similar passion and equally passionate about a topic – we both believe we have the evidence on our side, and we both think each other are trolls.

A troll can also be someone who keeps trying to engage with you when

beyond www.keptlecontholdingococuk

reason reason you're trying to tune them out. This is always a problematic thing on the internet because people can be very persistent, and there is a very broad borderline between someone who tries to get at you on Twitter a couple of times to get your attention or sends you an email, and somebody who's tweeting you 300 times a day.

But we have to remember the case

of Mark Simpson and his troll. That started off as someone who worked in gender studies wanting to talk to a prominent writer about gender studies. It actually started with somebody who felt they were an equal trying to engage with someone they felt they weren't equal with.

And very often it can be very ugly. A "troll" can be shorthand for somebody who has fewer followers, who has less of an audience.

So let's not forget that there are a lot of reasons why anonymity and pseudonymity are useful.

It's likely that none of us are government ministers, none of us are newspaper proprietors. Therefore none of us are obliged to give someone else a platform if you're being abused, whether it's in a public square or on social media. It is totally OK to block and ignore the people who are criticising you, and you never have to give any justification for doing that.

#### MAGNANTI ON SEX ADDICTION

Why is sex addiction such a problematic diagnosis? In a large part it's because the diagnostic tools that are used to declare whether or not someone is a sex addict are very blunt tools indeed.

The website for the International Institute for Trauma and Addiction Professionals has a giant button on its home page asking "Am I a sex addict? Diagnose yourself at home right now". It looks very professional and therapeutic.

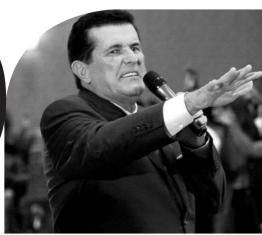
There are hundreds of questions on this questionnaire, and they start with things that actually sound pretty reasonable: Are you preoccupied with sexual thoughts?, for instance. Do you ever believe your desires are stronger than you are? These are the types of things, yes, that does seem to have a basis in some kind of diagnostic reality.

Then it goes into rather dodgier territory: "Were you ever sexually abused? Did your parents have sex problems? Have you been in an abusive relationship? Has anyone been hurt because of your sex life?" (ie, have you ever had a sexual relationship). "Do you hide sexual activity from others? Have you purchased sexual material online, including online dating?" And, of course, my personal preference, "Have you been a sex worker?"

Diagnosing someone with sex addiction because they've been a sex worker is like accusing TV chef Heston Blumenthal of having an eating disorder.



# Popffup Popsup



You can't keep a good – or a bad – televangelist down. Max Lowe is on the receiving end of Peter Popoff's latest promotion.

" If god had really told

would know I'm only 14

him all about me, then he

and don't have any debt.";

y name is Max Lowe and I am a 14-year-old boy. A few months ago I learnt about a televangelist and faith healer called Peter Popoff.

Popoff rose to fame in the 1980s where he astounded huge crowds with his so called, amazing supernatural skills. According to Wikipedia: "During his appearances at church conventions in the 1980s, Popoff routinely and accurately stated the home addresses and specific illnesses of his audience members; a feat many believed was due to divine revelation and 'God given ability'. In 1986, when members of CSICOP reported that Popoff was using a radio to receive messages, he denied it and

said the messages came from God. At the time of his popularity, sceptic groups across the United States printed and handed out pamphlets

explaining how Popoff's feats could be done. Popoff would tell his audience that the pamphlets were 'tools of the devil'." It seemed like a miracle but was god really talking to this man? Apparently not.

In 1986 skeptic and former magician, James Randi and his assistant Steve Shaw came to one of Popoff's shows bringing along a computerised scanner. They were able to pick up radio transmissions of Peter Popoff's wife, Elisabeth, reading out prayer cards that the audience members had filled out before the show. Peter would listen to the promptings through an earpiece and repeat what he had heard to the crowd. 16 months after the scam was uncovered Popoff filed for bankruptcy. You can see footage of his scam being uncovered on you tube.

But that wasn't the last of Popoff. In 1998 Peter Popoff made a comeback. This time he was promoting his new "miracle spring water" that was said to eliminate debt and cure your illnesses. Popoff now has his own TV show

where he advertises his miracle spring water and cures people's illnesses using his same old faith healing techniques that look impressive but even I can perform

them. I have watched his program [His infomercials have also been run on Australian TV - Ed] and in one episode I witnessed Popoff encouraging people with serious illnesses such as HIV and cancer to throw their medication onto the stage as a so called "retaliation to the devil".

After watching, I decided to explore this further. I went to his online

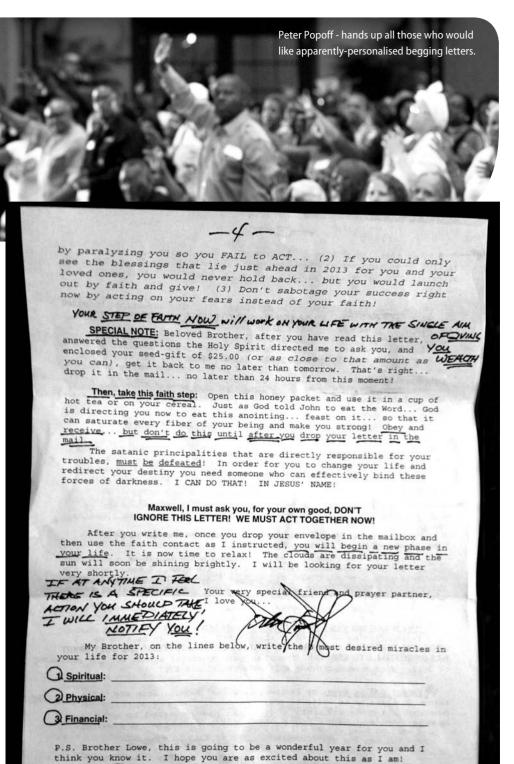
website, PeterPopoff.com, and filled in an application form to be sent some of his miracle spring water, giving him my name, email and postal address. The water is free, with all expenses paid by him, including shipping, etc.

A few weeks later I got a bulky letter from America containing a five page letter, an envelope with the words "Do not open" written on it, and an empty envelope with the address of Peter Popoff ministries written on it. So what do I do?

I read the letter he had sent me. It contained rather poor attempts at personalisation that included little notes in pen apparently written by Peter Popoff but when you took a closer look you can see that the writing has been printed with the page. The letter was written by Popoff and said that he knows I've been going through a hard time of debt right now and god has told him all about me. If god had really told him about me, then he would know that I'm only 14 and don't have any debt. It also contained instructions on what to do. He said that the envelope with the words "Do not open" written on the front contained 'anointed oil'. What I was supposed to do from there was to fill out a prayer card that he had also sent and then "sow a seed" of \$12. This is apparently to show that I am committed to god. I am instructed to then put the envelope with the oil on my cheque-book over night, then the next day send the money and the oil back to him where he would pray over it and my debt would be cancelled.

Out of curiosity, I opened the





I WANT TO THE THERE FOR YOU WHEN YOU NEED ME ..

envelope containing the anointed oil (remember you were not supposed to open it ). It turns out that inside the envelope is an eraser of some sort with a picture of a woman pouring oil on it.

5599103B

Ok, so it wasn't so free after all, since if I wanted to activate debt cancellation

I needed to sow a seed of twelve dollars. But twelve dollars isn't so much considering that it must have cost him a few dollars for the whole package. In the end, I did nothing.

