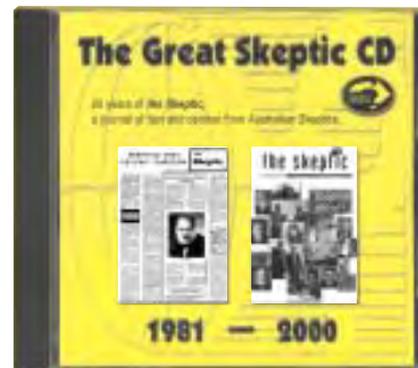


# the skeptic

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# the Skeptic

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# Contents

## Regulars

- 3 – Editorial – The Danger of Knowing for Sure
- 4 – Around the Traps
- 58 – Forum
- 66 – Letters
- 70 – Crossword

## Features

- 6 – Convention Report
- 8 – Expose: Free Energy? Not from Lutec 2 – *Ian Bryce*
- 14 – Challenging Times – *Barry Williams*
- 16 – Please Keep *Listening* – *Cheryl Freeman*
- 19 – Ignorance is Strength – *Peter Bowditch*
- 22 – Why do Alternative Therapies Work? – *Sydney Bockner*
- 24 – Christianity & Fundamentalsim – *Phillip Almond*
- 30 – Lead Balloon: Wealth Transfers – *Richard Lead*
- 32 – Angels & Financial Angles 2 – *Karen Stollznou*
- 36 – *At Last!* The Great Skeptic CD Release
- 38 – Evidence Based Medicine – *Chris del Mar*
- 40 – Dowsing for Dowsers – *Steve Roberts*
- 44 – Poesy: Mustering at Mitta – *Rosemary Sceats*
- 45 – Good Word: Language and History – *Mark Newbrook*
- 49 – Evolution of Religion – *Helen Lawrence*
- 52 – Cadena Interviews: Joe Nickell – *Richard Cadena*
- 65 – Dip in the Skeptic Tank – *Richard Saunders*

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# The Danger of Knowing for Sure

There is an image that has stuck in my mind since the first time I saw it. It comes from the television series *The Ascent of Man* and the particular episode was called "Knowledge and Certainty". It shows Jacob Bronowski reaching into a pool of black mud; black because it contains the ashes of people murdered as the result of an insane belief system.

In the middle of the 20th century civilisation was threatened as an entire country seemed to go mad, and millions of people died as a result. A new word was invented, "holocaust", to describe something which even today almost defies belief – that someone could propose, and execute, a plan to destroy a large part of the world's population simply because they had the wrong genealogy – their parents and ancestors were the wrong sort of human.

Some people thought that Bronowski was making a play on the words in the series title and showing that, as well as an ascent of human-kind towards civilisation, there was always the possibility of a descent back into primitivism and savagery. This point was certainly being made, but the main idea was contained in the title of the episode - "Knowledge and Certainty". Bronowski was making a distinction between science and non-science – between knowing something with confidence and knowing something with certainty. The Nazis knew with certainty that they were right.

Science, and its handmaiden skepticism, is based on the principle that knowledge is testable and that ideas and beliefs can be rejected and replaced if they can be demonstrated to be wrong or outdated. It is a process of continuous learning. Yes, science can have bad outcomes, but those bad things can be challenged

and changed if necessary. When ideas cannot be challenged then learning, improvement and the correction of mistakes are impossible. There is no way back.

On 11 September, 2001, civilisation was again attacked when hijacked aircraft were flown into the towers of the World Trade Center in New York City and the Pentagon, and again we were presented with indelible images that will stay in our minds forever.

At the time of writing, the people behind this atrocity are unknown, although there are suspicions and clues. For my purpose, however, it does not matter who did this nor whether the motivation was political protest, religious bigotry, racism, extortion, whatever.

What is important is that the people who did this were absolutely certain that they were right. The hijackers entered the planes in the certain knowledge that not only were they going to die themselves, but that they were going to kill an unknown number of strangers – people who had never harmed them in any way. It must take a special kind of madness to train for months for a suicide mission, to be so absolutely certain about your belief that there is nothing that could change that belief, regardless of the consequences to you or anyone else.

You might say that I am talking about extremes here, just as it would be extreme to use the examples of human behaviour that we have seen over the years in Cambodia, Rwanda, Ireland or the collection of tribes that used to be called Yugoslavia. Yes, they are extremes, but they are all examples of the failure of rational thought.

It is not just civil wars, however, that exemplify the problem. Agricul-

tural production was damaged for decades in the Soviet Union because ideology decreed that the science of genetics be rejected, and the same country held on to an inefficient economic system long after its faults and weaknesses had been demonstrated.

People are campaigning against the development of an AIDS vaccine because they think the loss of millions of lives is irrelevant when placed against their belief that all vaccines are evil. Others hang on to ancient superstitions and medical systems with no proven effectiveness and proudly state that these things must work because they have not changed for centuries.

Countries with enormous natural and human resources are held back by religious traditions which may have been appropriate when armies fought with spears. People have their savings stolen daily by liars who pretend to contact their dead loved ones or who promise miracle cures for incurable diseases.

Skepticism is sometimes confused with cynicism. Skeptics are seen as people who don't want to believe anything. This is incorrect – Skeptics, like scientists, are people who just want to be confident that what they believe and know is the most likely thing that accords with reality. Put another way, a Skeptic is someone who likes his facts to be correct.

It is difficult to change long-held beliefs and it can be distressing to find out that you have an emotional investment in something which is wrong. Sometimes, however, it is just necessary to put away childish things, because there can be real danger in knowing things that just ain't so.

**Peter Bowditch**

# A Sad World

## ■ Editorial woes

The editorial in the previous issue was written under rather trying circumstances. Let us explain.

It was more than half-completed when the Editor, who works from home, was presented with two sick grandsons and asked by his daughter would he take them to the doctor. He complied, returned home and as he was preparing to put the boys to bed, a scream of pain from the elderly and frail Official Skeptic Mini Fox Terrier sent him rushing to the stairs, down which she had fallen. It seemed very likely that she had broken her leg, necessitating an emergency visit to the vet.

Carrying the whimpering dog to the car, he apparently hurt her leg, as she sank her teeth deep into the ball of his left thumb, causing the claret to flow vigorously. Returning, in pain, but with the dog restored to health by a deft veterinary manipulation of her dislocated hip, he arranged another visit to the doctor to get a tetanus shot and some antibiotics.

At this point, a friendly Skeptic phoned, so the disgruntled Ed took the chance to unload his woes into the receptive ear. "You've certainly had your share of strife today", said the friend "It can only get better from here."

"I don't know", moaned the Ed "The way my day is running, an Ansett aircraft full of refugees will probably crash on my house." The day was shot and the editorial had not advanced by one syllable.

Very late that evening as he, with throbbing thumb, was about to turn out the light, the phone rang again. This time a Skeptical friend from Melbourne was on the line. "Are you watching TV?" he asked, "There's been a terrorist attack in the US and New York is in flames."

It was September 11.

---

## ■ More Editorialising

Following the above events, and in light of some of what follows, we were agonising about what sort of editorial we should write for this issue. Much has been written about the events of September 11 in the USA, some of it very good, but more of it very bad, and it seemed appropriate for a Skeptic to try to make sense of the tragedy.

Predictably, the usual nonsense about Nostradamus and other seers attracted the attention of far too much of the media. In the week following Sept 11, we gave five interviews on the single topic of a bogus "Nostradamus" quotation that really emanated from a

Canadian university student, who had invented his own obscure "quotation" to demonstrate just how easy it was to make gibberish fit any given circumstance.

Much more serious were the instant responses from people who should have known better. It might have been expected (though it can hardly be condoned) that people driven by a Christian fundamentalist dogma would blame the tragedy on the US allowing church-state separation, abortion rights, gay people, civil libertarians, liberals, etc.

Just as worrying were commentators who seem to be driven by an innate anti-Americanism, and who

rushed to judgement by instantly laying the blame at the feet of American foreign policy. It would appear that both the left and the right knees jerk with equal ferocity, when dogma and prejudice apply the mallet. Neither attitude shows an awareness of critical understanding of complex issues; both are equally repugnant.

Which still left us in an agony of indecision about what we could write to try to put our feelings into words. Then along came a piece from Peter Bowditch, that encapsulated those feelings and said it all so much better than we could.

Peter's thoughtful piece is a powerful and humane plea for tolerance and Skepticism, more than worthy of taking its place as an Editorial. We commend it to all our readers.

## ■ Electoral results

The recent federal election brought mixed results for the small number of *Skeptic* subscribers in the Federal Parliament.

Following the poll and Cabinet reshuffle, the MP whose seat includes the environs of Skeptics Central, Liberal, Dr Brendan Nelson, was elevated to the Cabinet as Minister for Education, Training and Science, in the new parliament. Our heartiest congratulations go to Dr Nelson, with the hope that his work in this vital ministry will continue to be enlightened by his contact with the Skeptics.

On the other hand, our sincerest commiserations go to the ALP's Senator Chris Schacht, a former Science Minister, who lost his seat as a Senator from South Australia.

In the interests of good governance, we need more Skeptics in parliament, not fewer.

---

## ■ Who's playing?

Recent news about advances in genetic engineering has brought a rash of reports of the cliched rhetorical question "Are we playing God?", emanating from the mouths of ill-informed politicians, journalists, media commentators and assorted gentlemen whose sole qualification to answer seems to be that they wear their collars the wrong way around.

While there might well be plenty of ethical questions associated with genetic manipulation, the assumption of these questioners seems to be that what they are asking with this question is profound, when, in truth, it is far from it.

The logic implicit in the question is that, somehow, "we" are now doing something different from what we have always done.

Were we "playing God" when we found cures for various diseases; when we split the atom; when we went to the moon; when we first flew in the air; when we first built cities; when we invented agriculture; when we domesticated animals; when, indeed, we invented gods?

Our species has been "playing God" ever since it first started exercising some control over its natural environment – it could be seen as a distinguishing characteristic of the species *homo sapiens*.

The only sensible answer to that question is, "Of course we are. Playing God is what we do."

## ■ Whither the Weather?

For many years the voice of the Weather Bureau on Sydney radio has been that of Steve Symonds, a meteorologist and occasional contributor to *the Skeptic*. Steve is a staunch skeptic and this year he gave a very well-received talk on weather myths at a NSW branch dinner, at which he denied that the Bureau actually controlled the weather. As Skeptics we were all inclined to accept his word for that, given that he adduced good evidence to support his claim. However, subsequent events mean that we might be forced to rethink our position.

On Friday, November 16, Steve announced on radio that, after 33 years of service with the Bureau, he was retiring.

Within hours, and continuing for days, the weather in Sydney and its environs changed from a warm and balmy late Spring to that normally encountered in mid-Winter (and in Melbourne, at that). Gale force winds ripped roofs from houses, heavy rain fell throughout the region and temperatures plummeted from the high 20s to the mid-teens. Think what you like, but could that be mere coincidence? We think not.

We wish Steve well in his retirement on the north coast of NSW, an area often touted by meteorologists as having the world's optimum climate. But then, where else would you expect a pro like Steve to go in his retirement?

## ■ A True Faith at last

Viewers of the recently aired three-part *Son of God* on ABC TV's *Compass* programme would have seen a forensic sculptor's reconstruction of what a typical 1<sup>st</sup> Century resident of Jerusalem might have looked like.

Based on skulls of Jews of the period, the implication was that Jesus, as a man of his time, probably looked something like the reconstruction.

It bore little resemblance to any of the traditional representation of Jesus favoured by Christian and other artists, but we couldn't help noting a strong likeness to former Australian wicket keeper (and current coach of English talent - the apostate), Rodney Marsh.

Those of us who have always believed that cricket is rather more a spiritual experience than merely a game, will not ignore this divinely inspired sign that we were right all along.

In the beginning was the Word, and the Word was "Play".

Can it be blind chance that the recognised spiritual home of cricket is called Lords? Not likely.

We are on the march and all false faiths will be swept aside; temples, churches and cathedrals will be demolished and replaced with pavilions and

ovals; line and length shall be our catechism; leather and willow our relics.

The Don will ascend his rightful Throne of the Sacred Turf and the voice of the Venerable Benaud will be heard in the land. Verily, it is written that "Hallelujah" is out and "Howzat" shall henceforth be the cry of the faithful.

Here endeth the lesson.

## ■ Passing strange

From time-to-time in this column, we have noted the passing of people who, while not being on exactly the same wavelength as the Skeptics, did at least manage, through their idiosyncratic understandings of the phenomena of nature, make the world a more enjoyable place for us. For some others we felt sorry, while for a few we felt their passing would be little loss to the species.

It is difficult to know into which (of the latter two) category to place William Cooper, of whose demise we learned only recently. Cooper, 58, the author of a curious book, *Behold a Pale Horse*, was a ufonut's ufonut, a conspiratologists conspiratologist. He stopped at nothing (especially logic or common sense) in his unrelenting exposure of shenanigans involving aliens, the Illuminati, the New World Order Conspiracy and especially the US Government. He had his own net broadcasting site to promulgate his propaganda, the virulence of which is rarely exceeded, even among the conspiracy fraternity.

Cooper was shot dead on November 6, by Arizona sheriff's officers who had been trying to serve him with an arrest warrant, after he opened fire on them, critically wounding one deputy.

## ■ Predictions

Finally, thanks to the subscriber who advised us of predictions made by renowned "psychic" Gary Wiseman in a North Coast newspaper. Gary predicted that the ALP would win the federal election and that O bin Laden would be dead by Xmas. He still has a chance to be half-right.



# Convention a Great Success

On the weekend of November 9-11 Australian Skeptics held its Annual Convention in Brisbane for the first time. Bob Bruce and the Queensland Skeptics (Bob and the Banana Benders, what a name for a pop group) did themselves and all Skeptics proud by the way they organised things and the outstanding programme of very knowledgeable and entertaining speakers was sufficient to enthuse even the most skeptical Skeptic.

Only the weather caused the odd astringent comment from the large number of interstate visitors who attended, with, "What do you call this; good one day, or perfect the next?" being heard many times by the long-suffering locals. Suffice it to say that the weather was such as to preclude even the cricket fanatics among the visitors from ducking away to the nearby Gabba to see the Test Match against the Kiwis.

A free session on Friday night saw a spirited debate on the Ethics of Euthanasia, with contributions from Prof John Pearn, Dr William Grey and Graham Preston. The programme proper started on Saturday, and after brief introductory comments from Bob Bruce, Richard Gordon and Barry Williams, Geraldine Moses gave a fascinating talk on Pharmacology and Herbal Medicine. This was followed by a

talk on Evidence Based Medicine by Prof Chris Del Mar (summarised elsewhere in this issue).

After morning tea, two speakers from Bond University, Maggie Grey and Halim Rane spoke about Mass

Communications and Media Myths, followed by Colin Keay's updating of his previous talks on Nuclear Myths.

Immediately post lunch, Prof Phillip Almond asked and answered the question Is Religion Bunk? (see

his paper in this issue) and Jan Groenveld spoke most movingly about her personal involvement in Cults.

The afternoon session concluded with presentations by Prof John Saunders on Naltrexone Drug Cures and Peter Bowditch, showing precisely why the Anti-Immunisation brigade regard him as such a potent foe.

Prior to dinner, Barry Williams announced that the winner of the Bent Spoon Award for 2001, was the promoters of the Lutec "Free Energy" device (see following story) which caused little surprise among the guests. After this announcement we had the pleasure of hearing Richard Saunders launching the Great Skeptic CD, a project on which he had lavished an immense amount of his own skill and time over the past 12 months (see cover illustration and other mentions elsewhere in this issue). Prior to this, a hastily conducted discussion among all the committee members of the branches represented at the convention agreed unanimously that Richard should be rewarded for his work by being made an Honorary Life Member of Australian Skeptics. The meeting greeted



*Part of the enthusiastic audience at the Convention*



*Geraldine Moses addresses the convention*

this announcement with acclamation. An indication of how popular the CD will be is that we sold 26 copies, hot from the printers, burners, compacters, engravers\*, at the convention.

\* What are CD makers called?

Dinner was superb and guests were entertained by a fine and amusing talk on Health, Nonsense and Money by Prof Andreas Suhrbier.

Sunday dawned with a certain amount of immoderate precipitation, however, visitors ignored this as they heard Prof Peter Greshoff wittily addressing the topic of GMOs: Friend or Foe, while Prof Ian Lowe spoke with knowledge and enthusiasm about the need for a Sustainable Environment.

As it took place on the morning of No-

vember 11, the next talk on The Great War, by Des Sturgess QC was most apposite. Steve Roberts then asked the question What Happened to the UFOs?

The convention wound up in the afternoon with a talk by Bob Bruce on the Brain Gym training pro-

gramme being touted around schools and a discussion on Ethics from Dr Trevor Jordan.

That this convention was such a great success is a tribute to Bob Bruce, Richard Buchhorn, Sheryl and Bob Backhouse, and the others on the Qld Skeptics committee. It was particularly satisfying that visitors attended from all states except WA. Congratulations to all involved.

We plan to publish papers from as many of the speakers as we can over the next few issues.