Then, out of the blue a week later, I got a second letter from Popoff. This

time it said that god has been talking to him about me and that my debt is about to be cancelled. He said that to help me with this he has sent a small flask of 'miracle spring water'. I am to sow another seed of \$25 please and then sprinkle the miracle spring water on the cheque and send it to him. So more money I needed to send now.

I thought that was it and once again did nothing, but a few days later, I got yet another letter. This one contained just a small flask of miracle spring water, and nothing else.

About four days later I received my fourth letter. In this he said that my "time is almost about to come and he has sent a special clock". This clock seemed to be a simple piece of card with some stickers of small clocks on it. Apparently I'm supposed to peel off one of the little clocks and place it on a prayer request when I need god to help. But, it comes as no surprise that to activate this I now need to sow a seed of at least \$17. The implication from his letters was that for bigger rewards and debts cancelled that you need to sow bigger seeds.

So, to date he had asked for a minimum donation of about \$54 and that's only if I send the bare minimum in the last letter. You must consider that some people might send thousands if they fall for his trick.

Okay, I thought that must be it. But no, yesterday I received another letter. Popoff claimed that in the middle of the night he had "awoken shivering and sweating". My name kept "appearing in his thoughts". He said that he feels I'm close to attaining debt cancellation. He also sends me something that he called 'blessed honey'. I am instructed to eat the honey and then send him \$25 to activate the power. I'm sure I'll get another letter in the next few days.

But would people really believe that Popoff via his miracle spring water and oil and honey can actually cancel debt? A Dateline news report stated that according to tax returns his ministry made \$23 million in 2005. He lives in a home worth \$2.1 million dollars and drives a \$100,000 sports car. So the answer is yes.

#### **Popoff Pops Up**

Continued...

I am concerned that someone who has a history of tricking gullible individuals in the past for his own gain is still out there making a fortune by promising 'miracles'. He is still targeting people who are vulnerable (in debt and sick), asking for money and using what looks like magic tricks (miracle oil, etc) to seem convincing. He is persistent and persuasive.

Editor's note: Sending honey through the post may have quarantine issues, depending on if it is commercially prepared and packed. The Australian Quarantine Service (AQS) says: "Point 2. Personal consignments of commercially prepared, processed and packaged honey and honey products are subject to inspection of packaging only. If not



the consignment
must be re-exported
or destroyed." http://
tinyurl.com/bkewott
Therefore, if Popoff has
'blessed' the honey in
the pack, it might fit
within the regulations.
But if it is his own
special "Popoff's
Personally Packed
Blessed Honey", then
it may be a matter for
the AQS.

commercially prepared and packaged, or if described as unfiltered or unprocessed then the honey products must be inspected to verify freedom from contamination with bees, parasites, and plant material. Where consignments do not comply with [this] point, the conditions under the Commercial section apply. Alternatively,

About the author:

Max Lowe is 14-year-old schoolboy currently living in Darwin. A fan of illusions and tricks of the mind, he "recently learnt how to bend spoons, Uri Geller style".





### The Psychology of Conspiracies

Conspiratorial thinking is a major element in the rejection of a broad range of scientific findings, from climate change to tobacco, vaccinations, GM foods and the cause of AIDS. New research reveals why in the June 2013 edition of **Australasian Science**.

Australasian Science provides a local perspective on scientific developments. Each month scientists and science journalists from Australia and New Zealand write about the latest research from our shores and offer independent analysis of topical scientific issues.

Along with regular columns from skeptic Peter Bowditch and Friends of Science in Medicine, the June 2013 edition of **Australasian Science** includes feature articles about 3D printing of organs, the imminent development of an artificial pancreas and how anaesthesia also blocks circadian rhythms.

Australasian Science is available in newsagents and online at australasianscience.com.au

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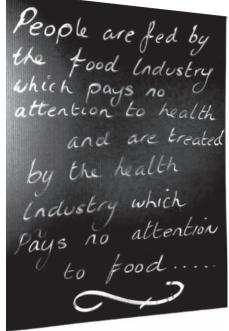
## Atraveller's tale

#### Marcos Benhamu finds some disturbing goods on the road

There is nothing extraordinary about the Caltex service stop at Wyong along the F3 Freeway between Sydney and Newcastle. It is mostly unremarkable, offering the usual amenities: gasoline, a convenience store, a Macca's and a local diner that serves oversized Panini sandwiches, crusty doughnuts and burnt-milk espresso drinks. The exception here is Oliver's, a purveyor of "organic" food - "Real food," as its slogan suggests.

The "organic" label has always taken my interest. When I took organic chemistry in high school, circa 1994, I learned that organic compounds contain carbon. Wikipedia also defines as organic all things physiological relating to dead or living organisms. By such standards, a Macca's burger is as organic as Goji fruit or a dog's turd. The first time I entered this establishment was some years ago, driving back to Sydney from Newcastle with my wife. We browsed their menu and the range of goods lining the shelves. It did not disappoint, as we learned that organic water and pink Himalayan salt hold extraordinary health benefits.

But rather than simply selling overpriced, trendy food, Oliver's promotes an alternative medicine ideology, in the form of anti-vaccination and antimedicine documentaries. Consider The Greater Good, an anti-vaccination chronicle telling of the conspiracy between pharmaceutical industries and medical authorities compelling the public to use harmful vaccines; *Doctored*, which reports on the American Medical Association's stance against pseudo-medical practices, resulting in a legal battle brought on by chiropractors known as the Wilk Case; Simply Raw: Reversing Diabetes in Thirty Days, which follows six people at the Tree of Life Rejuvenation Centre in America as they submit to a strict raw-vegetable diet to "reverse" their type II and type I diabetes.



Similarly, there are books on offer. One such example is *From Cancer to Wellness: the Forgotten Secrets*, by Kristine Matheson. On her website, the author pledges to cure cancer through a diet and without chemotherapy, a claim based on her own history of allegedly defeating stage 4 melanoma cancer.

An advertisement for alkaline water purports to provide "more oxygen". I wonder how they successfully attached additional oxygen atoms to the water molecule and still call it water - a mean scientific feat. As my wife Joanne said to me "There is no manner of quackery they won't sell."

This ethos is echoed in their extensive use of social media. Three months ago, they tweeted the following about renowned provider of false hope Dr Stanislaw Burzynski: "Case Dismissed! Texas Ends 15-Year Fight against Cancer Doctor Burzinski. This is great news for cancer sufferers ..." They recently provided a link to the website of 'Chi Tree' urging people to purchase apricot kernels from the site before regulators prevent their sale for human

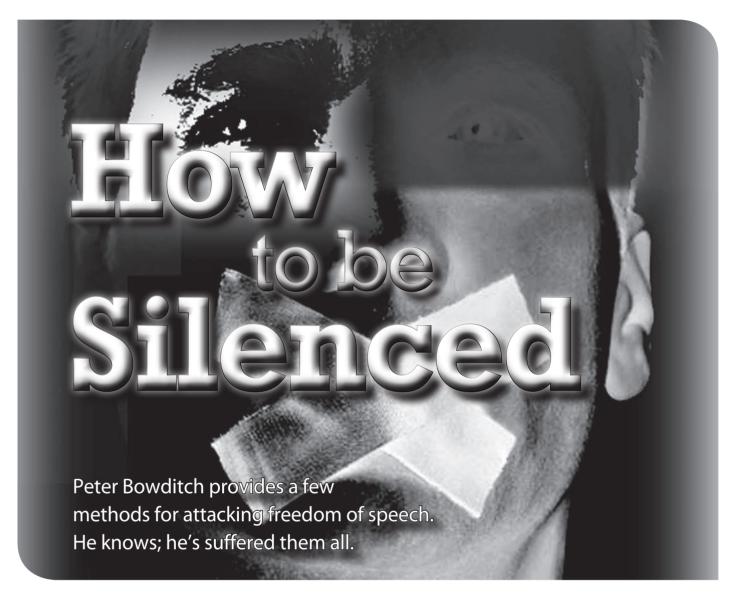
consumption. The site was recently clamped down on by the Food Authority due to the risk of cyanide poisoning from consumption of the kernels, which are touted as a cancer cure.

As a fast food restaurant, Oliver's is the upmarket option. The menu appeals to the health conscious traveller: no chicken schnitzel, burgers or fries. There are curries and sushi for those wishing to escape freeway pit-stop occidental cuisine. The bathrooms are (actually) clean. The PA system emits exotic chill-out music with jazzy undertones, a respite from the FM radio hits blaring in the neighbouring facilities. The local tourism information centre is also located there. There is wi-fi. All of these added benefits place Oliver's in an ideal position to spruik the ideology of the owners to an unsuspecting public.

I stop at this service centre regularly on commute to Newcastle where I attend university, but I rarely visit Oliver's because their food is relatively expensive. I made an exception a couple of days ago as I was collecting information for this article and went in to order a coffee. A regular cappuccino cost me \$4.20, but it was comforting to see that the size of the regular serving did justice to the label. The milk froth gleamed in the morning light and swelled just over the rim of the cup. The drink's texture caressed the palate warmly, attesting to the barista's skill. But the coffee tasted like dirt ... literally. It is difficult to find good coffee along any remote stretch of highway, regardless of how gourmet, upmarket, organic and biodynamic the restaurant might appear. On returning to the F3, I noticed that organic coffee can still give you heartburn.

About the author

**Marcos Benhamu** is a registered psychologist, currently completing his Masters (Clinical Psychology)



ne of the things I have noticed over the years is that crooks and quacks (often indistinguishable) do not reach for scientists or experimenters when asked for evidence of their claims. Instead they reach for lawyers who are employed to silence criticism. The tactics vary, but the objective is always the same - make threats that imply that awful things will happen to people who don't keep quiet. Here are a few that have been tried on me over the years.

COPYRIGHT VIOLATION - This was used by a company who had been found by the Federal Court of Australia to be operating an illegal pyramid scheme and who didn't like me talking about it. They claimed copyright on, among other things: a photograph which had been altered to

imply that they had an entire building as their Australian headquarters when in fact they rented a single floor; material from a web site which they had denied in the Federal Court action had anything to do with them; and an email headed "Death to Ratbags" which they claimed both copyright on and total ignorance of.

#### TRADEMARK VIOLATION OR

**DILUTION** - This was the complaint of a doctor who used a false university degree on her books and her web sites. I didn't bother fighting this because I had already succeeded in getting her to stop lying about her qualifications, but I'm sure I could have won in court if I tried. Think about the ramifications of not being able to mention a trademark in any published criticism or comment

about any company. The idea is absurd, but apparently not as absurd as claiming that, for example, diabetes can be cured. Another person tried to claim that his name was trademarked so I couldn't mention it but as he had published a web site about me claiming that I am a paedophile and a Nazi I didn't really care how offended he was.

#### MALICIOUS DAMAGE TO

BUSINESS - This was the claim by the pyramid scheme operators when they finally went to court. They made three specific claims: the owner of the building where they had their office (the building they suggested they owned in their advertising literature) had instructed the managing agents to terminate their lease and evict them; call centre operators employed by Australia's



two largest telecommunications companies had been instructed to refer callers to my criticism of the company: and, best of all, a Google search for their company name brought up my web site before theirs. This might all sound like a joke but all they had to do was prove that I'd cost them a dollar in business and they would have won the case. As one of their employees had committed perjury when swearing an affidavit in court (he could not claim ignorance he was a qualified lawyer) I'm sure they could have found someone to swear that they had not done business with the company because of what I had said.

#### THREAT OF BANKRUPTCY -

When I was sued in California along with many other people (and some non-people) by the late but not lamented cancer quack Hulda Clark, one of her minions suggested that the purpose of the action was to submit the respondents to about \$100,000 in legal fees each, plus travel and accommodation costs. (The case was withdrawn when the court asked Clark's lawyer to start producing evidence.) A quack in Sydney who had settled an action with the Australian Competition & Consumer Commission lawyered up and tried to stop me reporting the facts. Her lawyers talked about long and expensive litigation but they went away when I told them that their client had issued a media release saying that they had broken no laws and the ACCC were corrupt. (I had notified the ACCC of the press release.) During the course of my case with the pyramid scheme crooks they had a windfall of \$4 million when some funds frozen by a court in another matter were released. Their exact words to my barrister: "We now have unlimited funds to spend on this. Can your client say the same?"

GENERAL NUISANCE AND DISRUPTION - Any legal action, win or lose, is a distraction to real life. At the very minimum you have to respond to credible threats and maybe spend a day or two in court. Hulda Clark's lawyers had no intention of ever going to court but they wanted the respondents to brief lawyers and

be ready to go to court at any time. I finally settled with the pyramid scammers because they wanted to go into discovery mode, which would have meant their taking possession of every computer I own plus my business records and keeping all this for as long as they wanted to.

"ONLY PEOPLE WHO ARE WRONG ARE SUED" - There are still web sites out there that pretend that the Clark case against me is continuing. I know of at least two web sites which refer to a court order made with my full consent on the very first day in court with the pyramid schemers and offer this as evidence that I lost the case. In fact, I lost business over this

To date, that will be

ten months of my life

wasted in a blatant

attempt to stifle my

freedom of speech."

matter because some people simply won't do business with someone who has upset a multinational corporation, no matter how many times that corporation has

been found to be operating outside the law in other countries. Reputation is easy to lose, and often this is the only motivation for initiating legal action. Sue someone, then withdraw after the damage is done.

#### APPREHENDED VIOLENCE

ORDER - The latest tactic used on me was an application by Meryl Dorey of the Australian Vaccination Network for an Apprehended Personal Violence Order. She submitted the application to the Court on September 5, 2012, and the violence she was complaining about was when I said on April 28, 2012, that she should not encourage people to contact my family or I might respond in an unfriendly fashion. You read those dates right – four months between the alleged threat and filing of an application, four months during which she undertook a speaking tour of NSW, announcing her whereabouts every day, four months during which she published no fewer than five defamatory blog posts about me.

AVOs are usually treated by courts as a matter of urgency, because their most

common use is in cases of domestic violence or physical stalking. This case stretched across seven mentions before a full hearing was held on April 26, 2013 (two days before the anniversary of my supposed threat). Much of the delay was caused by Ms Dorey asking the Court for permission to supply more evidence and in one case by requesting that the Court extend an interim order on me that she was well aware did not exist.

It was quite clear that this was not about any personal threat of violence towards Ms Dorey. One of the conditions that Ms Dorey wanted put on me was "The defendant must not mention the applicant in any online forum in any derogatory manner."