The Convention for 2002 will be held in Melbourne at around the same time of year, and the Victorian Skeptics have already optimistically promised that the weather will be much better.



Delegation from the Provisional Wing of the Taliban (Qld Chapter) attending the Convention



# Bent Spoon Winner

The winners of the annual Skeptics Bent Spoon award (presented to the "perpetrator of the most preposterous piece of pseudoscientific piffle") for 2001 was announced at the Australian Skeptics National Convention in Brisbane on November 10.

The winners were the proponents of the Lutec Free Energy Generator, John Christie and Lou Brits of Cairns, for the most concerted campaign to market the invention least likely to fulfil its promises.

Their generator, claimed to produce 30 times more output than input, was slated to solve the world's energy crisis.



The Bent Spoon Award

The proponents set up an entire infrastructure: World Patents, numbered bank account, elaborate business plan, closed demonstrations to investors, and promises of franchises. Media exposure included newspaper, TV, US radio, and Internet sites.

Information provided by the proponents included glowing references from an alleged international technology company (actually one created by the promoters themselves).

This award owes much to the technical and investigative skills of Skeptical engineer, Ian Bryce, whose detailed reports in *the Skeptic* (21:3 and the following item in this issue) show how, despite many difficulties, he exposed the truth: the theoretical basis of the device is fatally flawed and the patents worthless. The prototype's actual output power is 33% of its input.

Well done Ian.



## Free-energy ? Not From “Lutec”: Pt 2

# Patents and Free Energy

**Ian Bryce concludes his investigation of a “free energy” claim, and finds it wanting.**



*Ian Bryce doesn't need to be a rocket scientist to conduct his investigations. Nevertheless, he is one, as well as being an engineer and member of the NSW Committee.*

Two inventors from Cairns have been promoting investment in their “Lutec Free Energy Machine” around the world. In the first Part we looked at their elaborate promotion and business activities, designed to separate investors from their money. We carefully analysed the power measurements on which they based their claim of 30 times more output than input, and showed the real efficiency is far less than unity (ie, no free energy).

In Part 2 we continue to report the investigation, focusing on the elaborate system of patents which featured so visibly in the promoters' material. We also give a layman's guide to energy theory, so readers will be better equipped to assess or advise others on the myriad of energy claims used in marketing both legitimate and doubtful products.

### Significance of Patents

For any invention which the inventor hopes will earn money, first he must take steps in order to protect it from being exploited by a copycat or pirate manufacturer. There are two ways to do this: for military technology, it is usually kept secret, which requires strict enforcement and severely limits the customer base. For commer-

cial devices intended for sale to the public, secrecy is not an option, and instead, patents are used to establish ownership of the key idea or innovation, and thus prevent unauthorised manufacture or usage. A potential investor will usually expect to see a patent or registered design, in order to protect his investment.

In the current case, the inventors have gone to great lengths to associate their patent to their marketing effort, as noted in Part1. We were not surprised to see, on the B.A.N.K. website, the declaration:

*Christie and Brits ... are the owners and inventors of a new technology expressed in an international patent application number PCT/AU99/00962. This invention has been applied to develop a device for generating electricity at no cost of fuel to run and without producing any pollution.*

There are many steps involved in patenting; it always extends over many years and costs tens of thousands of dollars. Thus, if we can examine the patent paper trail, we can expect it to reveal the inventors' key technology, what it achieves, how they think it works, and a time-line

---

of their technical and business activities.

In the case of inventions which are not in accordance with known physical laws, such as free energy machines, the inventors' claims are liable to change in response to adverse criticism. Then the patent is often very revealing about what was in the inventors' minds at that time, showing particularly their belief of how the device works.

As Brits and Christie advertised widely for investors, both family and corporate, their progress might be of interest to many people who have invested money or are considering doing so. Some knowledge of the patenting process and what to look for might also assist others considering investing in the multitude of other opportunities out there. It might also help Skeptical investigators to ask the right questions. Thus I will report on it in some detail.

### **Time-line**

The patent application process is notoriously long, complex and expensive. The paper trail for the Lutec invention indicates the following steps:

#### **1. In Australia:**

\* The Provisional Specification No PP6961 was filed in Australia on 06/11/98 by Intellpro, patent attorneys of Brisbane, Australia, and listed as the inventors Brits and Christie. In general a Provisional sets the priority date, important in the case of a dispute over who was first. It also starts a time-line specifying when other stages must be performed by. Provisionals are usually short and simple, often written by the inventor himself; thus it may be useful in showing the inventor's thoughts at this early date.

\* The Complete Specification was filed in Australia on 04/11/99. It was prepared by patent attorneys Griffith Hack of Brisbane. In general, a lot of effort is made to ensure the Complete must be legally correct. It must also describe what is

useful and novel about the invention.

\* Both Specifications became Open for Public Inspection (OPI) in Australia on 29/05/00. This means the public can then see them after that date. Some entrepreneurs scan all patents as they become OPI, hoping to find a valuable new invention and be the first to licence and market it (or perhaps to pirate it, if so inclined).

\* Christie and Brits' Australian patent application has not yet been "examined", so is not yet "granted".

#### **2. In the World:**

Under the Patent Co-operation Treaty (PCT), one application covers 92 countries, and, in effect, buys another 12 months before entering the National Phase.

\* Brits and Christie lodged under PCT on 04/11/99.

\* An International Search was completed on 25/11/99. Its purpose is to find the closest previous patents (it listed four). The Search does not make judgements on whether it will actually work or meet its stated purpose.

\* An International Preliminary Examination was due 3/01. Mr Carew told me that this took place, and it was examined and approved as claiming novel and inventive subject matter.

#### **3. In Specific**

Countries (National Phase): This means filing in individual countries other than the country of origin (Australia).

\* Deadline for filing was 22/05/01. This deadline calls for hard decisions, as each country costs a small fortune in attorney, application, examination and annual fees. I understand they filed in several countries, but I have been unable to locate the applications in searches, they may not have been processed yet. Usually, the most popular countries are USA, Europe (one applica-

tion cover many countries) and Japan.

### **Description of the Patent**

The Provisional Specification was titled "A Rotary Electric Converter And Controller Therefor". The description is very similar to the Complete Specification, which is addressed below. The PCT patent application may be seen at <http://l2.espacenet.com/dips/viewer?and> subsequent links.

The Australian Complete Specification was filed at the same time and is probably identical. It lists the inventors as Ludwig Brits and John Christie, of Cairns in northern Queensland, Australia. It was drafted by Mr Cliff Carew, a partner of Griffith Hack. I thought his comment would be useful.

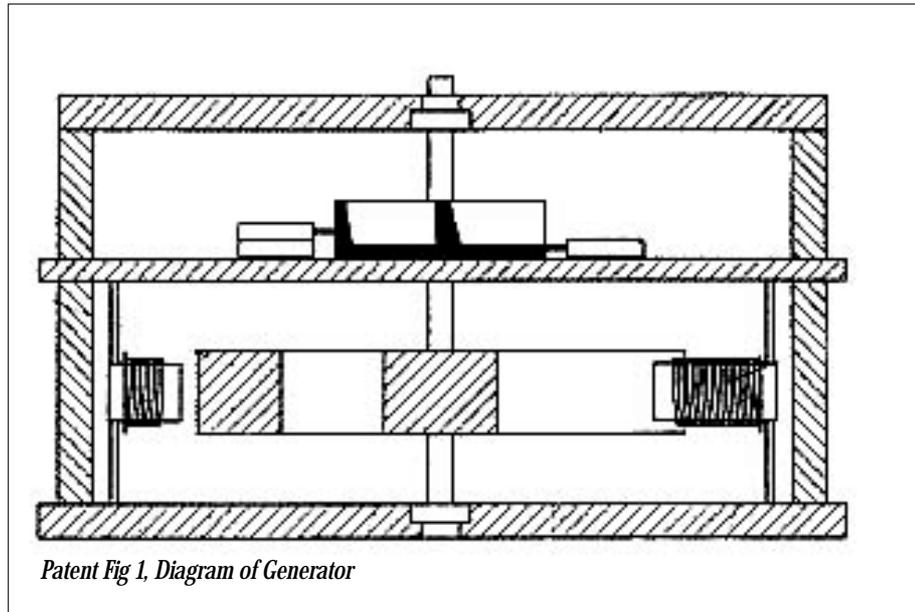
### **Abstract**

The abstract reads:

*A system for controlling a rotatable device, the system comprising a controller and a rotary device, which has a stator and rotor, wherein the controller is connected to the rotary device to control rotation of the rotary device, and wherein the controller is adapted to periodically energise [energise?] at least one energising coil of the device to create a magnetic field of a polarity which induces the rotor to rotate in a single direction and wherein the controller is switched off so as to de-energise the energising coil when other forces, being forces other than those resulting from the energised energising, coil produce a resultant force which induces rotation of the rotor in the single direction.*

*The detail in the patent describes, in the simplest implementation, a rotating machine with permanent magnets on the rotor, and electromagnets (iron cores with electric coils) on the stator (fixed part) (Fig 1 lower half).*

*A switching system driven by the shaft (upper half) provides current from an external battery into the coils, thus producing a torque and turning the shaft. So far this is the same as many common DC motors.*



Patent Fig 1, Diagram of Generator

### The Patent and the Free Energy Claim

We saw that the inventors closely associate this patent with investment in their free energy machine. Is this reflected in the patent itself?

\* The Provisional of November 1998 makes no free energy claim, only listing the purpose as “to improve the efficiency”.

\* Mr Cliff Carew, the attorney who drafted the patent in November 1999, told me that the inventors presented him with the central idea of using a timing switch to control electrical energy. In his opinion, it is a valid method of improving the efficiency of an electric motor.

They did, however, claim that it produces free energy, and he stressed to them that perpetual motion is impossible.

\* The patent text is very quiet on free energy, but pages 15 and 22 list among possible variations:

*The output produced by the rotary device can be mechanical and electrical at the same time... Current generated in the stator coil windings can be used as an output and likewise the torque generated by the rotor can be used to supply a mechanical output.*

\* When I put this to Mr Carew, he responded that this is meant in the same way that a car alternator may,

at the one time, put out electrical energy (via the terminals) and mechanical energy (eg to its cooling fan).

\* My difficulty with this interpretation is that a car alternator has a third interface: a shaft driven by a belt, which undoubtedly puts in energy. In contrast, the machine described in the patent has only two connections to the outside world, electrical to these stator coil windings, and mechanical to the one shaft, so there is no possibility of energy input at a third interface. This is confirmed in a letter from John Christie (4 Jan 01):

*By reconfiguring the coil, we can pump power back to the battery source, which then hold or even increases in charge level as the motor runs.*

So there can be both electrical and mechanical output (as distinct from input) at the same time. This indicates that the inventors intended the patent to support claims of free energy and perpetual motion.

More recently, the inventors' web sites and media statements show that they are relying heavily on the patent application to support their business claims for generating free energy (refer to above and Part One of this article).

### The Aspect of Critical Timing of the Electric Current

Putting aside the claim of free energy, does the patent contain any substance of value? The patent details describe at great length a special switch which provides, to the electromagnet, electric pulses of specific timing and duration. It shows a commutator with conductors that are tapered, in order to fine tune the pulse duration by adjusting the brushes vertically. The writer apparently believed that by applying current just long enough to overcome the natural magnetic attraction between the rotor's permanent magnets and the coil's iron cores, and then removing the current, more energy can be produced than is expected. John Christie has described this to the media, by web site, and to me.

Based on my experience as an electrical engineer, I see many flaws in the claim that this switch is novel or effective in improving efficiency:

\* Variable timing can be obtained electronically with ease, so this adds nothing new.

\* More amusingly, the writers do not seem to realise that in breaking the battery-electromagnet circuit instantly, the inductance will cause the current to keep flowing. In fact, copious arcing is very visible in their video of the device running! This wastes energy and will quickly erode the contacts.

\* They believe this timing is especially critical, as the switches are to be closed for precisely 12 degrees 51 minutes and 50 seconds of angle! (They could not possibly measure to this accuracy, so mathematicians among our readers might like to reverse engineer this figure to see what theory predicts it.)

Interestingly, the Provisional Patent a year earlier listed:

*typically 16 degrees 30 minutes of arc, the pulse being applied at 20 to 40 minutes of arc beyond a predetermined position...*

\* They believe this special timing makes the generator more efficient,

to the point of producing greater output than input.

The patent description includes a diagram of waveforms (see next column), but I cannot understand it. On seeing my comments, Mr Cliff Carew responded:

*The idea of combining an alternator with an electric motor by using a timing switch to control electrical energy fed to the overall system seems to be a viable proposition and is the one which is covered in the patent specification.*

Interesting, then, that the inventors are vigorously promoting it *only* as a free-energy machine, and its real efficiency is about 33%.

### Other Errors

The patent contains errors of spelling, grammar, and figures not referenced. For those readers with some electrical knowledge, the following should be of interest:

\* Page 3 states "... the back EMF urges the rotor to rotate ...". Actually a back EMF provides no force unless there is a circuit to allow current to flow. Page 19 repeats the mistake "... repulsion produced by the back EMF ...".

\* Figure 7, showing input voltage vs input current, and Fig 8, showing natural magnetic attraction, etc, do not make sense from an engineering point of view.

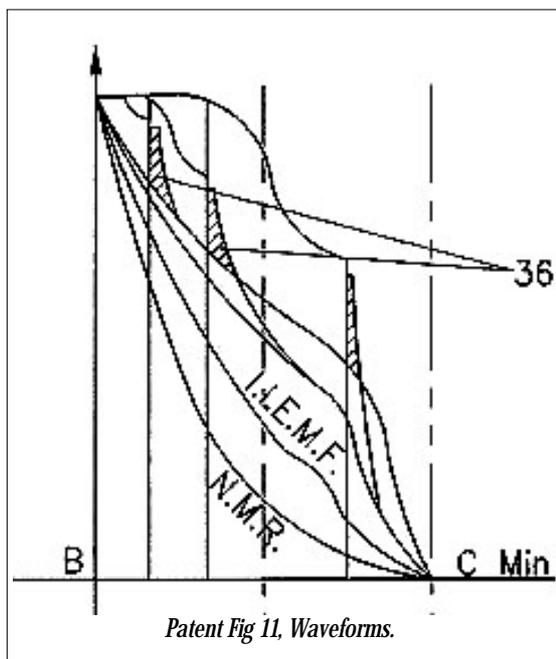
\* The writer of the patent believes that continuity of forward force is essential. He states that the coil should be energised at the moment the resultant of other forces becomes opposing (p. 3), and should be de-energised at the moment that other forces become assisting (p. 2). Without this, the rotor will not be able to spin continuously (p. 11). This belief ignores the inertia (fly-wheel effect) of the rotor.

\* A real engineering description of a motor would include analysis of ampere-turns, magnetic reluctance, air gap flux and the like. This patent instead contains confused ideas like

"natural magnetic attraction", "induced induction", and "ratios per second".

\* The magnetic force is referred to as the "mug force" (Fig 5). (A Freudian slip perhaps, referring to investors?)

\* There are many irrelevant digressions. Page 13 expounds that the coils may be wound from copper, silver, aluminium or other metals. The shape of the winding wire may be round, square, triangular, rectangular and others, and so on. In fact, the magnetising force of a coil is simply the number of turns of wire, multiplied by the current flowing; the choice of metal and the shape



are irrelevant to the principle of operation.

Mr Cliff Carew responded that my criticisms are just "wrong interpretations placed on wording that has been used". My view is that the patent documentation shows a lack of sound knowledge of mechanical and electrical principles.

### Can Patent Perpetual Motion Machines be Patented?

It is often reported that, in the USA, you cannot patent perpetual motion machines. This is due to a Statute for Prohibition if the patent violates the laws of nature. The Australian Com-

missioner for Patents, Ms Vivienne Thoms, advised me that Australia has no such Statute, so that the Government examiner cannot use that basis to reject a patent. However, the applicant must describe how it works, and give the best method for performing the invention. If the patent is later challenged in court, and the plaintiff shows that it violates the laws of nature, then the court will accept that the invention cannot work, and will not be useful. This is grounds for revocation of the patent..

### Will Attorneys cater to Perpetual Motion Machine inventors?

I posed this question to Mr Cliff Carew of Griffith Hack, who drafted this patent. He wrote that he understood it as a valid method of controlling a machine, which provides improved efficiency.

*I believe in the laws of physics, and that there is no such thing as a perpetual motion machine and I have made this clear to both John and Lou.*

In any case, based on other patents I have seen around the world, it is clear that there are some patent attorneys who are willing to draft and file patent applications which violate the laws of nature. Their staff (if competent) must know that the subject device will never work, yet they proceed to charge fees to the applicant. They could claim that they are supplying a service which the applicant desires, and so there is no victim. Skeptics would argue that this often indirectly results in investors being cheated out of their savings. The ethics of the situation need to be investigated.

### Comparison with Other Perpetual Motion Machines

Patents for perpetual motion machines cover a wide span of complexity. My collection includes the following:

\* The most fundamental such machine I have seen was a German

## Free energy?

patent showing a car motor containing eccentric weights on a shaft, the arm length varying with rotation angle. This scheme is re-invented periodically, such as in an Australian bicycle where the pedal arms are lengthened during the down-stroke. A rudimentary education in mechanics would reveal that this principle cannot produce free energy or improved efficiency.