Her application was dismissed completely, and the magistrate was less than impressed by a statement by Ms Dorey that if she didn't win it would be evidence of bias on the part of the court.

The magistrate was even more scathing about the expectation that a court would (or even could) stop me from mentioning someone on the internet.

Ms Dorey has since appealed the decision, and a hearing is listed for July 29.

To date, that will be ten months of my life wasted in a blatant attempt to stifle my freedom of speech. But there were some highlights. One was Ms Dorey offering as evidence of my stalking that I had advised two music composers of possible copyright violations (she included "thank you" emails to me from the composers' managers in her court submission). The other was her reaction to the April decision. She tried to argue with the magistrate. And then she cried.

About the author: **Peter Bowditch** is a past president of Australian

Skeptics Inc, and author of the website www.ratbags.com



#### The cycle of life

Conspiracies – scandals – presidents – diamonds. And so it goes, the almost inevitable realisation that all knowledge is connected and connectable.

#### MR PRESIDENT 2

Apart from a range of wellpublicised liaisons both before and during his presidency, including with a White House intern, Bill Clinton has been the subject of claims of conspiracies and weird paranormal involvements. The conspiracies include the supposed 'body count' of past acquaintances and business associates who have met untimely ends. The paranormal link is his being mind-controlled through the CIA's behavioural engineering Project MKUltra (as was Britney Spears, by the way). But a less reported relationship is via his governorship in Arkansas. The state capital is Little Rock, which is the home town of Marilyn Monroe's character in the song "Two Little Girls from Little Rock". from Gentlemen Prefer Blondes.

Two little girls - Marilyn Monroe and Jane Russell (Note: one of these is not blonde)



#### MS MOVIE STAR

Marilyn Monroe (born Norma Jeane Mortenson, 1926 -1962) actress, model and singer, became a major sex symbol and eventually an iconic figure in pop culture. She is still best known for her "dumb blonde" persona in such films as Gentlemen Prefer Blondes (1953), How to Marry a Millionaire (1953), The Seven Year Itch (1955) and Some Like it Hot (1959). But her dramatic roles also garnered attention: Niagara, (1953), Bus Stop (1956) and her last completed film, The Misfits (1961), with a screenplay by her then-husband, Arthur Miller.

CONSPIRACY: Murdered by CIA for info on Kennedys



#### **MESSRS SCANDAL**

Many US Presidents have had substantiated and unsubstantiated claims of sexual impropriety raised against them, including Jefferson (children by black servant/slave); Buchanan (homosexual); Cleveland (possible illegitimate child); Harding (illegitimate child); Franklin Roosevelt (affair with wife's secretary); Eisenhower (affair with wartime driver); Nixon (affair with cocktail waitress); Kennedy (multiple affairs); Johnson (multiple affairs, and reported illegitimate child); Reagan (alleged sexual assault); George H Bush (alleged affairs); George W Bush (alleged affairs and sexual assault); and Bill Clinton. (Source: www. counterpunch.org)

Source: Wikipedia, except where noted



#### MR PLAYWRIGHT

Arthur Asher Miller (1915 – 2005), American playwright, essayist and Pulitzer Prize winner. Plays included All My Sons (1947), Death of a Salesman (1949), The Crucible (1953) and A View from the Bridge (1955), as well as the film The Misfits. Testified before the US anti-communist drive HUAC (House Un-American Activities Committee), and cut relations with friend, film director Elia Kazan, after the latter revealed the names of known communists in the film industry to the Committee. His play The Crucible, ostensibly about the Salem witch-hunts of the 17th century, mirrored the hysteria and betrayal evident at the HUAC sessions.

A concurrent campaigner in the HUAC fight against radicals and 'Reds' was the director of the FBI, J Edgar Hoover.



Marilyn dreams of Arthur Miller (or Joe DiMaggio)



#### MR PRESIDENT

John F Kennedy (1917 - 1963), regarded as one of the most sexually active US presidents, was rumoured to be a particular target of Hoover, with the director receiving regular reports on his reported liaisons with a range of women: Marilyn Monroe, Danish journalist Inga Arvad; actress Gene Tierney; Swedish aristocrat Gunilla von Post; Judith Campbell, the mistress of Mafia boss, Sam Giancana; actress Marlene Dietrich; his wife's press secretary, Pamela Turnure; a couple of White House secretaries; and Mimi Alford, an intern in the White House.

CONSPIRACY: Links with organised crime, covert plot behind assassinations

#### MR DIRECTOR

John Edgar Hoover (1895-1972)

was appointed director of the Bureau
of Investigation - predecessor to the FBI
- in 1924; instrumental in founding the FBI
in 1935 and remained director until his death in
1972. Hoover's focus shifted from organised crime
to people who maintained contacts with subversive
elements, particularly the civil rights movement. He
was accused of trying to undermine their reputations,
especially via sexual 'improprieties'. Victims
included Martin Luther King, Jr, and actress Jean
Seberg, and he kept files on the peccadilloes of
noted political leaders and even Presidents.

CONSPIRACY: Homosexual, blackmailed by Mafia

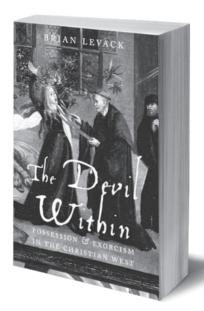


J Edgar Hoover knows how to deal with Reds and rumour mongers

#### Playing at possession

**The Devil Within:** Possession & Exorcism in the Christian West By Brian P. Levack

Yale University Press, **US\$35.00** 



evils really exist, and they really can possess people; that is, these are truths if you believe the stories in the Bible to be true. Jesus himself cast out devils from people, and he empowered his disciples to do the same, so the case is closed, it would seem.

But even for believers this has been an issue that needs some deliberation. I think this is because possession and exorcism insist that there is an acute impingement of the supernatural physically acting within our world.

Exorcisms against possessions are far from over, but they had their heyday in 16th and 17th-

century Europe, the main subject of *The Devil Within*. The author is a history professor at Yale University who has written before about witch hunting. The strange and entertaining stories here illustrate his main thesis, that the peculiar behaviour of possessed people is not necessarily because they are mentally or physically ill, nor because they are faking (two non-supernatural explanations favored these days, and even examined by some during the centuries under consideration). Levack posits that those possessed by demons may have been simply acting out roles that they learned from others, performing in a religious drama for which there was an audience handy.

The performances, if that is what they were, must have been enjoyed by societies that had a high interest in sensation and a high tolerance for disgusting acts as long as they were for religious ends.

One young woman's tongue swelled out of her mouth and she vomited two hundred pins. Another vomited long nails, brass needles, and lumps of hair and meat. A girl in Louvain vomited dung, coal and stones, and another in one year vomited enough blood to fill four hundred chamber pots. Vomiting toads or frogs was common. A boy claimed to be possessed in 1620, and showed that his urine was blue as

evidence of the fact, but he was caught mixing ink into it and was exposed as a fake.

It is a little more fun to hear about nuns who were possessed and thereby engaged in a variety of sexual practices. Another nun merely hoisted a heavy marble vase with just two little fingers. One of the Goodwin children in seventeenth-century Boston turned her head all the way around (a la Linda Blair in *The Exorcist*). Some levitated, while others got too heavy for anyone to lift.

One of the lessons in this book is that demoniacal possessions and exorcisms for them have not vanished as the centuries rolled by (far from it), but it is difficult to believe that current exorcists could be extirpating such fantastic symptoms.

The symptoms were products of their times and culture, Levack shows. There was fraud, to be sure, and although retrospective diagnosing is guesswork, plenty of the "demoniacs" (which seems to be the preferred term for those possessed) might have been suffering from Tourette's, or epilepsy, or simple hysteria. "A more comprehensive understanding," Levack writes, "can be gained by viewing demoniacs as well as all those who participated in the effort to cure them as performers in religious dramas. Whether unconsciously or not, they were playing roles and following scripts that were encoded in their respective religious cultures."

This is especially, though not exclusively, true of Catholic exorcisms. Not only could the demoniac and the exorcist follow a choice of scripts from the many manuals printed at the time (that the printing press increased liability for possession is a theme here), but they had audiences, sometimes numbering in the thousands, and they sometimes performed on purpose-built stages. The exorcists had the right costumes, and they carried the right props, like a consecrated host or a container of holy water.

Protestants, for whom possession and exorcism were less emphasised, had less florid shows. While the Catholics could 'prove' their ability to cast out demons and thus verify the righteousness of their particular sect, Protestants claimed that Catholic exorcisms were superstition and didn't work anyway. Protestants did not, for instance, hold crucifixes or the Eucharistic host against the body of the demoniac; Protestant exorcists and demoniacs alike held these to be mere magical material



objects. The Word of God, however, was sacred. This did not mean that Bibles were used physically as charms by Protestants to remove the demon (although this did happen), but meant that the demons would act with "a hideous noise" or "dismal agonies" when someone read from the book. While the exorcist in a Catholic ceremony might actively expel demons, Protestants tended to stress the far less dramatic prayer and fasting. Protestant demoniacs also seldom had sexuality as a main aspect of their complaints, but Catholics often did; Levack says this is because Catholics were intensely interested in sexual misbehavior, but for Protestants, it was just another sin. Protestant demoniacs tended to make statements about their personal sin and guilt when they were possessed, and if the demon happened to be speaking in a second voice, the Protestants never fretted whether these confessions were due to the demon or to the demoniac. Devils inhabiting Catholics often talked about sinfulness in the devil's voice.

A tiny part of Levack's book emphasises an unusual theatrical and societal presentation of demoniacs. There is a belief of possession by the souls of the dead within Hasidism, and this is the sort of possession that group has to deal with. Infestation by dead people has been rejected from the start by Christian theologians, so that does not happen to their community. Not only do the case histories here show that demoniacs and exorcists were playing roles assigned to them by their religious peers, but it is curious that there

"Out, damn spot." Even the Japanese liked to do a bit of dedemonising.



should have been fashions for, say, vomiting pins and needles. It is as if once someone demonstrated this symptom, then the symptom was reported and other people started showing it, too.

It is easier to believe that potential demoniacs were keeping abreast of the latest fad to manifest possession than that the demons themselves were hearing about the latest craze and imitating it upon their victims. Similarly, it seems peculiar that Protestant demons and Catholic demons would have known so well how to inflict their troubles but were careful to follow the roles their particular community assigned to them. There is some better explanation of this than a supernatural one.

An interesting aspect of possessions that might explain why there has been an increase in them (yes, an increase) in the past couple of decades is that now, just as centuries ago, they are considered to be signs of the Last Days, when the Devil is supposed to have unprecedented power. In the period covered in Levack's entertaining and thought-provoking work, the battle between the exorcist and the Devil was a re-enactment (theatre, again) of "the conflict that had taken place in biblical times and would be rehearsed once again at Armageddon."

More exorcists are now being trained by the Catholic Church, while charismatic Protestant churches are performing more "deliverance ministries", which seem to be exorcisms in all but name, the name being avoided because of a connection to Catholicism.

That we aren't going to have an end to exorcism anytime soon is one of the lessons of this book (and another is that we aren't going to have End Times nearly as soon as those predicting them say they are coming). Perhaps, though, in the current times, we can expect that such symptoms and ceremonies be seriously documented by some attendant's videocam. It couldn't hurt the cause of the exorcists if such documentation proved genuine (let's ask James Randi to officiate), especially if we got to see someone vomiting hundreds of pins.

- Reviewed by Rob Hardy

#### The Wrapture of Egypt

**The Mummy's Curse:** The True History of a Dark Fantasy

By Roger Luckhurst

ROGER LUCKHURST

Oxford University Press, A\$36.95

Acouple of the most famous movie monsters came from literature. Frankenstein's monster came from Mary Shelley, and Dracula came from Bram Stoker. The Wolfman was a

product of folktales that had been passed down for millennia. There are, the realists will tell you, no Frankenstein monsters, no vampires, and no wolfmen. There are, however, mummies, and though they may not be awakened by violations of a curse and though they do not walk around, hypnotise, and murder like in the movies, they really exist.

The reasons we have them as villains in the horror films are based on rumour and a response to colonialism. These are the surprising sources cited by Roger Luckhurst who, according to the book jacket, "teaches horror and the occasional respectable novel by Henry James" at university.

The book is a history of all things Egyptological, not just mummies but the European fascination for mummies, caskets and more. It is an academic work, without dryness; Luckhurst obviously enjoys the human foibles on display here, and much of the book, for all its facts, is simply funny, especially since, as he points out, there is no mummy's curse.

It's not just that "there's no such things as ghosts" - ancient Egyptians did not seal their mummy cases with curses because, well, curses hadn't been invented yet. Where there were messages left for finders of tombs, they tended to be welcoming, with words of thanks for honoring the name of the entombed resident. Rather than being cursed, explorers of tombs, Luckhurst says, "must be more likely to be blessed than cursed". The idea that there is some curse on a tomb that promises doom to the invader "is a fantasy, a later cultural imposition". Egyptologists are annoyed by the fantasy, leading one to write an article, "Mummymania for the Masses: Is Egyptology Cursed by the Mummy's Curse?". But at least

some are interested in investigating it as a modern cultural phenomenon.

The mummy's curse was highlighted by enthusiasm for the discoveries of Howard Carter when he entered King Tutankhamen's tomb in 1922. Sure enough, Carter's patron, Lord Carnarvon, died soon after the tomb was opened. Then railroad tycoon George Jay Gould toured the chamber, got a fever supposedly from it, and he died. Then the radiologist who surveyed the king's sarcophagus died. Then the governor general of Anglo-Egyptian Sudan died. The curse lives on, and stories say that it struck even the airplane crew that transported the treasures for display at the British Museum in 1972. It will do no good for rational investigation to look at these stories. Carter himself lived to be 64, dying quietly of heart disease, and studies of those who entered the tomb between 1923 and 1926 show an average age at death of seventy years.

It wasn't just Tut's mummy that was associated with curses; the stories of curses had preceded the opening of that famous tomb. The adventurer Walter Herbert Ingram, the socialite Thomas Douglas Murray and the journalist Bertram Fletcher Robinson all messed around with mummies in some fashion around 1900, and all came to bad endings. Or, at least, so the rumours said.