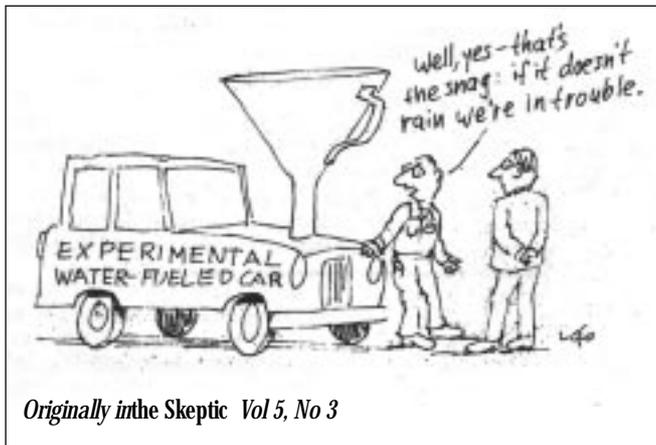
\* Of similar simplicity, but employing magnets, a device I saw at an exhibition consisted of two concentric aluminium cooking pots, the inner one (the rotor) free to spin on bearings. The inventors had glued magnets on the facing surfaces of the pots. When they gave the rotor a spin by hand, it lurched encouragingly. Even at the exhibition, they were desperately rearranging the magnets, in the naive belief that, once they found the right pattern, it would continue accelerating.

\* The Lutec machine is more complex being electromagnetic, but nevertheless the theory and practice is well-known. The Lutec patent contains no X-ray generators, cold fusion cells, or other high-tech devices which could gain access to exotic energy sources.

\* Further up the complexity scale, I investigated the water-powered fusion car of Steven Horvath of Brisbane, (*the Skeptic* 3:4 - now available on the *Great Skeptic CD*). His patent contained high-tech gizmos like an X-ray generator to ionise the incoming gases, thus (he claimed) making energy available for combustion. The then Premier, Joh Bjelke-Petersen, openly supported it, greatly to the amusement of his many critics. In order to analyse its technical claims, Australian Skeptics employed some advanced physics; the *Skeptic* article exposed it as a fraud.

\* The most complex perpetual motion machine I have personally investigated is arguably the monster machine which included shaft power,

electricity generation, heated gases, oscillating pistons, and mechanical rectification by ratchet. It cost a fortune to make, but, to the immense puzzlement of the inventors (who were skilled Italian technicians), it refused to run.



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### Why can't Free Energy Machines work?

This section reflects my many attempts to explain some basic physics to proponents of perpetual motion machines. I address it to the many I have argued with, to those proponents who may chance to read this, and to Skeptics in dealing with such inventors they may come across.

#### Energy exchanges on Different Scales

There is a quantity called energy, which matter can possess in many forms, including:

- \* Gravitational (more when a mass is high);
- \* Kinetic (when a mass is moving fast);
- \* Heat (more when the material is hot);
- \* Chemical (more when a material has the power to burn or go bang);
- \* Electrical (carried by current, and stored in electric fields);
- \* Magnetic (stored in magnetic fields);
- \* Nuclear (when an atom's nucleus undergoes fission or fusion).

The basic laws of physics are very well established; that is why we can

successfully design jumbo jets and cell phones. The most fundamental laws describe the forces and motions (interactions) of elementary particles.

The laws show that in every interaction, *without exception*, the energy given up by one particle is transferred to another particle. This is

equivalent to saying that in this basic interaction, the total energy is constant. This has been verified in a billion experiments, in classrooms and laboratories around the world. All scientists and a majority of members of the human race accept it.

When the particles are grouped together to form atoms and molecules, many of the fundamental interactions can be grouped together. There come into play higher-level interactions and laws (for example the field of chemistry). A chemical reaction can be regarded as summations of fundamental interactions. Thus, the total energy should be conserved, and indeed measurements and practice confirm it. When bulk materials are fashioned into a machine, the laws can be further coalesced into so-called macroscopic laws, which take into account the averaged properties of the materials. An example might make this clear: consider a rotating electromagnetic machine connected to a battery. Engineers design and test such systems every day.

#### Interactions include:

- \* Mechanical forces between two parts (due to physical contact, eg, bearings);
- \* Inertia (energy stored in the moving parts);
- \* Chemical to electrical (electrolyte and electrodes in battery generate current);
- \* Electrical to magnetic field (eg, current flowing from battery to coil of electromagnet);
- \* Magnetic fields (eg, surrounding permanent magnets);

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\* Magnetic to mechanical (eg, magnetic field generates torque urging rotor to rotate);

\* Magnetic to electric (eg, moving magnet in generator produces EMF (voltage) in a coil);

\* Electrical to heat (eg, coil heats up).

When such a motor or generator system runs, what do we find about the energy now? With so many exchanges, surely there is opportunity for new phenomena? Many free energy proponents believe (or at least claim) that by carefully fashioning the magnets, coils, pole pieces, etc (or the equivalents in their field), they can create more output than input.

Sorry, both the theory and the experiment are again unanimous: the total energy is conserved.

### Analogy with the Economy

Sometimes I try to explain by analogy. Consider two people with coins in their pocket. In an interaction, say A gives B \$5 (in exchange for a bag of apples), then anyone can see that A has \$5 less and B has \$5 more, and the total money held by the pair is unchanged. This is the same idea as exchanging energy in an interaction between two elementary particles.

Now consider a payment from one company (group of people) to another. The payment can be regarded as the combination of many elementary transactions, and the company payment is the summation of the individual transactions. It follows that money is conserved also at the larger scale.

Finally, consider transferring money among a set of companies; will this break the conservation law? Alan Bond tried this; his round-robins of loans and borrowings appeared designed to generate money out of thin air. He could not, or would not, see that the total money is constant.

Most people can see that, no matter how complex the purchases and payments, they are merely a summation of more basic interactions and there can be no "net gain". I hope that readers in doubt can see that

the workings of machines is analogous to the economy.

Energy is conserved at the lowest level, and through summation it follows that it is also conserved at the highest level. The law of conservation of energy is also known as the first law of thermodynamics.

### A Primer in Power and Energy

When confronted with claims of energy-saving devices etc, it is useful to be able to tell fact from bull-dust. Knowledge of some terms and units might be a help.

Power is measured in *watts*. A light bulb consumes around 100 watts of electricity, and a car engine might produce 110 kilowatts of mechanical power at its output shaft.

Energy is the power totalled over a certain time interval, and is measured in *joules*, one joule being one watt for one second. Our electricity bill charges us for electric energy in kilowatt-hours (kWh), and our gas bill charges us for the chemical energy which is available as heat output, in megajoules (MJ). A calorie in food is about 4.18 joules of chemical energy available to our metabolism.

The first law of thermodynamics simply states that energy is conserved, ie, may be converted between forms but may not be created or destroyed. There is also a second law of thermodynamics, which states that in any transfer of energy in a machine, some is wasted as heat. This means that if we put in say 100 watts of electric power into a motor, we can only get less than 100 watts out as useful shaft power. The ratio is called the efficiency.

Machine designers have been striving for hundreds of years to make their machines more efficient. Consider car engines, batteries for mobile phones, power stations, aluminium refineries. Any designer who can gain 1% in efficiency for their process (say from 91% to 92%) is doing their job well.

The above comments address common energy sources such as chemical, electrical, magnetic, and mechanical. There are some exotic energy sources which should be men-

tioned for completeness. If an inventor claims his engine runs on:

\* Nuclear fission (eg, from uranium);

\* Nuclear fusion (eg, Horvath car and cold fusion);

\* Antimatter;

\* Quantum fluctuations;

\* Zero-point energy;

\* Wormholes;

\* The electromagnetic aether;

then we cannot immediately dismiss their claims on the basis of conservation of energy alone. A deeper analysis (usually by a specialist) is called for, and in many cases we find that the claim does not ultimately make sense because the inventor's technical knowledge was deficient or feigned, as was the case for the Horvath hydrogen fusion car.

### Conclusion

Australian Skeptics (and their counterparts around the world) will continue to investigate claims of free energy, from both the theoretical and measurement points of view. We will keep an open mind on each case until the evidence is in.

Meanwhile, we can categorically say to such free energy proponents that, according to the laws of physics, their machines can not work. All measurements to date have confirmed this. Thus, such claims are based on false premises, and fall under the description of scams. To seek money or advantage from them, risks being labelled fraudulent.

To people considering investing in such schemes, we suggest you say to the promoters "Australian Skeptics say it is impossible; have you accepted their challenge?"



# Challenging Times

Australian Skeptics has, for several years, challenged proponents of testable psychic or paranormal claims to substantiate their claims under controlled conditions, offering the prospect of winning \$100,000. James Randi and the James Randi Educational Foundation have an even longer-running offer, now standing at over \$US 1 million, and other groups around the world have made similar offers for varying sums. To date there have been no successful claims on any of these offers.

However, in a recent flurry of publicity, one Victor Zammit, a retired Sydney solicitor, has apparently decided to take the Skeptics on at their own game and has issued a challenge of his own. It appears on his web site [www.victorzammit.com](http://www.victorzammit.com):

## *\$1 Million Challenge to Disprove Evidence of Life After Death*

*A reward of one million US dollars is offered to any sceptic anywhere in the world who can rebut and refute beyond absolute all the evidence for the existence of the afterlife.*

Is that clear? Mr Zammit seems to hold the opinion that all the Skeptics' challenges are somehow unfair to "talented psychics", though his stated reasons for so believing are, to say the least, unconvincing. He offers his counter-challenge in the following terms:

## *Why the challenge?*

*The million US dollar reward is guaranteed by four Sydney lawyers including myself – all experts in evidence – ...*

Well, that's a relief – it's nice to know that the loot is guaranteed by "experts in evidence". However, further reading of Mr Zammit's site leads one to the suspicion that he simply doesn't comprehend the difference between "evidence" as it *might* apply to a legal case and how it *does* apply in a properly conducted scientific investigation. In a somewhat imperfect analogy, let's look at this in terms he might understand.

## **An analogy**

Suppose that a crime is discovered somewhere in Australia. It is the role of the Crown to gather and interpret evidence that points to a likely perpetrator (someone they have *reason to suppose* might have been responsible), to lay charges against the accused person, to present the evidence in a court in such a way that the *impartial* adjudication process will be satisfied that the case is proven. Note that in this instance, the responsibility for "proving" the case rests entirely with the Crown (the claimant). Ideally, the defendant (the skeptic) is not required by law to do anything and (again, ideally) he is protected by

the "presumption of innocence" (the null hypothesis).

Similarly, if a claim is made about some alleged paranormal ability, the burden of proof rests solely with the claimant; the Skeptic is required to do nothing. Put simply, our challenge to the paranormalist amounts to:

*You claim to be able to levitate – well, levitate. You claim to be able to predict the future – well, predict. You claim that there is life after death – well, give us the evidence.*

At base, Skeptics' challenges simply require people to do what they claim they can do. We ask claimants to specify not only what results they expect from a test, but also what results would convince them they are wrong. And, prior to any test, Skeptics always ask claimants if they agree that it will be a fair test of their claims. Consequently, the results of any such test should be in no doubt to any observer.

Mr Zammit requires anyone seeking to take his "challenge" to refute "beyond absolute" (?) every little thing he (Zammit) can think of, that *he believes* to be evidence of an afterlife. In fact, what he is doing is to ask the skeptic to prove a universal negative – an impossible task. He also seeks to reverse the burden of proof.

Worse still, he proposes an adjudication panel to decide whether or not the claimant has won his challenge

(and this is where the analogy with the law breaks down). Far from being an objective process, as envisaged in a Skeptics challenge, his challenge will be decided purely by the subjective opinions of the adjudicators (of whom he is one). It's as though, in a criminal trial, the defence was entitled to appoint both a judge and a jury of its choosing, and to be the sole arbiter of what evidence was admissible. This is hardly a model one would expect to result in a fair trial, and it is nothing like a method by which one would conduct any sort of scientific experiment.

Not only does he wish to stack the jury, he also reserves the sole right to decide what evidence is allowed and who will be allowed to give it.

### Expert witnesses

Much of Zammit's site is taken up with promoting his book on the subject, together with cataloguing his own legal successes. He might well be as distinguished a legal practitioner as he claims to be, but that is entirely irrelevant to what he is proposing here. Expertise or distinction in one specialist field is no guarantee even of competence in an unrelated field, a fact that seems to have escaped Mr Zammit (indeed it is explicitly ignored by him).

Among the "experts" he quotes to support his belief is Prof Brian Josephson, who shared a Nobel Physics Prize for his work on superconductors. Prof Josephson has since gained some notoriety in scientific circles for his support of various "psi" phenomena. Whether or not this notoriety is warranted, as he has done nothing to demonstrate the existence of such purported phenomena, his belief in them is irrelevant to their existence.

Zammit further adduces in support of his case claims by all manner of other "expert" witnesses such as Sir Arthur Conan Doyle, Sir William Crookes and Sir Oliver Lodge, all distinguished late 19<sup>th</sup> Century literary or scientific figures who were all famously sucked-in by the then popular, but long-since discredited, spiritualist movement.

More importantly, he simply ignores any contrary evidence, which he characterises as being the work of "closed-minded, hard-core sceptics". In fact, anyone who disagrees with Mr Zammit is so characterised; he seems to harbour an intense dislike for all Skeptics, but above all for James Randi.

Apart from the "experts" who might have some skills in scientific fields, Zammit also mentions with approval such luminaries as Edgar Cayce (whom he spells Casey, indicating that he is working from hearsay and hasn't actually seen the name in print), Nostradamus (yes, really), various "Indian guides" of long deceased spirit mediums, Sai Baba, and other charlatans.

He even appears to believe that a claimed increase in the belief in the afterlife among the (US) population is somehow "evidence" in support of his case. A strange assumption, even for a solicitor.

### Wisdom?

However, he goes further than merely accepting all manner of dubious claims at face value; he has even distilled some "wisdom" from a raft of them, allowing him to postulate "Seven Laws of Psychic Energy". The first of these is actually true:

*All "solid" objects are vibrating energy.*

A profound discovery when Einstein first postulated it, but fatuous in this context and in stark contrast to those which follow. Law 2, for instance, states:

*The mind is an 'energy station' which creates transmits and receives energy.*

*i. The will (of the mind) can change the form of energy.*

*ii. Thoughts, which are waves of energy, can be transmitted to and from human minds within the earthplane and to human and other entities within the afterlife in a process called telepathy.*

Huh? And it's all downhill from there. The seventh in the series probably sums them up pretty well:

*Energy is a "boomerang" – the energy you give out will return to you.*

Profound, what? I'd like to suggest a somewhat more useful observation for Mr Zammit and others who engage in similar fantasies:

*Reality has a nasty habit of belting you over the head when you least expect it.*

### Further waffle

We all know that some lawyers tend towards the prolix, but Mr Zammit's web site takes this to hitherto unheard-of lengths. He makes much of the claim that his "challenge" has been running for some 300 days, and so far:

*No closed minded materialist skeptic has beaten the psychic's \$1 million challenge. The materialists, (sic) closed minded sceptics continue to fail to win the \$1 million reward!*

I suppose, to some people, if you have nothing much to say, then saying it twice, with the words in a different order and with bad spelling and grammar, adds to its gravity. Maybe that works in a court of law (though I doubt it), but it does nothing to disguise the fact that Zammit's challenge to Skeptics is no challenge at all. Nobody is likely to indulge Mr Zammit's vanity by engaging in his exercise of self-promotion, for that is all it is.

Far be it for this humble Skeptic to tell Mr Zammit, a highly qualified lawyer and self-professed "expert in evidence", how to conduct his business, but the evidence he proffers here, relating to his understanding of the nature of scientific investigations, would indicate that (putting it with all the delicacy we can muster), he wouldn't know his arse from his elbow.

**Barry Williams**



# Please Keep Listening

## Mixed results for attempts to remove dangerous gadgets from the healthcare sector

Following my report "LISTEN to My Story" (21:3) the NSW Health Minister, while recognising the seriousness of my concerns, advised me in that NSW Health would *not* duplicate the Australian Competition and Consumer Commission's (ACCC) April 2000 LISTEN distributor legal test case, and referred my concerns back to the ACCC. In October the ACCC advised it would take no further action, as it does not deal with the advertising or practices of individual clinics registered only as business names. They referred my concerns to NSW Fair Trading, who in turn advised me it would not be duplicating the ACCC-LISTEN legal case.

In July 2001 an inquest was conducted into the death of an 18 day old baby, born with a lethal heart abnormality medically diagnosed as 'aortic stenosis'. The baby was then allegedly tested by a naturopath using a "machine" and diagnosed as having "aortic stenosis and Tetralogy of Fallot" Media reports identified the device as a MORA, which was unknown to the baby's doctors. (Ref: editorial "Children in Peril", 21:3)

As a result, "What is a MORA machine?" has become a question being asked recently by many in the media, medical profession and the public. Many more may seek information in the future. The following information is derived from what is claimed by the proponents of the machine.

## MORA and EAV

Developed in 1977 by German MD, Dr Franz Morell and engineer, Erich Rasche, the name is a combination of both names. It is an exclusive design product manufactured and marketed by Mr Rasche's company, Med-Tronik in Germany, whose website lists 30 foreign agents servicing many more countries. The MORA is claimed to be a dual-function unit having both diagnostic and treatment capabilities, with the exclusive MORA name and the model number embossed on the front panel.

Dr Morell claims to have previously worked with another German MD and acupuncturist, Dr Reinhold Voll who, in the 1940s, coined the term EAV or "Electro-acupuncture According to Voll". This describes his system of using an electronic black-box type machine with a skin-probe that senses specific acupuncture points on the hands and feet for electronic signals or oscillations\*, which he claims emanate along meridians connected to body organs, parts and cells.

\* Note that the "skin sensing probe" of EAV machines does not work 'independently' of the operator in the 'testing' mode. As anyone who has ever used an Ohm meter would know, an operator can easily vary the results shown on an indicator scale, by varying the amount of pressure applied to the skin via the probe, or by the level of moisture present on the skin.



Cheryl Freeman is a former nurse and a tireless campaigner against bogus and dangerous pseudo-medical devices.

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Meters on the front panel register on a scale from 0 to 100 (50 being “normal”); above 50 indicates inflammation, below 50 indicates pathological degeneration. At some stage Dr Morell claims to have advanced his MORA’s diagnostic capabilities by attaching another ‘sensing plate’ so that body fluids, such as blood, saliva, urine and sweat, could also be ‘tested’, so aiding in the diagnosis.

To use the MORA as a treatment unit Dr Morell claims to have ‘programmed’ it to isolate what he called the “harmful or pathological signals”, then to modulate or invert them, delivering them back to the patient via the same acupuncture-skin probe as “healing signals or oscillations”. In this way he says, he is using “the patient’s own oscillations” to heal.

Further treatment is given by his “medicament test” - a system that takes the ‘guesswork’ out of prescribing. A selected homeopathic remedy (H/P) is placed on another sensing plate which determines if the remedy is appropriate. If it is, then its electro-signals are delivered to the patient via the skin probe, so giving the patient an extra “super-dose” of the H/P remedy which then continues to be taken by mouth as prescribed.

MORA machines have been highly recommended in Australia by qualified therapists, chiropractors and holistic MDs. They are currently priced from \$13000 for the basic model, to \$24000 (plus GST) for the new SUPER MORA. The sole marketer of the exclusive MORA warns about cheaper generic models in use.

### Other EAV Machines

EAV is the diagnostic system base of many other electro-diagnostic/treatment machines, such as, VEGA, THERATEST, DERMATRON, LISTEN and INTERRO. They are then termed “EAV machines” but, like the MORA, they all have other, added, “diagnostic” and/or “treatment” features.

What is significant now is that the LISTEN (with the same EAV as the MORA) has been shown in the ACCC’s Federal Court case in April 2000 to have no scientific basis, a finding reached earlier in 1999 by the

NSW Health Care Complaints Commission. (“Listen to My Story” 21:3.)

Of greater significance now is that, following appeals to the above authorities since the ACCC’s LISTEN case, so far there has been a total failure of all state and federal authorities to take any legal action against alternative health clinics that continue to promote and use LISTEN, MORA, and other types of “diagnostic” machines.

### Propaganda

During 2001 this high-profile ‘qualified and safe’ industry continues to ignore the ACCC’s LISTEN case. A report in *Nature & Health* by a Sydney therapist recommends various “diagnostic” modalities including “EAV to determine organ functions”. In *Diversity*, the journal of the Australian Complementary Health Association an editorial board member writes approvingly of “diagnostic technology like LISTEN and VEGA being widely used by naturopaths”.

Since writing “LISTEN to My Story” in July, in which I highlighted use of these devices on children, I have come across a high-profile qualified NSW therapist using the title of ‘Dr’ (claiming a PhD) advertising ‘Electronic Medicine’ – “a diagnostic-tissue sample-body fluid-DNA testing machine” with no specific name only a number, “a specially modified unit purchased in the UK, the only one of its type in Australia”. What is extremely disturbing is that the “tissue sample tests” conducted by this machine have been promoted by the therapist in her regular *Well-being* magazine column. In these she makes the most extraordinary medical diagnostic claims and reports on her safe and highly effective use of these ‘tests’ on babies and children.

It is impossible to know how many types of nonsense-bogus electro-diagnostic-treatment devices, masquerading as scientific medical technology, are being used in alternative health and integrative medicine clinics around Australia, nor the extent of their use on babies and children.

What we do know is that there are no compulsory warnings, education or effective consumer protection.

Clearly, state and federal legislative reforms are urgently needed. (See following item, “Proposals for Health Devices Regulation”).

During November I have once again submitted updated appeals, highlighting the risks to babies and children and including the above Proposals to the NSW Ministers for Health and Fair Trading and to the National Coordinating Committee of Therapeutic Goods. The new federal Health Minister should give the ‘devices’ issue top priority.

It is also important for me to report to you that I have received another formal legal threat attempting to thwart public knowledge of the devices industry, this time from the solicitor for a therapist’s LISTEN clinic. It accuses me of “agitating and generating unfavourable media interest in his client’s legitimate LISTEN business.” I advised him that there was no such thing: that LISTEN (and similar diagnostic devices like VEGA and MORA) were proven blatant frauds. This therapist has promoted the LISTEN as “especially risk free and safe to use on children.” I refused to sign their apology and demand documents.

### Conclusions

There are a number of critically important facts to note about the claims made for these devices.

They are based on *beliefs* (and it can be put no higher than that) about human anatomy and physiology, for which not only is there *no* evidence, but which is in serious conflict with a great deal of what *is* known about the subjects, with a high degree of confidence;

They are based on the assertion that the *same device* can be used for *both* diagnosis and treatment, a highly dubious assertion, to say the least;

Despite a successful prosecution, for claims judged to be “deceptive and misleading”, of the distributor of one such device, health and regulatory authorities continue to ignore the proliferation of these potentially dangerous gadgets among “alternative” practitioners.

# Proposals for Health Devices Regulation

If vulnerable consumers are to be protected from the deceptive and dangerous practices of the bogus health devices industry, we must first acknowledge that the current regulatory system is totally ineffective in addressing the very real dangers to health that these devices pose.

Whatever regulatory and penalty systems are instituted, it is imperative that they feature public education as a major component of both systems. The qualified alternative health and integrative medicine industry can hardly be trusted to inform consumers about the true nature of the devices, given its track record of support for such devices and of bombarding consumers with a mass of false, misleading and dangerous propaganda.

Regulations should restrict the sale and importation of any devices making explicit therapeutic claims about serious diseases, unless and until they can be demonstrated to perform as claimed.

Here, briefly, are some of my suggestions, based on over sixteen years experience dealing with the devices issues.

## **Prohibition of all unsubstantiated Clinical-Medical-Diagnostic-Therapeutic Claims**

All devices for which therapeutic (etc) claims are made regarding serious diseases and infections, organ and immune system functions, allergies, toxicity, hormone levels, and including all health screening/checking/testing/analyses/assessments must be able to substantiate those claims with evidence of properly conducted trials and research. *In no way should these devices be treated any more leniently than are any legitimate medical devices.*

Use of testimonials from persons allegedly suffering from specific medical conditions is not sufficient.

Claims such as “can screen for and treat imbalances in energy fields (chakras, chi, qui, ki, life and vital force and so on)” may be permitted, but these *must not* be translated into any health or medical claims.

Any such clinics should prominently display notices that devices used in the clinic are not approved as medical devices.

## **Prohibition of all “Safe to Use on Children” Claims**

For reasons stated in previous articles.

## **Public Health Warnings**

Health authorities should have the power to issue public warnings, coupled with the power to solicit information from the public during investigations, whenever serious concerns are reported about the promotions and use of specific devices. Official investigations should not be conducted in secrecy; the public has the right to be fully informed from the outset and to be warned.

## **Other Prohibitions**

Clinics using such devices should be prohibited from advertising themselves as “Health Screening”, “Diagnostic”, “Advanced Diagnostic”, “Hi-Tech Health”, “Allergy and Asthma Prevention” or “Breast Assessment”, or from otherwise intimating that they are carrying out medical procedures.

Operators should be prohibited from claiming such qualifications as “medical technologist” or “diagnostic technician”, unless such qualifications are from recognised tertiary institutions.

## **Essential Proof Powers**

Given flaws in current legislation, new legislation must require that the burden of proof in support of claims should always lie with the promoters.

## **Penalties**

Government health and fair trading legislation should include a penalty system for offenders that includes substantial fines, client refunds and publication of “Retraction-Correction Notices” in newspapers and in all areas where illegal advertisements and promotions were published. This is the only way to ensure continued public and mainstream and alternative health media education.

One way to educate and protect health consumers is to require compulsory warnings, that the devices are not approved for therapeutic use, are to be placed in all clinics in full view of clients, on all clinic documents, and on all advertising and promotional material regarding these devices.

## **TGA Health Devices Warning**

The *Therapeutic Goods Act* should be amended to require all unscientific health devices to be listed on a special list titled “TGA Health Devices Warning List (or similar)”. In this way no one can misuse the TGA-LIST and falsely promote devices as “TGA Endorsed and Approved”, as happened under the former flawed and now abolished ARTG-AUST L system.

This new system could operate in the same way as the previous system: requiring all imported and Australian devices to be listed; all advertising claims checked for compliance; general and electrical safety of devices tested; and requiring manufacturing and importing companies to be registered (eliminating the backyard electronic tinkerer market), before any device could be imported, marketed, sold or leased in Australia.

Others may have better ideas. The point is we must do “something” especially when babies and children have become needless victims. 

# Ignorance is Strength

## Condemning cancer quacks out of their own mouths

Let's start by looking at some statements by people in the cancer curing business. All of these people claim to know the cause of cancer and also claim success in treating it.

### Lorraine Day

*Cancer is cancer! Whether it is prostate cancer, stomach cancer, brain cancer, breast cancer, lymphoma, melanoma, leukemia (cancer of the blood) or any other type of cancer. All cancer is a result of an immune system that is not working properly. Fortunately, all cancer responds to rebuilding the immune system by natural methods. The immune system cannot be rebuilt with drugs because all drugs have side effects that eventually suppress the immune system and damage the body even more.*

### Stanislaw Burzynski

*Dr Burzynski first discovered and named antineoplastons in the late 1960s. These drugs are safe and nontoxic, unlike traditional chemotherapeutic agents. Antineoplastons are comprised of compounds that occur naturally in the human body:*

*amino acid derivatives and peptides from proteins and essential amino acids present in the diet of all biologic organisms. Antineoplastons are found in the blood of healthy persons and not in that of patients with cancer. Dr Burzynski currently is using antineoplastons to treat cancer, HIV infection, and auto-immune diseases in 74 Phase II clinical trials.*

### Hilda Clark

*For many years we have all believed that cancer is different from other diseases. We believed that cancer behaves like a fire, in that you can't stop it once it has started. Therefore, you have to cut it out or radiate it to death or chemically destroy every cancerous cell in the body since it can never become normal again. Nothing could be more wrong! And we have believed that cancers of different types such as leukemia or breast cancer have different causes. Wrong again!*

*In this book you will see that all cancers are alike. They are all caused by a parasite. A single parasite! It is the human intestinal fluke. And if you kill this intestinal parasite, the*



*Peter Bowditch, a Vice President of NSW Skeptics, maintains web sites dedicated to exposing pseudo-medical and similar claims.*

## Ignorance is Strength

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*cancer stops immediately. The tissue becomes normal again. In order to get cancer, you must have this parasite.*

*How can the human intestinal fluke cause cancer? This intestinal parasite typically lives in the intestine where it might do little harm, causing only colitis ... or irritable bowel syndrome, or perhaps nothing at all. But if it invades a different organ, like the uterus or kidneys or liver, it does a great deal of harm. If it establishes itself in the liver, it causes cancer!*

*It only establishes itself in the liver in some people. These people have propyl alcohol in their bodies. All cancer patients (100%) have both propyl alcohol and the intestinal fluke in their livers. The solvent propyl alcohol is responsible for letting the fluke establish itself in the liver. In order to get cancer, you must have both the parasite and propyl alcohol in your body.*

### **Sam Chachoua**

*This well-known phenomenon relates to the ability of some animals to be totally resistant to diseases that are lethal to others. HIV, for example, will only infect humans with deadly consequences. Most animals tested will reject attempted infection. Why not use an animal's immune response to generate passive vaccines against AIDS?*

*Before the pharmaceutical age, doctors used horse sera in the treatment of Rabies, Polio, Small Pox and other plagues. Why not employ the same logic today?*

*The ability to raise passive vaccines and Dr Chachoua's ability to transfer resistance to human cells enables the neutralization of the viral mutation problem with other therapies. The success of this approach has been remarkable, both in the laboratory as well as in humans.*

*The study of these miracles of nature where incurable disease magically*

*disappears has led many scientists to conclude that certain infections are capable of destroying cancer tissue (cf. Coley, Didot, Duffy). The relationship between infections and cancer was further expanded upon by investigators such as Scott, Glover and Livingston. Largely ineffective vaccines were developed by these scientists. Dr Chachoua developed thousands of vaccines and therapeutic products based upon this phenomenon. He was also able to elucidate the real cause and function of cancer. His vaccines include tagging agents capable of attaching themselves to the cancer cells and making them immunologically tempting targets as well as a battery of specific, non-toxic therapies. The shrinkage of large cancer lesions within days and the disappearance of symptoms can be expected and delivered."*

### **Cancer cures all**

I hope that this clears everything up, but I will summarise these findings for you. Dr Day (who is a qualified medical doctor), says that all cancer is caused by a failed immune system and can be cured by praying and consuming extract of barleygreen. Drugs are bad.

Dr Burzynski (who is a qualified medical doctor) says that all cancer is associated with an absence of antineoplastons and that replacing these chemicals (a form of drug treatment) will fix the problem.

Dr Clark (who has a legitimate PhD in physiology and a Doctor of Naturopathy degree from a correspondence school) says that all cancers are caused by a thumb-sized parasite in the liver and that killing this grub with electricity cures cancer immediately.

Dr Chachoua (who is a qualified medical doctor) says that cancer is a result of an unfocused immune system and that certain drugs can enable the immune system to target cancer cells more effectively.

To the untrained eye, these differing views of cancer and its causes and cures might seem contradictory. In fact, you might even say that they are mutually exclusive, in that they

all propose completely different causes and cures for cancer, with no possible overlap. If you were a believer in "alternative medicine", however, you would see no inconsistency at all. As all of these stories have the common property of being opposed to "conventional medicine" (read "medicine"), they can all be correct simultaneously.

### **A windfall**

Dr Chachoua recently won a court case against Cedars Sinai Hospital in Los Angeles and was awarded \$11 million in damages. I will write that out in words - eleven million US dollars. He was awarded this because the hospital's research arm had discontinued contracted research into his techniques. On his web site, Dr Chachoua suggests that his cure has been common knowledge for a long time and that it is a disgrace that this simple answer has not been taken up by conventional medicine. After the court-endorsed theft of money that could have been used for real research, Dr Chachoua created another web site which said that the \$11 million was going to be used to do all the research again because all details of it had been lost by the hospital.

These statements seemed inconsistent to me - it was going to take \$11 million to refund the obvious - but, as I am a simple shill for allopathy, perhaps I just don't understand. (It seems that Dr Chachoua didn't use any of the \$11 million to pay for registration of his domain name because the second site now points to a pornography sales outlet. I can understand how looking at dirty pictures could make someone's final days more interesting, but I don't think it's a cure for cancer.)

I found out about Dr Chachoua's windfall when someone posted details of this major victory for "alternative medicine" on an Internet mailing list inhabited by devotees of Hulda Clark. It was received with great pleasure and rejoicing. The person who posted the message had read it on a similar list devoted to the followers of the Burzynski creed,

where it had engendered a similar enthusiastic response.

The truly amazing thing is that any rational follower of either Burzynski or Clark should consider Chachoua to be an outrageous charlatan because he says quite clearly that their heroes are one hundred percent wrong. I have, in fact, openly challenged the supporters of these different curers to join me in denouncing all the other ones as quacks but the only response I got was to be accused of opposing “alternative medicine”. Guilty, Your Honour.

Another thing that all these curers have in common, as well as being alternative, is that they are all being suppressed by the great billion-dollar cancer conspiracy. That’s the conspiracy that has doctors and executives of pharmaceutical companies and fund-raising organisations letting members of their families die from cancer because they are forbidden from mentioning the alternatives and therefore threatening their employers’ profits. The amazing thing to me is that these people are so suppressed that Lorraine Day can only appear on television weekly, Hulda Clark can only sell a few hundred thousand copies of her books every year (you can only get them through underground outlets like Amazon.com), Burzynski can charge \$125,000 to participate in a “clinical trial” (because the authorities allowed him to exploit a loophole in the law which said that a clinical trial was not a “treatment”), and Chachoua can only get \$11 million from a court. It seems to be an amazingly ineffective conspiracy.