The most amusing part of this book is how far the rumors flew. There was a mummy of a priestess at the British Museum, officially known as "Acquisition #22542" (actually it wasn't a mummy, just a mummy case). Even a journalist who wrote about the mummy succumbed to the curse, an example of what Luckhurst calls a "recursive curse". The journalist had been warned by none other than Sir Arthur Conan Doyle, who wrote "I told him he was tempting fate by pursuing his inquiries, but he was fascinated and would not desist. Then he was overtaken by illness. The immediate cause of death was typhoid fever, but that is the way in which the 'elementals' guarding the mummy might act." (In his acknowledgements section, Luckhurst jokes, "I should perhaps also take the opportunity to thank any Egyptian elementals that might still be hanging around, for deciding not to kill me off in some bizarre or comical manner during the writing of this book.")

A "well-known society girl" taunted the



mummy to do its worst, only to fall headlong down the museum's steps. Or so the story goes. The queries from curious readers and from editors of newspapers all over the world so exasperated the Keeper of the Egyptian Rooms that he mimeographed a point-by-point rebuttal: no, there is no record of a curse, no, the man who carried the case met with no accident, no, the man who photographed it did not have his camera smashed, no... but it all changed very little.

The sensationalist journalist and spiritualist W. T. Stead wrote about the museum's mummy, and look what happened to him: he died on the *Titanic*. This sparked the rumor that the mummy had been on board the ship, and that it was the curse that had arranged the approach of that pesky iceberg. Somehow the mummy survived the sinking, only to be on the Lusitania to arrange that disaster as well, and so on. Actually, any curses the mummy case has done have been telepathic; it has never left the museum. A genuine Egyptologist was so exasperated by these rumors that she made up even more fantastic stories that the museum had sold the mummy case and it had been presented to the Kaiser who thereupon started WWI, and look what happened to him. One might fight fire with fire, but fighting rumour with rumour only added more stories for the general circulation.

It is strange that at the beginning of the nineteenth century, observers regarded Egypt and its relics with awe and wonder; by the end, the feelings included fright and menace. The strongman turned Egyptologist Giovanni Battista Belzoni wrote a narrative of his finds in 1820, and did not turn to any gothic speculation; there was no dread about digging out the mummies or feeding them into the campfire as needed. Victorian Gothic tales often included menacing objects, or curses passed to a next generation. Conan Doyle, Edgar Allan Poe,

Algernon Blackwood, and H. Rider Haggard all got into the act; it is a surprise that Louisa May Alcott did, too, in a "brief and nasty shocker, 'Lost in a Pyramid, or the Mummy's Curse'" of 1869.

And then, at the turn of the century, Luckhurst says, theosophy and the revival of magic, via such lights as Madame Helena Blavatsky and Aleister Crowley, supercharged the idea of a curse, along with the medical study of hypnosis (which somehow became part of the mummy curse rumours, and is, of course, one of the mummy's powers in the movies).

Luckhurst argues that these tales emerged at the times they did because of colonial guilt, the idea that the 'others', in this case the colonised and exploited Egyptians, were taking their revenge. Britain had looked upon Egypt as a mystical yet admirable source of ancient wisdom. As Britain's colonial grasp tightened, however, Egypt looked darker and more threatening. Neither colonial Egypt nor ancient Egypt had curses with which to afflict the colonisers, so the colonisers made them up. It seems a silly employment for the imaginations of the colonisers, but not nearly as silly nor as funny as the role of rumour.

There are many bizarre surprises in this strange tale, recounted within an entertaining book that goes into such dusty corners as the architectural revival of Egyptian motifs, Egypt as reconstructed within the world's fairs, and the meetings and researches of the London "Ghost Club". Luckhurst's book reminds us that there is merit in looking seriously at silliness.

- Reviewed by Rob Hardy

#### The Skeptics' Guide to the Universe

is a weekly Science podcast talkshow discussing the latest news and topics from the world of the paranormal, fringe science,

and controversial claims from a scientific point of view.

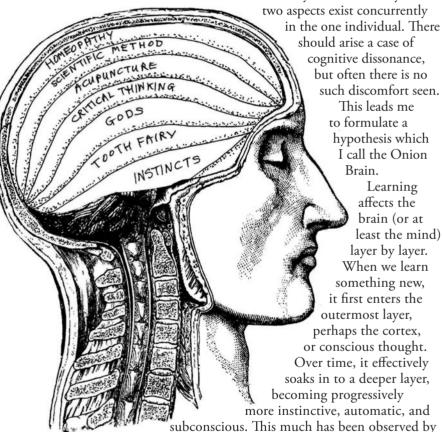
www.the skepticsguide.org



#### The Onion Brain

In which is proposed a theory of how the brain processes logic, layer upon layer

Por forty years I have been observing people with odd beliefs, and asking why they hold such ideas. I move in science and engineering circles, where ideas have to be tested using evidence and analysis. Occasionally these



several writers.

When we learn a second skill, it again enters first the outer layer, eventually soaking further in. However it does not overtake the first skill – the layers remain in order.

The eventual result is that skills end up effectively in layers, like an onion. My key point is that any given layer can act on another layer, but only if it is further outwards. Put another way, if two layers are in conflict, the inner layer will usually win.

For example, imagine a person who was exposed to several modes of thought in sequence during the growth of their brain:

- Firstly, acupuncture, from perhaps an Asian culture
- Secondly, the scientific method or critical

thinking, say in an Australian school
Thirdly, they come across homeopathy.
These three skills can be imagined as forming three layers in the mind or brain.

#### **Hypothesis**

The hypothesis is that a given layer can be used to challenge an outer layer more effectively than an inner layer (other things being equal). In the above case, the critical thinking skills could be applied to the homeopathy more easily than the acupuncture. The person would thus be able to apply the scientific method to challenge and discard the homeopathy, while being less able to question or dislodge the belief in acupuncture.

If found true, this would illuminate the question of why we believe weird things, and point to more effective critical thinking education programs.

#### Anecdotal evidence

I have seen many cases supporting this idea, both personally, and through claims to the Skeptics of paranormal phenomena and pseudoscience. I have also seen some scientists and engineers who are able to critically examine new ideas when encountered, but who become confused or angry when the religion they were taught as a child is similarly questioned.

#### Testing the hypothesis

There are quite a few skeptics involved in critical thinking education, at primary, secondary and tertiary levels. Some also carry out research into anomalous beliefs. It would be great if we could apply a test of the idea.

The most thorough test would be a longitudinal study, which surveys a group of children for irrational beliefs. It would then follow their education over the years, and repeat the survey from time to time, on the same cohort. This would obviously be a long and expensive research program.

A simpler means might be to question people in detail about their history of belief and education, which could provide faster results. Alternatively, there may well exist data from previous surveys that could be mined for relevant information. Over to you!

lan Bryce Chief Investigator, Australian Skeptics



#### **Even More Freudulence?**

In which issue is taken with anti-psychoanalysis and the same old stuff

The March 2013 edition of *The Skeptic* carried an article by Neil Woodger, a Melbourne psychologist, responding to a reply I wrote to another article by another psychologist, Garry Bakker; both clearly oppose the theory and practice of psychoanalysis, and explain why in their respective pieces.

Critiques of psychoanalysis such as these generally follow a formula: they usually start by saying it's outdated (it's not), they usually say it's not evidence-based (it is now), and they are usually written with little regard to facts. Woodger's critique is no different.

Woodger takes a different approach to Bakker, the latter trying (and failing) to demonstrate that psychoanalysis is "guff". Woodger, however, seemingly wants to approach the matter "rationally". However, his overt bias, his use of arguably misleading information, and a wellworn tendency to denigrate psychoanalysis, puts him in a very long line of those who just seem ideologically opposed, and have an axe to grind, here apparently because of difficulty accessing Medicare. And this while Woodger wants "to provide a different focus by highlighting the many challenges facing people who need mental health treatment, particularly the behaviour of those who treat them" (33:1, p55). It's not a different focus, it's the same old stuff.