### **Doublethink**

The title of this paper – “Ignorance is Strength” – is a suitable slogan for the “alternative medicine” movement. It was suggested by George Orwell in the novel *1984*. The following paragraph contains a possible manifesto for the movement, based on something else that Orwell wrote in the novel.

*Doublethink means the power of holding two contradictory beliefs in one’s mind simultaneously, and ac-*

*cepting both of them. The (Altmed) intellectual knows in which direction his memories must be altered; he therefore knows that he is playing tricks with reality; but by the exercise of doublethink he also satisfies himself that reality is not violated. The process has to be conscious, or it would not be carried out with sufficient precision, but it also has to be unconscious, or it would bring with it a feeling of falsity and hence of guilt.*

Doublethink lies at the very heart of Altmed, since the essential act of the Party is to use conscious deception while retaining the firmness of purpose that goes with complete honesty.

*To tell deliberate lies while genuinely believing in them, to forget any fact that has become inconvenient, and then, when it becomes necessary again, to draw it back from oblivion for just so long as it is needed, to deny the existence of objective reality and all the while to take account of the reality which one denies – all this is indispensably necessary. Even in*

*using the word doublethink it is necessary to exercise doublethink. For by using the word one admits that one is tampering with reality; by a fresh act of doublethink one erases this knowledge; and so on indefinitely, with the lie always one leap ahead of the truth. Ultimately, it is by means of doublethink that the Party has been able – and may, for all we know, continue to be able for thousands of years – to arrest the course of history.*

One day I will write something about similar inconsistencies in the diet business. In the meantime, if I combine a no-fat diet with a no-carbohydrate one, add a touch of no-protein, avoid meat and dairy products, stay away from anything with additives or artificial vitamins and completely eliminate anything with a trace of genetic engineering I will probably lose weight and lower my risk of diabetes. The beauty of it is that I wouldn’t have to stay on this regimen for more than a couple of weeks before I saw the effects.

### **References**

1. The Lorraine Day quote is from her web site at [www.drday.com](http://www.drday.com)
2. The Burzynski quote is from the Burzynski patient group web site at [www.burzynskipatientgroup.org](http://www.burzynskipatientgroup.org). Dr Burzynski’s own web site is at [www.cancermed.com](http://www.cancermed.com), where he is a smart enough not to talk about curing anything, preferring to leave that to the “patient group”. There are two advertising sites for the Burzynski clinic at: [www.cancerbusters.com](http://www.cancerbusters.com) and [www.ouralexander.org](http://www.ouralexander.org).
3. The Hulda Clark quote is from her book: *The Cure for All Diseases*. That’s *The Cure for All Diseases*, in case you missed it the first time. The Clark web site is at [www.drclark.net](http://www.drclark.net), although, like Burzynski, she prefers someone else to run the site and make the claims. If you look at [www.savedrclark.org](http://www.savedrclark.org) you can see how Clark reacts to criticism.
4. The Chachoua quote is from his web site at [www.nexusmagazine.com/chachoua.html](http://www.nexusmagazine.com/chachoua.html)

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# Why do Alternative Therapies Work?

## Research shows reasons why some "alt" therapies work

Yes – they do work, sometimes. These therapies include aroma therapy, reflexology, homeopathy, naturopathy, retinopathy, faith healing, acupuncture – to name but a few. There is no doubt that some patients (alternative therapists call them clients) do respond to these methods, and there are several reasons for this. It is not due to an understanding by the therapist of pathology (the scientific study of disease processes).

The simplest explanation of a patient's recovery following alternative therapy is that there is no connection between the recovery and the treatment. The natural history of most chronic (long standing) diseases is characterised by periods of exacerbations and remissions.

A well known example is the clinical picture of multiple sclerosis. Indeed, the history of exacerbations followed by remissions at irregular intervals is one of the diagnostic features of this neurological disease. It is understandable if a patient accounts for a remission if he or she has had some treatment – any treatment – beforehand.

### Placebo

Next we must consider the placebo effect. It is well known that inert pills or medicines or injections "cure" 30% of patients. The placebo effect is due to the surprising power of suggestion. Even more surprising is the finding in recent years of a biochemical explanation for the placebo effect. Much research has been spent on this subject.

Colin Blakemore<sup>1</sup> describes research at the University of California San Francisco (UCSF) with dental pain patients. Half were given a placebo injection of sterile saline solution by an automatic machine without a doctor in sight. The other half were given the same injection by the doctor himself in an operating theatre atmosphere. The group ministered to by the faceless computer had little alleviation of pain. But those who had the personal care of a doctor had marked relief of symptoms.

Hans Kosterlitz<sup>2,3</sup> at Aberdeen University, George Pasternak<sup>6</sup> in London, S.H. Snyder<sup>6</sup> at Johns Hopkins, Roger Guillemin<sup>5</sup> at UCSF (who was awarded a Nobel Prize) and A. Goldstein at Stanford University, were among the pioneers who discovered in 1975 a peptide in the brain with morphine-like actions. They called it enkephalin (Greek "in the head"). Pasternak<sup>6</sup> at St George's medical school in London and Snyder<sup>6</sup> at Johns Hopkins, Baltimore identified opiate receptors in rat brain ie, cells specifically adapted to receive opiates such as morphine. Kosterlitz and Hughes<sup>2</sup> described how the brain was producing its own opioid, now known as endorphin. In stressful or painful states the brain's own opium-like analgesic would relieve pain and anxiety.

Kosterlitz<sup>3</sup> described the biosynthesis of opioids in the animal kingdom and the production of endorphin in the brain. Goldstein<sup>4</sup> at Stanford University included the pituitary gland at the base of the brain in the



*Dr Sydney Bockner is a psychiatrist and a member of the SA Skeptics.*

production of opioid peptides including endorphin. Bloom, Guillemin *et al*<sup>5</sup> found profound behavioural effects in rats and suggested this effect of endorphin might be a new factor in mental illness. The pain relieving effect of the brain's own opioid could account for the analgesic action of several alternative therapies, eg, the relief of pain by acupuncture.

The proof of this concept was made by the discovery of a new drug which neutralised the pharmacological effects of morphine. This was the synthetic drug naloxone (naltrexone) which blocked the morphine receptors in the brain and thus acted as a morphine antagonist. It was found that naloxone cancelled the pain relief produced by acupuncture. Thus research at UCSF revealed that naloxone not only neutralised morphine analgesia, it also neutralised the analgesia produced by a placebo. Howard J. Fields at UCSF treated volunteers with dental pain. Half of them he gave morphine injections, the other half he gave sterile water injections. All the patients given morphine developed relief of pain. 30% of

patients given water injections also had pain relief – the well known placebo effect. He then gave all the subjects naloxone injections. The morphine group had a quick return of their dental pain, indicating the neutralisation of the morphine by naloxone. However the 30% with sterile water analgesia also experienced return of pain. Here was a morphine antagonist neutralising placebo analgesia, thus proving that the body was producing its own morphine.

### Wrong diagnosis

Another explanation of “cure” by alternative therapy is that the wrong diagnosis has been made. The majority of “amazing cancer cures” fall into this category.

Hysteria is a psychoneurosis which simulates organic, physical disease. These patients may have gross physical symptoms such as an abnormal gait, or paralysis, or loss of memory, or blindness, or convulsions – but with no physical signs of organic disease. Patients with this disorder are susceptible to alternative

therapies, and indeed tend to seek alternative medicine practitioners, particularly if they have been told that their illness is “psychological”. In fact alternative therapy is often more successful than orthodox therapy in these cases. Here we have a situation where a pseudo physical illness responds best to a pseudo treatment! However, the underlying psychological disorder remains unchanged.

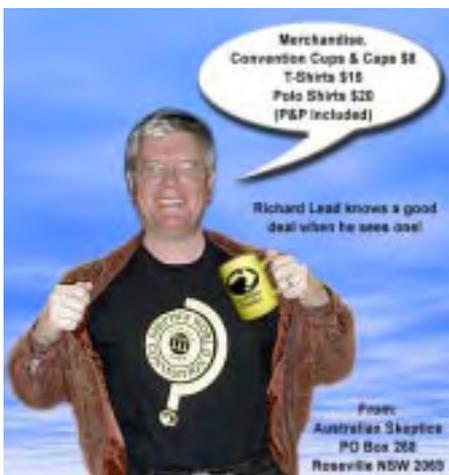
Alternative therapies tend to be encouraged by the media. “It must be true - I read it in the papers”. The claims of alternative therapists should be viewed with skepticism.

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# Christianity and Fundamentalism

**Prof Philip Almond charts  
that which distinguishes  
fundamentalists from  
other Christians**



*Philip C Almond is Head of the School of History, Philosophy, Religion, and Classics at the University of Queensland. He is the author of seven books.*

“The Bible is a plain book,” declared the early fundamentalist preacher Charles Hodge in 1857. “It is intelligible by the people. And they have the right and are bound to read and interpret it for themselves; so that their faith may rest on the testimony of the Scriptures, and not that of the Church” (Boone 17). Here is a central image of fundamentalism – as true today as 150 years ago. The simple uneducated reader, unchurched and untutored, opens the Biblical text, reads, and finds salvation. For Hodge, the text, read by a reader illuminated by the Holy Spirit, is sufficient. The Text itself instructs the reader, and the Church is an obstacle to the true reading of the text.

My aim in this article is to show why Hodge’s claim makes sense within the rules of Fundamentalism, but cannot make sense to anybody who is not part of the form of life which allows those rules to exist. And I want to argue that this is because Fundamentalism is what the French philosopher Michel Foucault would call “a discourse” and that the Fundamentalist simply reading his Bible is immersed in a whole mass of texts

that belong to a single discursive formation – Fundamentalism – written by “so many authors who know or do not know one another, criticise one another, invalidate one another, pillage one another, meet without knowing it and obstinately intersect their unique discourses in a web of which they cannot see the whole, and of whose breadth they have a very inadequate idea” (Foucault, 126). What I hope to do then is to uncover the logic, to lay out the rules, of this complex version of Christianity.

Broadly speaking, Fundamentalism is the extreme end of that form of Protestantism known as Conservative Evangelicalism. So there is some truth to the notion that a Fundamentalist is a Christian who believes that Billy Graham is a liberal. Certainly it can be said that Fundamentalism is that movement that sees itself as struggling for true Christianity against a new non-Christian religion – liberalism, modernism, or secularism that it believes has affected Western Culture generally, and infected Protestant Christianity in particular.

The historical origins of the term

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are clear. The term “fundamentalist” was perhaps first used in 1920 by Curtis Lee Laws in the *Baptist Watchman-Examiner* to identify those who believed and actively defended the fundamentals of the faith, “to do battle royal for the Fundamentals” as he put it. It referred back to a series of twelve small volumes published between 1910 and 1915 which defended the whole range of traditional Christian teachings against what it saw as their current enemies – Romanism, socialism, modern philosophy, atheism, Mormonism, spiritualism, and so on, but above all liberal (Protestant) theology, German higher criticism of the Bible, and Darwinism. By 1920, the fundamental doctrines it was concerned to defend were the inerrancy of Scripture, the virgin birth of Christ, the substitutionary atonement of Christ, Christ’s bodily resurrection, the historicity of the miracles, the Deity of Christ, and in some cases the premillennial second coming of Christ.

### **The Bible and its Authority**

Central to the defence of all of these was that of the Bible and its authority. And the authority of the Bible is, for the fundamentalist dependent upon the assumption of its autonomous meaning, which means its literal truth. Asked what the literal truth of the Bible means, the fundamentalist response will be its “common sense” meaning. Deep, hidden, or esoteric readings of the text are rejected in favour of its plain meaning. At the very least, this means that fundamentalists are genuinely committed to a particular understanding of religious truth.

And it is an understanding of religious truth that it shares with some Muslims and Jews: namely, that truth in general and religious truth in particular is propositional. Religious truth is primarily truth that can be put into sentence form, for intellectual assent. Truth is, moreover, the correspondence of a proposition with an external reality, with things as they really are or were. It follows from this that any biblical

passage has only one meaning, the literal one, which is its correspondence to some thing or event in space and time. It is the happening of an event, rather than any significance which may underlay it which has importance.

Now Fundamentalism prides itself on incarnating, as it were, not only true Christianity, but original and primitive Christianity. But here, in its most core belief in the single meaning of the Bible it is unknowingly and unerringly (inerrantly, one might say) modernist. Prior to the Enlightenment, the Bible was generally seen as being a multilayered text, with multiple meanings. To be sure, the text had a literal or historical meaning but also allegorical, typological, moral, and more generally a mystical or hidden meaning, which it was the task of interpretation variously to bring out. But the Enlightenment left the literal/historical as the only meaning. With the rise of historical criticism in the post-enlightenment period, the meaning of the text was sought behind the text, as it were, in its history. But for Fundamentalists, there is no historical meaning behind the text. The text and its historical meaning coincide – this is what taking the Bible literally *literally* means.

For Fundamentalists, this coincidence of text and meaning is grounded in the Reformation. They see themselves as heirs of the Protestants Reformers. Where the Reformers held firm against the tyranny of the Church in their emphasis on the authority of Scripture, so they stand firm against the oppression of Biblical scholarship. Where the Reformers stood against the control of the Bible by an ecclesiastical elite, they see themselves as nailing themselves against the wall of a Scholarly elite. For the Fundamentalist, the medieval allegorical method of Roman Catholicism has simply been replaced by the modern historical methods of liberal Protestants, or more recently, by Catholic historical criticism, and it is equally pernicious. In this sense, where by “intellectual” we intend the Biblical critics of the

Universities and Seminaries of the mainstream denomination, Fundamentalists are proudly anti-intellectual. The badge of “the simple Bible Christian” is worn with pride.

But of course, neither Luther nor Calvin were fundamentalists in the modern sense. Quite the contrary. Luther saw the authority of the doctrine of Justification by Faith overriding the authority of Scripture, and was more than happy to see the Epistle of James removed from the Canon of Scripture. In contrast to the modern Fundamentalist, the Reformers were able to distinguish between the Word of God and the words of God. For the reformers, the Word of God lay behind the words of God; for Fundamentalism, there is no distinction between Word and words. Thus the reformers, like liberal theologians in the modern period are able to distinguish between the meaning of the text and the medium of the words. For the Fundamentalist, no such distinction is possible: the medium and the message are identical. And thus we can see why, for the Fundamentalist, to question the medium, the words themselves, is to question the message, the Word of God, and is tantamount to questioning the authority of its author – God.

### **An Inerrant Text?**

Having said all which, and as James Barr has pointed out, the real concern of the Fundamentalist is not with the literal truth of Scripture but with its inerrancy. Literalness may vary up or down. But it is inerrancy that is the constant factor:

*Being wholly and verbally  
God-given,*

(Declared the Chicago Statement on Biblical Inerrancy in 1978)

*Scripture is without error or fault in all its teaching, no less in what it states about God’s acts in creation, about the events of world history, and about its own literary origins under God, than in its witness to God’s saving grace in individual lives. The authority of Scripture is inescapably impaired if this total*

## Christianity and Fundamentalism

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*divine inerrancy is in any way limited or disregarded, or made relative to a view of truth contrary to the Bible's own... (Boone, 26).*

Thus, a literal interpretation of the Genesis story would have it that the earth was created in what the text says, six days, and some fundamentalists will hold to this. But many fundamentalists, taking into account scientific data on the age of the earth will accept "days" as referring to geological ages. Thus is the text squared with science, and its inerrancy maintained, although at the expense of its literal truth.

Inerrancy is crucial for another reason. For Fundamentalists, the admission of one error is the thin end of a wedge which inevitably leads to atheism. Admit a textual error and, it is believed, the next thing you know you will be denying the Resurrection of Christ and the whole mansion of Christian cards will come tumbling down. More importantly, the Bible is inerrant because it tells us so. Jesus says the Bible is without error, as do Peter and Paul. Thus it is so. As James Barr puts it:

*the full theological status of Jesus Christ and the Apostles is deployed as a power that will enforce the traditional authorship and historicity of these various documents. Jesus said this, and this is final; to question this is to say that he was wrong, and if he was wrong in this, then he may perfectly well be wrong in everything (Barr, 73).*

Thus for example, R.G.V. Tasker:

*If He (Jesus) could be mistaken on matters which He regarded as of the strictest relevance to his own person and ministry, it is difficult to see exactly how or why He either can or should be trusted anywhere else. (Barr, 74).*

The circularity involved in the argument that the affirmation by the Bible that it is inerrant is guaranteed by its inerrancy is obvious. But in defence of the Fundamentalist, it should be said that the inerrancy of the Bible is not a doctrine drawn from the Bible's claims about itself.

That the Bible is inerrant is a grammatical law of fundamentalist discourse prior to any claims the Bible may make about itself. That it does itself claim to be so is, for the fundamentalist a bonus extra.