None of Woodger's attempts at criticism of psychoanalysis are especially new; certainly none are convincing. All are tiresome because they treat psychoanalysts who present evidence for what they do with contempt, as if they never spoke. He "sets the scene" by exploring selected terminology. This is just a device to introduce notions of charlatanism and un-accountability, to leave the reader with the impression that psychoanalysis is implicated here, and that he'll demonstrate just that.

Referring to psychology training, he paints Freudian Theory as something of a quaint historical anachronism that has no place in modern centres of academia with their exacting standards. There is, of course, a well-deserved debate these days about declining standards in universities, which of course includes (though not exclusively) psychology departments. Returning to the article, clearly Woodger just ignored the evidence base, and subsequent developments, I

outlined in my response to Bakker. This seems convenient, as he wants to demonstrate how long and involved psychology training is, and how it is "evidence-based".

Had Woodger resisted the temptation to use this cliched argument, he might have discovered that psychoanalytic training is in fact quite exacting and extensive. To be registered as a qualified psychoanalyst, and member of the International Psychoanalytic Association (IPA), one first needs an appropriate undergraduate degree, after which one embarks on a four year theoretical program while at the same time doing supervised clinical case-work and having a training analysis all at the same time. Overall training can take five to seven years on top of the undergraduate degree; one can't be accused of being a slouch here. I'd have thought Woodridge could have done better than resort to a "our years are longer than your years" argument?

Woodger's claim that "psychoanalysis is simply irrelevant ... because it fails to meet the modern standards ... as they are taught in the institutes of higher learning" (p55) is simply and factually wrong. If we leave aside that there is contemporary research evidence about psychoanalysis (that he's ignored) and its efficacy, we find that it is indeed taught in higher centres of learning. One can do modules in psychoanalysis and development in the Faculty of Medicine at Monash University, a Masters in Child Psychoanalytic Psychotherapy at Monash too, a Masters in Psychoanalytic Studies at Deakin University, or study psychoanalysis at University College, London which is affiliated with Yale University, at New York University, or McMaster University in Canada. That clinical psychoanalysis is not taught in every university has more to do with logistical issues about how to fit such a complicated course into existing faculties, in my view.

To denigrate psychoanalysis by asserting Medicare opposes it, as "shown" by it not being given a guernsey in the Better Access to Mental Health program, betrays an ignorance of history. There are facts here: the Better Access program was the government's attempt to fix a bottleneck of patients waiting to see psychiatrists by specifically allowing access to psychologists and cognitive therapy (CBT). It was a political fix, to get around problems of the government's own making after running down the health system; it benefited psychologists rather than penalised psychoanalysts.

Another pertinent fact is that intensive psychoanalytic psychotherapy, for patients who



A happier Freud?

meet certain criteria, is indeed rebatable under Medicare. The Royal Australian and New Zealand College of Psychiatry supports this in its official position paper (no. 54) on the subject. This is as it should be, since the Medicare criteria define

patients with complex disorders that, were psychologists using CBT alone to treat them, it would arguably border on the irresponsible and unethical.

In the latter half of the article, Woodger seemingly slips in his most urgent gripe – a lack of access to Medicare rebates because of limits to psychology consults imposed by Medicare. Is this then what this is all about, money rather than patient need?

Psychoanalysts didn't oppose psychology access to Medicare, this was a political issue. To argue that the removal of psychoanalytic treatment would somehow benefit patients by allowing complex cases more access to psychologists and CBT alone, flies in the face of common sense. Again, to reiterate the evidence base, Skeptic readers should be aware that there is an established evidence base that shows the provision of psychoanalytic treatment can reduce general medical costs while

increasing productivity.

In an arguably misleading attempt to illustrate how "bad" and "outmoded" psychoanalytic treatment really is, Woodger turns to several case examples. In my view, they are just examples of spin.

The first case describes a complaint about a "not serious" problem, a psychologist offering to treat this using psychoanalysis, and the costs involved. Woodger even takes a shot at the psychologist for offering this. In an astonishing statement, Woodger condemns the psychologist as "not practicing ... at an acceptable standard" without knowing the detail of his assessment of the patient; Woodger seemingly just knows it's "not serious". If he does know, he certainly doesn't tell us; serious issues often present as minor problems. He seems to be completely unaware of the many psychologists who are indeed IPA qualified psychoanalysts in Australia, and members of the Australian Psychoanalytic Association. It may have been quite reasonable for the psychologist to offer this; on the basis of Woodger's information, we just can't tell. Yes, costs are an issue but that's often negotiated; again, we can't tell. The patient might well have been aghast at the fee, complained, and made an issue of it. She was, of course, quite within her rights to refuse and go elsewhere.

The next example of supposed poor practice

involves a patient not getting better, and perhaps seemingly getting worse, after two years of psychoanalysis. Any experienced practitioner will be familiar with this. It's not hard to appreciate that as things emerge, patients may well feel worse. At times, that may necessitate medical intervention while the analysis continues. Are we meant to be shocked that this patient has persisted for two years, in a therapy that by definition is long term and intensive? This example may well be one of poor communication with the mental health practitioner (not the patient, you'll note) rather than poor practice, as Woodger might have us believe.

A last example involves a child with encopresis. Again and conveniently, Woodger "just knows" somehow that play therapy offered here was inappropriate. How? Experienced practitioners are well aware of how often severe emotional disturbances, either in the child or their family, present as a physical symptom in children; kids are the "canary in the coalmine", as it were. We're told how "best practice involves working with parents" but we aren't told that the usual practice in such cases may involve several interviews with the child, with the parents, and an interview with the family together to discuss treatment options. This might well include psychological interventions, such as play therapy, while at the same time treating the presenting symptom (here, encopresis). Did this happen? We can't tell. He just asserts that "it was a waste of time and money". Does Woodger know of the Victorian Child Psychotherapy Association, that child psychotherapy is an industrially recognised discipline under the Health Professional Services Award in Victoria, his own state?

To conclude, Woodger fails to convince in his support of Bakker's contention that psychoanalysis is "guff". He fails to convince that his focus is about providing better treatment for patients. He seems unaware of the growing interest amongst psychologists in psychoanalytic methods. Woodger is quite mistaken in his view that psychoanalysis should not be offered. Evidence abounds to support this. Woodger writing as if he "just knows" is not evidence. Complex or difficult cases need a diversity of approaches (including CBT!) to be effectively treated. Reducing the availability and diversity of treatment options means it is patients who will suffer, not psychologists or psychoanalysts.

(Dr) Gil M Anaf Psychoanalyst, Clinical Senior Lecturer, Discipline of Psychiatry School of Medicine, University of Adelaide



#### What you think ...

#### **Ball lightning**

feel the same way as Adam Stagell about ball lightning, as explained in his letter (The Skeptic, 33:1, p61). High school physics indicates that lightning results from an electrical current passing through the atmosphere, heating and ionising the gases so that they briefly become excellent conductors, allowing a rapid discharge of the accumulated electrical potential. The lightning itself is just super-heated gas briefly emitting visible light (and other electromagnetic radiation), while thunder of course results from the sudden expansion (explosion) of that gas. Ball lightning sounds like a phenomenon arising from a contained, continuous highvoltage electrical discharge, which would require a constant generation of potential difference, and therefore in need of energy input. The question becomes: where is the energy source? Presumably the gases would be heated, so you'd expect accompanying sound effects. Sounds very dodgy, but I'm prepared to be surprised by some good evidence.

> Paul Prociv Mount Mellum QLD

#### A pessimistic view?

have been a long time reader of your magazine (though I admit I'm not a subscriber), and I applaud you for your longevity. But because of that I sometimes wonder about the ability of skeptics and rationalists and atheists etc, to ever successfully present a skeptical view that convinces the majority of people that all of the pseudoscience stuff is nonsense.

Astrology and ghosts and 'mind reading' have all been around for a

long while, and your magazine has covered those since the very start of its existence, I believe. But they're still around. Your magazine is not giving as much space to those topics as it did before, which is probably a good thing, but it doesn't mean the battle has been won.

The same goes with the alternative medicine – homeopathy, naturopaths; they've all been around a while (though not as long as astrology), and your magazine seems to be giving more pages to these topics, swapping it over from the previous astrology etc, which is also a good thing.

But they too are still around. So I ask, will the skeptics ever win? I despair of the gullibility and credulousness of the public, but is it part of our nature to believe the unbelievable? Do we need the astrology and the miracle cures that much that we throw away our good sense and critical thinking to embrace them with open hearts and open wallets? And will they ever stop doing so, at least in the majority of cases?

Michael Scott Via email

#### Cargo Cults at home

Brian Dunning's "Waiting for the Day" (The Skeptic, 33:1, p24) took me way back to 1969, when I came across members of the John Frum movement while working in the New Hebrides (now Vanuatu). Its origin, as explained to me on several separate occasions, was the heavy US military presence there during the Pacific War ("John frum [somewhere in the USA]").

Experience more recently, however, indicates that cargo cultism is not restricted to quaint, primitive, isolated

groups (depending on your definition, of course), but manifests much closer to home.

In the early 1990s, while setting up a public health research project in a remote Aboriginal community of Arnhem Land, I first had to meet the land council secretary, in effect the local mayor. This bloke oversaw all the community's maintenance and infrastructure projects, commanding a budget of several million dollars annually. As an ice-breaker, I referred to the portrait of Queen Elizabeth on his office wall, commenting how much younger she looked in it (it must have been from the 1950s), in response to which he inquired why we were so keen to be getting rid of her – it was during the build-up to our great Republic Referendum. On being asked what he meant, he replied, in all seriousness: "Well, if you get rid of her, where is all your money going to come from?"

I was momentarily dumbfounded, but on further discussion, discovered that this man, a senior Aboriginal figure in Arnhem Land, who spent a lot of time in Darwin and flying further around the country (he'd been to Canberra), really believed that all our money was generated by the Queen: she was the source of all wealth, and the Federal Government's job was simply to dispense the cash as it saw fit (along the lines of PNG's "wantok" system).

Spending more time in that region allowed me to see how a cargo cult mentality could arise: supply barges came in regularly to discharge their bounty onto beaches or mudbanks, and aircraft delivered passengers and goods daily. All one needed to obtain food, fuel, a video, a vehicle or a plane ticket, was money, and it all came readily and regularly from the Government.

The locals had no other way of understanding how the world works – attendance at the school was abysmal, with less than 30 per cent of eligible children being present on any day (and teaching was not in English, but in their own language, spoken by perhaps 3000 people in total, and based on an



abbreviated English alphabet). Most kids stayed home watching videos of Hollywood rubbish such as the *Robo-Cop* series of movies, or freely available pornography.

It became clear to me why hardly anybody there could speak English, let alone have any inkling of what work meant, or how wealth (and material goods) might be generated.

I wondered about what impressions a growing child or even an adult there could have of our society, and how we behaved and functioned. And this was supposed to be a model community, the best run one in the Top End!

Such abject ignorance naturally extends to personal hygiene and nutrition, underlying the serious major health problems of remote communities for which medical intervention alone will never provide an effective response.

Real education, about how the greater world works, about how to

care properly for our own bodies, is what is lacking in remote indigenous communities of this country; without that, the best we can expect is cargo cultism.

> Paul Prociv Mount Mellum OLD



#### **CRYPTIC CROSSWORD SOLUTION**

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#### **DR BOB'S QUIZ SOLUTIONS**

- 1. Cricket
- 2. The nutter who killed poor little Fanny Adams wrote in his diary "24 August 1869. Killed a young girl. It was fine and hot." although he did not expostulate on whether he was talking about the weather or the killing. But here's a hint for would-be murderers: Do not write down your crimes in your diary!! It will get you into all sorts of trouble.
- **3.** When the Romans defeated Mithridates' army and he tried to poison himself, he was unable to do so. He had to get a passing soldier with a sword to help out.
- **4.** The kakapo defends itself by freezing motionless, so you walk up to it, bend over it and pick it up.
- **5.** The works of George Orwell were deleted. Oh, the irony. But, people got their money back.

You can see more like this, every month and going back some years, at www.skeptics.com.au/features/dr-bobs-quiz/



#### Local Skeptical Groups

#### **VICTORIA**

**Gippsland Skeptics** – (formerly Sale Skeptics In The Pub) Meets every second Friday in Sale and Morwell in alternate months. saleskepticsinthepub@hotmail.com or 0424 376 153 Facebook http://www.facebook.com/pages/Gippsland-

Great Ocean Road Skeptics – (Geelona)

Skeptics/172376579482915

Meets on the last Wednesday of each month from 6pm, City Quarter, Cunningham Pier East Geelong Contact: Carolyn Coulson carolco@barwonhealth.org.au

#### Melbourne Eastern Hills Skeptics in the Pub

Meets second Monday of each month at The Knox Club, Wantirna South. Contact: Lucas Randall 0423141453 mehsitp@codenix.org http://mehsitp.codenix.org

#### Melbourne Skeptics in the Pub

Meets on the fourth Monday of every month from 6 pm at the Mt View Hotel in Richmond. http://www.melbourneskeptics.com.au/skeptics-in-the-pub/

#### Mordi Skeptics in The Pub

Meets at 7.30pm on the first Tuesday of each month at the Mordi Sporting Club. (\$2 to cover website costs) http://www.meetup.com/Mordi-Skeptics-in-the-Pub/

Peninsula Skeptics – (aka The Celestial Teapot)
Contacts: Graeme Hanigan 0438 359 600 or Tina Hunt 0416 156
945 or glannagalt@fastmail.fm
http://www.meetup.com/Teapot-Mornington-Peninsula/

#### **TASMANIA**

#### **Launceston Skeptics**

Contact: Jin-oh Choi, 0408 271 800 info@launcestonskeptics.com www.launcestonskeptics.com

Launceston: Skeptics in the Pub 1st & 3rd Thursday of each month 5.30pm @ The Royal Oak Hotel

Launceston: Skeptical Sunday 2nd Sunday of each month 2.00pn @ Cube Cafe

#### NOTE: LISTINGS WELCOME

We invite listings for any Skeptical groups based on local rather than regional areas. Email us at editor@ skeptics.com.au with details of your organisation's name, contact details and any regular functions, eg Skeptics in the Pub, with time, day of the month, location etc. Because this is a quarterly journal and most local groups meet monthly, it is unlikely we will be able to include references to specific speakers or events.



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