Thus Fundamentalism sees itself as reproducing the world of the Bible. And for this reason, Fundamentalist preaching lives in Biblical space. To John Rice:

*The sermon must be definitely scriptural... One ought to establish the theme of the sermon directly upon a text or Scripture in the plain meaning of that Scripture, and then one should prove all the subdivisions of the sermon by Scriptures. It should be distinctly a Bible kind of sermon (Boone, 97).*

There is an implicit denial here that the preacher is interpreting the text. And there is a concealment of the interpretive role of the Preacher which empowers him in his authority over ordinary believers. It is God's word not his own word that he delivers. So paradoxically, the denial of the power to interpret the text empowers the preacher. He can assume divine authority, and wield discipline within his Church. Writes Jerry Falwell:

*The Thomas Road Baptist Church, attempts to get every believer to join the church, hence under the discipline of the Word of God. ... Discipline is not found in 'consensus' of deacons or of a congregation. This discipline is found in the Word of God and men are judged by it (Boone, 96).*

### Boundaries limited

But in spite of appearances and claims to the contrary, the preacher's boundaries are limited. They are determined by a textual world beyond the limits of the Biblical text, the world of Fundamentalist Biblical commentary, of Conservative scholarly literature, of works that are sound and wholesome because they support and reinforce the view that the Bible is inerrant and infallible. It is not without irony that those tradi-

tions most reliant upon a Book – Judaism, Christianity, and Islam abound in commentarial literature which limits the boundaries of the text, and allows the reader to remain safe within the walls of orthodoxy.

It is in the discourse created by these secondary texts that the Fundamentalist lives, and moves, and gains a hearing. To use the linguistic currency of Fundamentalism is to demonstrate one's commitment to it; a case of "justification not by faith but by words". Thus, Daniel Stevick:

*A way of talking, a way of acting, a body of predictable responses, have grown up within Fundamentalism, and conformity with these is the criterion of acceptance... A quite specific group of catch-phrases mark a Fundamentalist. Some of them, such as 'infallible word,' 'second coming,' 'Jesus saves,' 'accepting Christ,' and 'personal saviour', are not strictly biblical. Yet these shibboleths are made the basis for inclusion or exclusion by a group which claims sole and supreme loyalty to the Bible. (Stevick, 56).*

But even fundamentalists are faced with a Bible whose errancy on some points is obvious even to them. And many are forced to admit that there are errors in the text as we have it. The response is to move inerrancy away from the present text as we have it now to the past text as originally given. Fundamentalists are renowned for their adoration of the King James or Authorised version of the Bible. But for Reuben A Torrey for example:

*No one, as far as I know, holds that the English translation of the Bible is absolutely infallible and inerrant. The doctrine held by many is that the Scriptures as originally given were absolutely infallible and inerrant, and that our English translation is a substantially accurate rendering of the Scriptures as originally given... [the] original manuscripts were copied many times with great care and exactness, but naturally some errors crept into the copies that were made. (Boone, 29).*

To those outside the interpretative community of Fundamentalism, the admission of errancy to the text we have, and the attribution of inerrancy to the lost autographs renders the doctrine of inerrancy useless. But within the community, it continues to serve a twofold purpose. On the one hand, the assumed closeness of the Authorised Version of the Bible to the original autographs allows it to function, to all intents and practical purposes as the inerrant word of God. But the notion of the original uncorrupted autographs allows the deflection of any criticism of problems found in the current text. The theory of the original pure autographs allows for the rejection of the human dimension of the text – a possibility which textual and historical criticism continually opens up, while simultaneously affirming the divine dimension of the text.

Having said which, let me qualify that last statement somewhat. The theory of the original autographs would be well served also by a doctrine of divine dictation. Indeed, the doctrine of inerrancy would seem to require not only original autographs but original autographs without the possibility of human error. But fundamentalism strenuously resists a theory of divine dictation. Thus, for example:

*We need not suppose declares Michael Green that there was anything mechanical in God's inspiration of the sacred writers, as if they were God's secretaries to whom he dictated his letters. (Barr, 290).*

But it is not at all clear why they are so resistant to this. Hans Frei gives a clue, and it is one that depends on Fundamentalists as being heirs of the Enlightenment, more specifically heirs of Deism. For Deists, divine dictation implied something undesirably mysterious and, worse, enthusiastic. It bespoke unbridled emotion and the loss of reason. So the denial of the authors of the Bible in ecstatic trance automatically writing down divine words is a reflection of the marked rationalism and empiricism of its discourse which finds its roots ultimately in the em-

pirical method of Francis Bacon, the predilection of Puritans for reasonable religion, and the Common Sense Scottish philosophers. No one dictates to Fundamentalists. They will do all the dictating necessary. The fear of the infection of enthusiasm continues to show itself more practically among Fundamentalists in their wariness of Pentecostal tongue



speaking and revivalist extremes more generally.

### **Fundamentalism and Science**

The claim that Fundamentalist discourse is markedly empiricist and rationalist may come as something of a surprise to many, who are inclined to think of Fundamentalism as archetypically irrational. But in its approach to the miraculous, for example, it is as rationalist as any liberal theology. A natural explanation is preferred wherever possible. As James Barr puts it, what on the face of it are gross divine interventions are reduced to very limited concatenations of natural forces. Here, for example, is K.A. Kitchen on the plagues of Egypt which result from excessive inundation of the Nile:

*the excessive inundation may have*

*brought with it microcosms known as flagellates which would redden the river and also cause conditions that would kill the fish. Decomposing fish floating inshore would drive the frogs ashore, having also infected them with Bacillus anthracis. The third plague would be mosquitoes, and the fourth a fly, Stomoxys calcitrans, both encouraged to breed freely in the conditions produced by a high inundation. The cattle disease of the fifth plague would be anthrax contracted from the dead frogs, and the 'blains' on man and beast (sixth plague), a skin anthrax from the Stomoxys fly of the fourth plague. (Barr, 241-2), and so on.*

Here we are far removed from the literal reading of the Bible. The plain sense of Scripture – the continual supernatural intervention of God – is here replaced by a naturally occurring series of events for which God merely provides the occasion. No eighteenth century Deist could do better.

This combination of the Bible and Science strikes as odd those of us who recall that Fundamentalism created its own identity in opposition to science and especially to Darwinism. Here too, Fundamentalism has moved some ground. George Marsden points out that, by the 1970s, most evangelical scientists teaching at Christian colleges accepted some form of theistic evolution or “progressive creationism” as they often preferred to call it (Marsden, 156). But the traditional antipathy between Fundamentalism and evolution has continued since the 1970s in the movement known as creation science which is dedicated to a belief in the literal interpretation of the first few chapters of Genesis which necessarily precludes evolution.

For Henry M. Morris, the idea of an evolutionary origin must have had its first beginnings in the mind of Satan himself (see Clark and Morris, 80). But even Creation Science does not position itself rhetorically as a conflict between evolution and the Bible (though this is clearly its underlying rationale) but as a conflict between a view of creation as the

## Christianity and Fundamentalism

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benevolent outcome of a conscious design (and thus of a conscious Designer) and the serendipitous outcome of the arbitrary play of impersonal evolutionary forces. Ironically, here the 18th century Enlightenment is brought to bat on behalf of 20<sup>th</sup> century conservative Biblicists.

### Fundamentalism, Politics, and Society

It is not uncommon among revivalist movements within Christianity to favour the individual's personal vertical relationship with God over his or her horizontal responsibilities to the neighbour. The social and political consequences of this are significant. Human efforts to change the world are on these terms against the divine plan. If it is really the case that God is planning for things to get worse, it is the duty of the Christian to bring lost souls to the Lord Jesus, not to engage in social and political activism.

Having said all which, we are all aware of Fundamentalist activism on behalf of the right wing of politics, and their concerns about the very decay of the society which may herald the time of tribulation. Jerry Falwell and his now defunct Moral Majority, far from scorning the political process as Dispensationalists do, became actively involved in political lobbying on such issues as abortion, the Equal Rights Amendment, prayer in Schools and textbook legislation. Jerry Falwell was one of the rare people not to blame Osama bin Laden for the recent attacks on New York and Washington, preferring to lay the blame on the internal moral decay within America, most notably on the feminists, the gays, the lesbians, and the abortionists. But Falwell himself, as a consequence of his willingness to work outside of Fundamentalist circles is himself looked upon as an apostate from true Christianity. Bob Jones Jr of the ultra-Conservative Bob Jones University described Falwell as:

*the most dangerous man in America today as far as Biblical Christianity is concerned, [because he] uses such good things as morality and reform*

*in an attempt to deceive Christians into alliance with apostasy. (Harris,45).*

This sense of a nation set apart is definitive of Fundamentalists. For they do see themselves as the true and only Christians. And they reject any involvement with those who do not share their views. The contrast between the true and the nominal Christian is, on the face of it, that between those who are genuinely committed and those who are not, but in practice it is a contrast between those who hold true Fundamentalist doctrines and those who do not. Here is the core of what many see as Fundamentalism's typically arrogant and intolerant attitudes not only to those of other religions but also to other Christians.

But to expect Fundamentalists to be tolerant of others is to expect them to act against what they see as the essentials of Christianity. Jerusalem has nothing to do with Athens. The true Gospel is intended to be a stumbling block not only to Jews and Gentiles but other Christians. And no compromise is possible. As James Barr has put it:

*... the fundamentalist's position about true and nominal Christianity is intrinsic to his faith: to ask him to modify it is to ask him for something which he cannot perform. To abandon this element is for him not only to abandon an unnecessarily uncharitable judgement about others, but to abandon the very process of perception by which he understands himself as one grasped and held by God. (Barr, 17)*

His own identity is fundamentally dependent on the demonisation of the other.

### Fundamentalism and the Either/Or

Here then there is a key to Fundamentalist discourse in this uncompromising Either/Or. It is a tradition with a long history in Christianity which reaches back to Tertullian, and forward to Karl Barth's dialectical theology in the 20<sup>th</sup> century via Soren Kierkegaard in the 19<sup>th</sup>. And it

stands in contrast with that other strand of Christian theology which, in interplay with its surrounding culture, attempts to present a Christianity relevant to the day. Although it would vehemently deny it, as a child of Modernism, Fundamentalism is just as culture bound as any liberal cultural theology. But its rhetoric of the eternal Gospel based on Biblical truth versus the temporal gospel following the fleeting fashions of the day is a powerful one.

For those of us who are followers of liberal theologies, or of no theologies at all, we are destined to live in a world of varying greys. The old absolutes are gone. The old certainties, even those of modernity, are no more. And postmodernity does not only promise no new certainties but has relegated to a dark corner of the Western mind any hope of any certainty at all. Compassion, tolerance, all the virtues can no longer be grounded in a metaphysical realm of certainty – of the divine and the good. Such virtues – any virtues - can only be driven by the conviction that a world determined by the absence of virtue – as we have seen to our horror in the United States – is too awful to contemplate.

The world of the Fundamentalist is a different one. My world is one which, unfortunately does not, cannot, make any ultimate sense. Theirs is one that does. It provides certainties where mine provides only doubts, it gives unambiguous answers where mine offers ambiguous questions. In mine, meaning is dispersed, in theirs, present and unified. Here is Francis Schaeffer:

*With the propositional communication from the personal God before us, not only the things of the cosmos and history match up but everything on the upper and lower storeys matches too; grace and nature; a moral absolute and morals; the universal point of reference and the particulars, and the emotional and aesthetic realities of man as well. (Schaeffer, 109)*

In our human desire that there should be a grand order to things I am at one with the Fundamentalists.

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We all share an emotional need for unity, a need to put things in some kind of significant order. Science still seeks for a grand unified theory. And we, like Fundamentalists, are heirs to the myth that the secret to the mystery of all things might lay within the pages of some one book, and between or behind its words. This is part of the power of Christianity, Judaism and Islam, the Religions of the Book, and their conviction that ultimate truth is to be found capable of expression in words. That a Book holds the key to the understanding of the universe underlies, too, those esoteric and occult traditions which seek to harness the power within words, in the conviction that, in the beginning there was only the word.

But the world which they have created is not one which is within the Biblical text. It is one which they have created in their reading of the text. The faith of Fundamentalists rest no more on the Bible than the faith of any Christians. The meaning which the Bible has for them emerges in the world between the text and their reading of it within the context of the community of faith of which they are a part. The Bible has many meanings. And there are many Bibles, as many as there are varying

communities of faith within which the Bible is read. The Fundamentalist inhabits one of many Biblical worlds, each as legitimate as any other. At the end of the day, the world created by the fundamentalist has a unity and coherence, and a certainty about it of which I am not a little envious. But it is, and perhaps in part for these reasons, a harsh, intolerant, and judgmental world which they inhabit. They are welcome to it, but I have no wish to share it.

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# At Last!

## *The Great Skeptic CD*

**See centre pages for details.**

# Wealth Transfers

**The balloonaut takes aim at the insurance industry and doesn't hold his fire.**

*The society of people who have never bought anything they didn't want to buy holds its annual general meeting in a telephone box. We have all done it, haven't we?*

In reality, we don't buy things we don't want - they are sold to us. The clever psychological tricks employed by salesmen to part us from our money would make a topic in itself, but I will leave that for one of our psychologists to write.

There are a number of words which, when combined, create a nice fuzzy glow ('wine tasting' works for me). What images come to mind when you read the words 'savings plan'? Most people respond favourably to this expression, with its feeling of good old-fashioned financial virtue. So would you willingly commence a ten-year savings plan which swallowed all contributions for the first three years, and only returned the level of your own contributions by the middle of the ninth year? If your answer is yes, I have a bridge for sale.

Some of the most common financial scams are perpetrated from the 'big end of town' and by institutions which consider themselves pillars of society. Some years ago I provided tax advice to a Sydney life insurance agency. The insurance company be-

hind this agency is a household name, but for legal reasons, let's call it ABC Limited. Sales of traditional whole-of-life insurance policies were rapidly declining, as the public became aware of the poor returns on such products. So ABC Limited simply renamed them as savings plans, and actively disguised the reality of a traditional life insurance policy.

Under the lax disclosure rules which existed at the time, no selling commissions were revealed to the targets. And the commissions were laid on with a trowel. 'Surely you can afford to save just \$15 per week, Mr Target,' went the script, and if the victim nodded in agreement, the salesman made \$616.40 commission on this \$15 per week contribution. The commission was paid in full the following week. That was not the end of it - the life insurance agency also received \$616.40 commission, the salesman's manager received an override commission, everyone in sight received volume commissions, and on it went. The first three years of the poor sucker's savings was instantly lost in commissions, all paid up front on receipt of the first month's savings. Pay attention - a nice scam on ABC Limited will unfold.



*Richard Lead, professional tax adviser and amateur disc jockey, is treasurer of the NSW Skeptics.*

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I became intrigued by this business, and spent some leisure time observing its operations. A poor sod is approached by a slick salesman, who persuades him to commence a ten-year savings plan which, if he terminates it in the first three years, he loses everything! After a full ten years, the investment return is less than 1%. The average policy lapsed within five years, resulting in a huge transfer of wealth from the Australian public to slick salesmen and an insurance company at the big end of town. I met dozens of the salesmen, and asked each the same question: "This person you have just signed up - if she is typical, she will contribute around \$4,000 over the next five years, and will then let her savings plan lapse. ABC Limited will then send her a cheque for less than \$1,500. How can you do that to a fellow human being?" And the trained reply was always the same: "Because of me, she will at least have \$1,500. Without me, she would have nothing."

### From the inside

It was an eye-opener to see the life insurance industry from the inside. They engaged a team of around fifty telemarketers, who phoned people at random from the telephone directory. A seductive script was followed, with the sole objective being to line up an appointment 'in the comfort of your own home' with an 'investment consultant.' Each successful appointment was worth \$30 to the telemarketer, and the persuasive ones made obscene incomes. (The 'sucker list' of successful appointments was subsequently sold to other businesses!) On average, the salesmen made a sale to one third of the targets, yielding around three sales per week. Easy money.

The training sessions for the salesmen were priceless for any sceptic with a sense of the ridiculous. They spent hours being coached on how to enter a room. (Read that last sentence again - I am not making this up.) You see, if you enter a room with an assertive and bold manner, you dominate the room, and closing the

sale is certain! Their memorised script asked questions which forced a yes answer from the target. *Don't you agree that being rich is better than being poor?* They were told that if they got six 'yes' responses during the sales spiel, the sale was certain. (Since then, my response to salesmen is always 'perhaps.' It seems to rattle them.) And the hours of practiced handshakes! They were taught to firmly grip the target's hand at the second knuckle, and as the shake commenced to twist the hand so their hand was on top. This supposedly establishes dominance, making the sale a sure thing!

Ah yes, the scam against ABC Limited. You will recall the salesmen were paid their \$616.40 commission in the week following the first \$15 contribution from the investor. A group of four new salesmen came into the agency and immediately became the top sellers. Others averaged three sales per week; these guys made three sales per day. All of the investors were from a particular ethnic group (the identity of which is not important), not by coincidence the same ethnic group of the four salesmen. These guys did not use the telemarketers, but arranged their own appointments. Every appointment resulted in a sale, and every sale was for a large savings plan, not the \$15 per week minimum. [Does the reader smell the rat yet?]

Amusingly, the two owners of the life agency lauded these four to the other salesmen, urging them to learn, and to copy, their methods. I quietly explained to these owners the way a Ponzi Scheme operates, but they were blinded by the huge commissions they were making and did not want to see the reality. I urged them to check the *bona fides* of the investors, but was ignored. And yes, after the four had received their millions in commissions and disappeared, thousands of savings plans lapsed in one week. Many of the 'investors' lived at non-existent addresses; many others were unemployed and penniless. ABC Limited demanded repayment of commissions from the life agency, which went into

liquidation, with both owners losing their homes. To me, as an outsider, it was all so obvious, but to those on the inside, the blinding effect of fast money had its usual consequence.

### Wattle - a Happy Ending

Speaking of Ponzi Schemes: Regular readers of this column will have followed the story of an old widow who invested \$45,000 into a Ponzi named The Wattle Group. The daft old thing believed she would receive 50% per annum on her investment, and lost everything. The scoundrel behind Wattle was jailed for ten years, and the Australian Securities and Investments Commission banned the investment adviser who recommended Wattle to her. The grapevine tells me he is now bankrupt. All of this pleased me no end, but she still lost her money. So you can imagine my pleasure this month (November) when I handed her a cheque for \$54,000, representing her full investment plus interest. It took almost four years of yelling and threatening, but the investment adviser's professional indemnity insurer finally paid up. The look of gratitude on her face made it all worthwhile, although sticking the bayonet into the bad guys was pleasure enough.

Alas, as I write these words another transparent Ponzi is unfolding. It seems formerly up-and-coming Sydney businessman Karl Suleman drew some \$130 million from 2,000 of Sydney's Assyrian community via an unlicensed high-yield investment scheme. Preliminary estimates are for a \$60 million shortfall, with the funds dissipated on the usual luxury lifestyle and an Internet venture (Froggy.com). And the claimed lucrative enterprise touted to justify the high yields on investors' funds? A shopping trolley business!

Special thanks to readers who have forwarded various scams and dubious products to Skeptics Central over the years. Please keep them coming, and we will continue to hammer them.

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# Angels and Financial Angles - Pt 2

## Following the money trail from the “angels”

The Inner Peace Movement (IPM), headquartered in San Antonio, Texas, is the major subsidiary of the Americana Leadership College (ALC), located in Washington DC. Australian branches are known as Australiana Leadership Colleges. ALC was founded by Dr Francisco Coll, DD in the early 1960s.

### What they do

Foremost among ALC's collection of mottos is a biblical parable that Dr Coll paraphrased and claimed as his own:

*If you give a hungry man a fish today, he will only be hungry again tomorrow. If you teach a man how to fish, he will have the freedom to use his own resources.*

ALC subsidiaries are called ‘departments’, with 11 different departments operating under the umbrella of the college. Besides IPM there are departments of Religion and Philosophy; Psychology and Parapsychology; Cultural Anthropology; Profound Mystical Meditation; Astro-Soul; Operation Action; Professional Consultant Training; Public Relations; Balanced Living and the newest division, the Department of the Family World.

In this article I will investigate the beliefs and undertakings of ALC and its primary subsidiary, IPM. ALCs are active in 30 countries including Australia, NZ, Canada, England,

Japan and most US states. IPM operates in 22 countries and claims that approximately 500 000 people have participated in their programmes worldwide. The Internet website, Adherents.com, a site for religious group statistics, asserts that IPM maintain 600 premises in the US.

Both ALC and IPM offer an extensive series of courses and state that they award certificates upon completion. However, courses undertaken through the college are *not* accredited and have no value outside the hierarchy of the college's own course structure. Nonetheless, a search on the Internet will reveal members claiming the title of ‘Doctor’ and even ‘Professor’ within the organisation, despite the lack of qualifications beyond certificate award status. A former member, Don Bott's, experience indicates that ALC's courses can prove to be both expensive and futile:

*After attending the “college” three summers, I was awarded the meaningless degree of master in arts in communications counselling and shortly thereafter learned that it was unrecognized, at least in the USA.*

ALC state that their many departments:

*... are designed to offer people with varying interests and backgrounds group work involvement, courses, tools and techniques that match that person's state of consciousness and interests.*



Karen Stollznow, who recently graduated in linguistics, is a member of the NSW Skeptics committee.

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IPM brochures state that:

*The Inner Peace Movement is groups of people who have the common bond of wanting to grow spiritually without dogma, theology or some guru directing and overseeing their growth.*

### **Cult status**

Contrary to this statement both ALC and IPM indulge in dogma, their own brand of theology and 'guruism'. The American Family Foundation (AFF), which offers information about 'psychological manipulation, cult groups, sects and new religious movements' and online cult indexes such as 'psychicinvestigator.com' and 'watchman.org' classify both ALC and IPM as cults.

ALC incorporate its own interpretation of Christianity, Hinduism and Buddhism, plus the paranormal into their beliefs. It could be described as a combination cult of Eastern religion/aberrational Christian/Occult/New Age or even as an unorthodox religious group. Courses are a blend of spiritual, social and occult teachings on such concepts as trance healing, mediumship, 'astro-travel', *ear candling* and self-realisation dreams. Leaflets state that "these are all part of your true nature and can be used practically here on Earth". ALC also advocates the use of 'spirit water' (otherwise known as 'energised water') for protection, better dreams and for use in meditation and trance healing. Many alternative therapists are affiliated with ALC worldwide, included among whom are acupuncturists, aura therapists, reiki therapists and psychic healers under the flamboyant title of 'Shamanic Breathwork Facilitators'. Some proudly cite completed ALC courses on their resumes.

Another of the organisation's many mottos is:

*All illnesses can be helped or cured when you are open to your true feelings.*

The Inner Peace Movement is a New Age cult with teachings about ESP, psychometry, meditation, reincarnation and auras. After completing several courses, followers claim

to experience flashbacks to previous lives. IPM teaches that ESP is:

*...the common experience of all people. The fact that some have developed this extra sense to a very high degree has created the impression that only certain people have it.*

It claims that ESP is 'realised' in the medical field by the existence of psychosomatic illnesses; in science, by references made to energy transmitted and received; in industry by the existence of creative inspiration and is exhibited by the "layman with his hunches, feeling premonitions and intuitions".

Former member, Allison Thomas, says:

*I was part of the Inner Peace Movement in NZ and Australia from 1976 and met lots of friends and family from past lives – a soul connection. I learnt how to talk to my angels, how to teach others to talk to their team of angels, how to see auras, do psychometry and how to teach everyone that they are psychic.*

### **Enter angels**

The College and IPM place great emphasis on teachings about guardian angels and their role in guiding and influencing their subject. (Another of their many mottos is "Everyone is an angel in training".) Perhaps they are catering to an audience already convinced. A Time magazine article, "Angels Among Us", (December 1993) claims that 69% of Americans believe in angels. IPM member Susan Scott says:

*They are graduates of planet Earth and we choose them before we are born to come and help us.*

Mrs Scott joined IPM in 1971, following the tragic death of her three-year-old son. She might have derived comfort from the movement's claimed ability to contact the dead through channelling, or their philosophy that the departed can become guardian angels to their living relatives; others might see it as an example of the group preying on the distraught and vulnerable.

IPM teaches that guardian angels

are the souls of people who have lived previously, often many times, until they learned the lessons of human existence and 'graduated' from their physical selves. These spirits freely roam the universe, assisting others on their spiritual journeys until they, too, can fulfil their destinies and achieve a balance between thought and feeling. Goosebumps are the telling physical sign that one's guardian angels draw near.

### **Spiritual cleansing**

The following is a 'spiritual cleansing technique', reproduced with the permission of Richard Lassiter, an ALC member.

*Spiritual cleansing is a means of clearing your personal energy or aura. You will stay cleansed after using this technique until you allow yourself to get fragmented by your environment, either inner or outer environment.*

1. Shake or rub hands vigorously to energize the aura around your hands. (Your personal energy is strongest around your head and hands) We will call this charging your hands.

2. Close your eyes.

3. Starting at the third eye (pituitary; outflow chakra), using the first three fingers on your dominate hand, gently rub your third eye area of several seconds.

4. Palms toward your eyes, bring the other hand up and, using your finger tips, run your hands down the outside of your face joining them again under your chin in front of your thyroid gland (relating chakra).

5. Charge hands again.

6. Starting again at the third eye, this time run hands over the head, finger tips touching to back of head (pineal; inflow chakra), separate hands and bring them around neck to thyroid once again.

7. Charge hands and repeat steps 2 - 5 until you feel cleansed. (7 to 1397 times)

*What you will feel depends on your state of consciousness and your spiritual gift order. You may feel nothing at all, but you are cleansed if you did*

## Investigation

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*this technique. Experiencing chills means that your guidance are close to you. You may feel calm, warm or energized. When you open your eyes the room may be brighter and colors sharper. Things may seem quiet. As you do the mechanical part of the technique, mentally, or out loud, say, 'In the name of (whatever is highest to you) I cleanse my body, I cleanse my spirit (or soul, or energy, or whatever)'. That's basically it. You do this technique for 21 days (the number of days it takes to change a habit pattern).*

### Recruitment

Both the college and IPM regularly recruit members by conducting psychic fairs in clubs and halls (see Pt.I of this story in 21:3). After receiving readings from implausible psychics, those patrons remaining are led into an adjacent room to hear the 'angel talk'. This half-hour long lecture introduces the audience to the beliefs of the movements, via charts, black-board drawings of their trademark stick figures with halos, and promises of the acquisition of psychic and healing abilities. This is all spiced-up with business and motivational jargon.

Potential, though not yet fully persuaded, followers appear to be harassed into involvement with ALC and IPM. Some rather aggressive tactics are employed to coerce people into attending their courses. I phoned the groups' Sydney office to ask a few questions about the two organisations. Obviously, by using a reverse call look-up programme they tracked down my details and sent card to my local IPM representative, recommending that they convince me to attend their courses and then contact the head office "in two weeks, with results". How do I know this? Australia Post accidentally posted the card to me rather than the addressee. (My guardian angels must have been looking out for me!)

A potential IPM recruit is recommended a series of lectures and workshops that introduce the novice to the tenets of the organisation. First is an orientation lecture, 'Man and the Universe', similar to the 'an-

gel talk' that follows the psychic fair. This one-hour lecture offers the student 'a big picture of the meaning of life on planet earth' (\$8), where they will experience their 'soul energy' and discover their 'psychic gifts'. They will be taught how to read auras and will receive a 'free message' from their angels. Then follows a three-hour workshop, 'Exploring Inner Dynamics' (\$29.70). This promises to teach the 'power to heal and to use 100% of your potential'. Subsequently, an hour-long session, 'Communicate with your angels' (\$67) will inform the acolyte of "your personal 'gift', of 'intuition', 'vision', 'prophecy' or 'feeling'. They will learn how many angels surround them and how to directly communicate with them. "All information during this profile is channelled directly from your angels by a specially trained and certified consultant".

### Financial angles

From here on the course costs increase exponentially rate to \$121 per session, at which point retreats and 'pilgrimages' to USA are recommended, with ensuing leadership potential. In the meantime, weekly 'discovery groups' and frequent 'PCC Security Circles' maintain regular contact between follower and organisation and ensure their continued indoctrination. The weekly meetings are the sole way to "maintain and strengthen communication with your angels". (What is the fascinating sounding 'PCC Security Circle', I hear you ask?) These 'Peace Community Church' meets involve group singing intended to heal the ill and express love from afar to friends and family. Brochures state that:

*...the songs we sing in the PCC vibration are very special and can put you in tune with the love that we all are, have been and always will be.*

The cost of completing the minimal courses with IPM, excluding retreats, overseas seminars, 'lecturer' preparation courses and weekly meetings, comes to a total of around \$350. Of course, leadership, along with the honour, brings the additional costs of further courses and

frequent refresher courses. IPM boasts 80 000 people in leadership roles and 2 200 programme coordinators worldwide. Furthermore, members may become subscribers to IPM's monthly leaflet, *The Times Communicator* and the quarterly *Expression!!* magazine. Also included is an 'inspirational' 90-minute cassette tape. (*Skeptic* subscribers who may have grumbled at increasing subscription costs, might feel mollified that they have made a wise purchase upon learning that an annual subscription to the IPM is \$404!)

### Limits

The number of courses available through ALC and IPM differs between branches. The number available in Australia is strictly limited, due apparently to our relatively small population. A plethora of courses are conducted within the US, with the Washington DC branch web site listing 40 plus courses, sometimes offering a sequence of courses for each topic and priced from \$20 to \$150 (\$US). The range of courses available also varies. Preliminary courses are consistently offered, although the range of 'elective' courses is diverse and often absurd. For instance, the Calgary branch offers a 'DNA Activation workshop' hosted by one 'Dr Gerard', author of *Change your DNA, Change your Life*. An email to the 'Doctor' elicited no response. The Washington DC branch offers 'Course 2005' about reincarnation, teaching attendants:

*... to discern habits and attitudes you have brought with you from other lifetimes, as well as the strengths you have gained as a soul through time.*

More pragmatic are the business and motivational courses available, although these courses are still not accredited. Even then spirituality is blended into the syllabus.

Attending the full range of courses and maintaining membership with ALC and IPM becomes an expensive commitment with ongoing costs. Furthermore, members receive no recognised qualification to show for their diligence, time and money, unless they plan upon a career within the

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organisation. Moreover, IPM professes to be an educational, non-profit organisation, despite the fact that the parent company, ALC, is listed on the Australian Stock Exchange. ALC states that all IPM groups are autonomous, but with the exorbitant fees for their courses and no shortage of interested parties, can it be possible that no one involved is making a profit?

### Strange bedfellows

Most new age beliefs are incompatible with Christianity, and it appears that the Skeptics might have Christianity on our side in denouncing ALC and its 'departments'. A number of prominent American religious groups such as the Christian Healing Ministries International, Dove Ministries and the online [www.catholic.org](http://www.catholic.org) (despite often exhibiting parallel beliefs, eg. angels.) are outspoken against ALC in the US. IPM in particular has made enemies with its New Age doctrine. The belief that guardian angels are souls that have been born and reborn on Earth until they have learned their life's purpose, contradicts biblical writings. Therefore, Christians perceive 'communication with angels' to be necromancy, a practice condemned by the Bible.

ALC teaches that a person's life 'runs in seven-year cycles', that there are seven levels of consciousness where the 'body changes spiritually and physically every seven years'. Christ consciousness is the highest level. Separating Jesus and Christ, they teach that Jesus was a man who reached 'Christ Consciousness' and taught this while on Earth. ALC claims it provides a way for people to "unveil their own Christ-like nature". Within this doctrine, God is impersonal and spoken of as 'The All', 'The Cosmos', and 'The Universe'.

That Christians are often hostile to ALC and IPM is illustrated in a quote, regarding the introductory IPM lecture from online Christian magazine, *The Watchman Expositor*.

*Unfortunately, for those who not only listened to this lecture but accepted its contents as truth, they are being led down the path of deception directly*

*into a den of demons wherein lies total destruction of body and soul.*

Apart from incurring eternal damnation for those concerned, association with ALC and IPM does have its realistic dangers. Followers are attracted to the organisation's ready answers to life's inexplicable questions, the unknown and the unknowable. They are trapped by the 'special knowledge' the groups purport to possess. The courses are convincingly structured like a University syllabus and unfortunately do hold some credence amongst the New Age community. ALC and IPM provide their followers with a sense of community and belonging with their caring and peaceful guise. Like any other cult, these groups prey on the lonely, the vulnerable and the discontented.

Yet another favourite motto of Dr Coll about the ALC and their teachings is:

*It is not a way of worship, it is a way of life.*

He also liked to say:

*If a man worshipped a stone and you take it away from him, he has nothing. It is better that you help him expand his understanding so that one day he may release the stone when he sees a better way for himself.*

Not so profound, yet an ironic warning to those who contemplate involvement with ALC and IPM.

### Conclusion

At the very least involvement with the ALC and IPM can amount to a pointless venture of wasted years and misspent money. At worst, association with ALC and IPM can inculcate a misguided belief that angels are guiding us, allowing people to absolve themselves of responsibility for their own thoughts and actions. Followers will rely on their inherent 'ESP' rather than good judgement. There are great risks in their belief that all people have the potential to heal. Those who are told that they have the 'spiritual gift' of 'feeling' may dismiss their own illnesses as their acute sensitivity towards the pains of those around them. Follow-

ers are deceived with the teaching of concepts such as reincarnation, aura reading and psychometry. They are pressurised into undertaking numerous expensive and worthless courses wherein legitimate fields such as philosophy, psychology, anthropology and business are mingled with bogus courses. Then there is the concern that exploitation exists when followers are encouraged to engage in practices like mystical meditation. The hypnotic state induced could make a person highly susceptible to suggestion and leave them vulnerable.

Moreover, there is the unsubstantiated assumption that the Americana Leadership College and its 'educational, non-profit department', the Inner Peace Movement, will continue to afford 'spiritual guidance' to the followers when their money runs out.

### Notes:

The 1989 book, *The Ultimate Evil*, by Maury Terry, claims that the IPM and ALC in the United States had connections with Charles Manson and the Scientologists during the 1960s.

Dr Coll died in Puerto Rico in December 1999, a fact well concealed from new members of ALC and IPM. Correspondence from both organisations still bears the duplicate signature of the deceased founder. ALC and IPM dislike admitting the mortality of their founder, as shown by my source's assertion that "Dr Coll is not dead. He makes his presence known [sic] to me in my dreams and daily life. He's still teaching me and we're even closer." This is further compounded by the installation of son, also named Francisco Coll, at the helm of the college.

It is an impossible task to find out the name of the institution where Dr Coll earned his Doctorate of Divinity. A spokesperson from the Sydney office stated that "it doesn't matter where he got his title from. His own teachings are all that's important". Researching Dr Coll is even more complicated in that he shares his name with another Francisco Coll, beatified by the Catholic Church in April 1979.

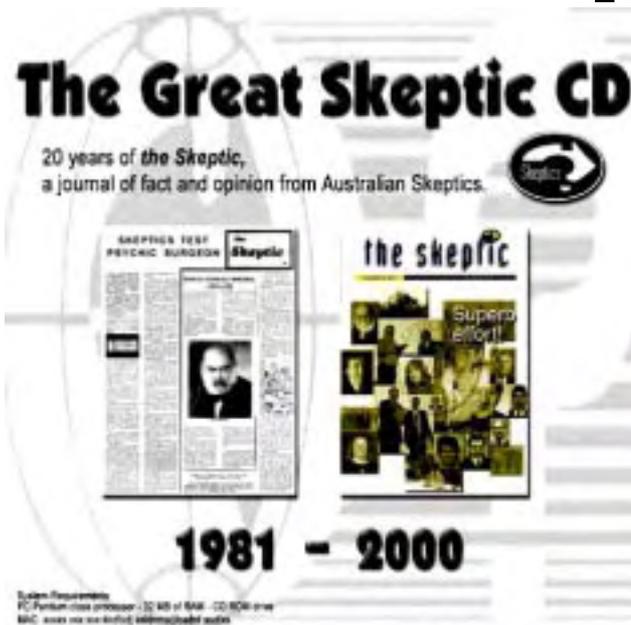
Finally, the financial future of the group is uncertain. Coll's widow, Mary Annette Coll, has filed a suit against her son, Francisco Coll, and the ALC, with the US bankruptcy court in the week this article was written, July 16, 2001.



# At Last!



# \$55



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# The Great Skeptic CD

## At last!

We've been talking about it for ages, we've been working on it for over a year, and now, thanks largely to the remarkable technical skills persistence and, above all, enthusiasm of Richard Saunders, *The Great Skeptic CD* is here at last.

## A world first

No other Skeptics group in the world has ever presented such a comprehensive compilation of all their work.

## Contents

*The Great Skeptic CD* has over 4000 pages which can be read with equal facility on PC and Mac platforms. It contains the full text of *In The Beginning*, the book we produced several years ago as a compilation of all the original articles from *the Skeptic* from 1981-85, and a similar treatment of the issues from 1986-90, which we have made into a virtual book entitled *The Second Coming*.

From 1991 to 2000, the magazines are exactly as they appeared in their original format (with a few of the more egregious typos and other editorial cock-ups removed).

Additionally, Richard has included some extra illustrations taken from various sources to brighten up the text and many of the photographs included in the magazines will be seen in glorious colour for the first time.



*The Man*



*The Product*

All the magazine covers have been reproduced, just as they were, and there is a facsimile of the historic First Issue from 1981.

Also included is the full text (slightly updated) of our book *Creationism: An Australian Perspective* (Eds Ken Smith and Martin Bridgstock) and the book, *Skeptical*, (Canberra Skeptics, Ed Don Laycock) which were published in the mid-1980s.

## Searching

It has a powerful search function. Follow the instructions and you will be able to track down every place where the word "creationist" is written (hundreds of times) or even "toothbrush" (once).

Each disc contains detailed instructions, so even those who are comprehensively computer illiterate (such as the Editor of *the Skeptic*) can easily learn how to use it. If you can't, call us and we will help.

This is an invaluable tool for any Skeptic involved in answering questions from the public and media. More than that, it is fun to read and makes an ideal gift for anyone who is interested in any of the wide range of activities *the Skeptic* covers.

At \$55 (incl p&p and GST) it replaces a full set of back issues costing around \$300 (if we had them all).

We wish to thank all those subscribers who answered the call to provide help with proof reading – you were wonderful. Also all the other people whose involvement made it all possible. A more comprehensive Thank You is included on the *Disc*.

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## Available now from Australian Skeptics

PO Box 268  
Roseville 2069

# \$55

# Evidence-based Medicine

**Talk presented to the Skeptics  
National Convention,  
9-11 November  
in Brisbane**

*"Evidence-based medicine is the integration of best research evidence with clinical expertise and patient values" - Dave Sackett*

This paper will show the extent to which medicine is responding to the skeptics in its midst. Those of us practising evidence-based medicine (EBM) start from a position of skepticism, and then try and find the evidence to support or refute the clinical questions that arise in consequence.

### **A worrying case**

Perhaps the best way of introducing the issue is to look at one tiny bit of the medical literature. In 1979 Bernard Lown, an editor of one of the large textbooks of medicine, drew attention to the fact that the toll of middle aged men from heart attacks could be reduced by finding a drug that reduced the abnormal rhythms of the heart following blocked coronary artery heart attacks. A crossover trial was published that showed that a new anti-arrhythmic drug dramatically reduced the incidence of abnormal contractions following heart attack. It became common practice to treat people with heart attack with this drug as a routine to reduce the chance of malignant, potentially fatal, rhythms.

So far so good. This sounds like good use of research evidence, does it

not? However clinical researchers began publishing trials that simply compared the survival of patients following heart attack who had been randomly (and blinded) given either the drug or a placebo. Those on the drug were dying at two-and-a-half times the rate of those on placebo: the drug appears to be poison to this group of patients.

How can this be? How could we have such conflicting views arising from different kinds of research? This points up the main difference between EBM and deductive reasoning. In the deductive based research model an assumption was made between the occurrence of pre-ventricular contractions and sudden death. Reduce the former, it argued, and deaths would reduce too. The EBM approach simply looks at the outcomes that matter directly, ignoring the surrogate measures.

The horror behind this story is the delay that took place in America before the routine use of the anti-arrhythmic drug was dropped. Perhaps as many as 20,000 men (plus thousands of un-estimated women) in America alone were killed unwittingly by doctors giving them the drug – even though the empirical evidence that it was harmful was researched, published and accumulated for years in libraries.

Why does this divergence between



*Chris Del Mar is professor of general practice at the University of Queensland*

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research findings and clinical practice exist? How can we stop it?

### Medical literature

Clearly all doctors have to do is keep abreast of the world literature.

However it does not take much thought to see that this is an impossible task. The number of Medline indexed journals (this does not include all those that come unsolicited through doctors' letter boxes) would form a pile 200m high every year. Who could keep up opening a pile of journals half a meter high every day (including weekends, including Christmas), but also reading it all, and being able to recall whatever might be relevant to a patient sometime in the future? There is also the problem of deciding how to deal with the sort of conflicting research findings we have, such as described above. Nor does it help with patients presenting with problems for which we need immediate information to make optimal clinical decisions. Of course not everything published is useful to us clinically: some is useless because it simply is not valid (the research is technically flawed in some way – meaning it just is not 'true'). Much else is good research but simply not relevant to us clinically (at least, not yet).

So it comes as no surprise to find that few doctors manage to keep up to date very well this way. Even using 'continuing professional education' (called, not surprisingly, 'continuing medical education' or CME, in our area), has been shown in trials not to change the 'up-to-dateness' of doctors.

So, what follows are examples of clinical problems in which we have been able to find the best available evidence, and enhance our clinical decisions.

### Three Case Studies

1. A woman with a cough for 20 years was found eventually to have gastro-oesophageal reflux. We found the evidence of this possibility from finding a case-series of patients with undiagnosed cough referred to a specialist hospital service. This search found the information needed—even though it would be reasonable to argue that the doctor 'should' have known about something even as rare as this.

2. A man was bitten by a dog. Should he be treated with antibiotics? We knew he should (that is, vaguely knew that antibiotics reduce the infection rate if given prophylactically), and started to write him a prescription for them, after cleaning the wound appropriately. It was the patient who asked the EBM question ("What differences would they make, Doc?"). A search for the evidence found a meta-analysis (that is, a systematic review of the literature with an attempt at resolving any differences between the results of different trials). This gave us additional information: the average infection rate following dog bites attending Hospital Casualty is 14% without antibiotics. With antibiotics this is halved. This enables us to calculate the absolute benefit (50% of 14 = 7 out of every 100 people have an infection

avoided, or, the number needed to treat, NNT, to avoid infection is  $100/7 =$  about 14). The patient decided against bothering with antibiotics on this intelligence.

What lessons can be learned from this? Patients are interested in empirical evidence; often they can understand it well; if they are provided it they can participate in the clinical decision better.

3. A middle-aged man with symptomless microscopic blood in the urine wondered about the benefits of undergoing the conventional investigations, some of which are unpleasant. A search identified a predictive study of >20,00 people that was able to compare the outcomes for people with this condition with those without it. The difference in outcome was the same: microscopic haematuria is not a predictor of cancer of the urinary system. He decided not to go ahead.

How does EBM help? It has the potential to redirect doctors' information needs away from a 'push' process, (keeping up to date by reading and CME) towards a 'pull' one (finding the information needed for any individual patient). It challenges many conventionally held traditions by its empirical rather than deductive reasoning. The medico-legal implications are possibly positive rather than risky: because EBM encourages better understanding of the issues surrounding clinical decisions, it promotes shared decisions with patients, the best defence against the most common cause of litigation (failures of communication).



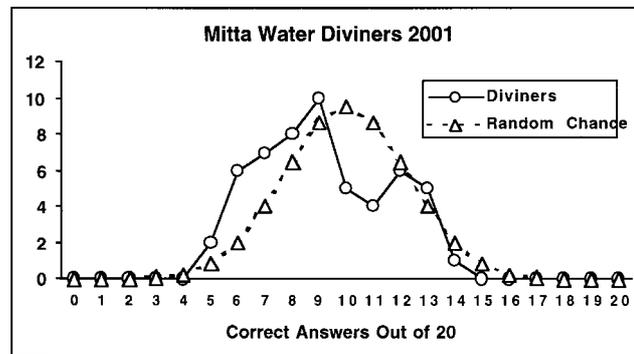
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# A Generous Offer

**In the spirit of the holiday season (and of increasing the subscriber base) this year we will be extending last year's very successful offer to subscribers. If you are a current subscriber, and if you wish to take out a gift subscription for one (or more) new non-subscriber(s), the latter will be charged at half-price (\$22).**

# Dowsing for Dowsers

**The Skeptics test a record number of water diviners, with expected results**



The denizens of Mitta Mitta are accustomed to gather every March to buy and sell horses, have races for the kids, discuss the weather, verify the quality of beverages made from fermented hops, etc. Mitta<sup>2</sup> is also the hub of the skeptical uni-

The results of our competition for dowsers at the 2001 Mitta Muster were in accord with chance – here they are.

This article also recounts the trials and tribulations we endured in organising this event, and suggests how we can improve it for next time. The skeptical method, after all, should be more concerned with process than results; instead of saying “divining doesn’t work” we offer “dunno – let’s try it and see”.

A group of us – Russell & Robyn Kelly, Laurie & Eden Smith, Bob Nixon, Rosemary Sceats, Peter Hogan, Helen Bradshaw, Jenny Hunter and myself, Steve Roberts, tried very hard to find someone who could divine for water. Five of these Ten Tireless Skouts of Skepticism, reside in Mitta Mitta, a hamlet outside Albury. In fact we may as well say it’s outside Melbourne, as it’s actually nowhere near Albury – it’s halfway down the Omeo Highway.

verse, with 8% of its population being paid-up Skeptics, and that’s not counting the horses and sheep. The Borderline Skeptics HQ is located in a secret bunker near the pub. Very near the pub, in fact, so near that ... anyway moving right along ... the organising committee of the “2001 Mitta Muster”, in their great wisdom, considered it appropriate to host a small competition for diviners, at the edge of the sports ground where the festival is held. The idea would be to set out some samples of water and not-water for dowsers to investigate, hoping to see someone score more than chance. For example, the chance of getting all of 20 samples correct at random is  $1$  in  $2^{20}$ , or about 1 in a million. Further maths is explained below.

We thought we’d get a few takers – divining for water is well-known in the bush. Word got around and, yes, some phone calls came in. Then the story got into the local media – along



Steve Roberts is a cryptographer. Further information about him can be gained by decoding this: X.

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with what might be won: the Skeptics Prize now standing at \$110,000 and never yet claimed. Well. We were amazed to get thirty phone calls over a couple of days, along with the first of many amusing things, such as the self-styled best gold diviner in Victoria who asked for some cheap camping accommodation because the motel was too expensive. Then on the day, there was a crowd of 52 diviners – one for every card in the pack – most of whom, being anxious to win the Prize before someone else did, wanted to be early in the queue. Diviners came from Mildura, from Melbourne, from South Australia, Tasmania and even from NSW, a nearby minor state whose residents probably think Mitta is a big place.

Most of us went up a day or two early, since one of the locals always has a few friends around for a few beers the evening before. “A few” turned out to be 50 mates, many with their own aircraft (mercifully the 747 pilot brought his own plane, not his work one). An enormous steak – most of a cow, it took two people to lift it – was cooked on a mighty blaze, and we brought the Bed of Nails out, to everyone’s amusement. The following morning we gathered again, and among a crowd of 70 hung-over revelers we began to prepare the samples.

Now here was our first little test. Our idea, as agreed at a planning meeting some weeks beforehand, had been to fill 2-litre milk bottles with either water or sand. The local Skeptics kindly provided these, but our request for “twenty 2-litre containers” had been heard as “22-litre containers”, several of which now appeared. After some attempts to devise a dowsing competition using these monstrosities, we gave up and went on the scrounge for milk bottles.

Easy, you might think – let there be 20 milk bottles ... for a start, our host’s house had several, the neighbour had 2 more and a bloke who passed by in the street said he had one at home. We tried begging from house to house, but Mitta has only a few houses, one shop and a pub. The shop sold hot coffees so they had some milk bottles to spare; and we found a few more among the pub’s

(wet) garbage – next time somebody else can rummage through that! The pub had some motel-style rooms and the landlord kindly retrieved a milk bottle out of each room, tipping the milk into jugs (presumably removing the beer first), and thus we eventually got our 20 bottles plus a few spares. The bottles of course are translucent, so we needed paper bags to wrap around them – we found that the bags you get wine bottles in fitted perfectly. We bought a few bottles of wine from the pub – some of each sort, red and white – and then scrounged 30 bags. Oh, and some sticky tape and a marker pen to write a number on each bottle.

By this time it was 9:45 and although we said the competition would start at 12, the festival itself opened at 10 and we were told that impatient dowsers had been waiting in line at the site since at least 8am. Now we needed to fill the bottles with sand or water. Our local members had laid in a pile of dry sand for this purpose, but unfortunately several kiddies had found it and were happily playing in it, getting much of it already wet. We mercilessly dragged the kiddies from the sand pile, hurling them into the foaming torrents of the Mitta River where they were eaten by the crocodiles\*. Now, out of 20 bottles how many should have sand and how many water? If the diviners know that it’s 10–10 then it’s not 20 random tests, and the maths becomes more fuzzy. Meanwhile a crowd of 100 people had gathered to see Mitta’s latest exhibit, entitled “Mathematicians Arguing In Sand Pit” – and we had to ask for a bit of privacy.

We decided to pick a random number from 6 to 14 so we could tell the diviners that there were at least 5 sand and 5 water samples out there. This does skew the maths a little bit (in favour of the diviners - it excludes 31,008 out of the 1,048,576 ways of guessing the 20 samples) but we wanted to eliminate the all-sand or all-water answers. We also made extra samples of sand and water as

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\* Do you believe everything you read?

spares and for the two calibration samples, on which the diviners were asked to verify their technique before trying the real test.

Eventually we shoo’ed the crowd away and filled some bottles with water and some with dry sand, which itself proved difficult without a funnel. Before the numbers of each got too accurate, two persons were chosen to handle the bottles and know which was which (you could tell by pressing gently on the plastic bottles). These two persons bagged and labelled the bottles, and put them in big cardboard boxes for transport to the site, 10 minutes drive away. Luckily none of the water ones leaked – if the paper bags had got wet, we’d have had to start all over again. In fact the grass on which the samples were laid down was already damp – it was the one-hole Mitta Putting Green, the most irrigated patch of land for 50km around, although nobody remarked on that. So to prevent the paper bags getting damp, we wrapped the bagged bottles in thin plastic shopping bags. Some diviners wanted to complain about the plastic, but they could all easily divine the calibration samples of sand and water, which were identical to the field samples in the test.

At the venue, under the watchful glare of a world record crowd of 40 – yes 40 – impatient diviners, our two volunteers laid out their 20 samples, taking extreme care not to drop or shake each one. The samples were set out along a roughly oval line, at 1-metre intervals (3 metres would have been better – next year we’ll use more space).

We were careful to achieve two vital things that are essential for a proper test:

- The two persons who knew which sample was which were kept away from the divining area. In this way we kept the trial *Double Blind* – even the Skeptical attendants did not know what was in each bottle. It is well-known that audiences “signal”, even subconsciously and unwillingly, if they know the answer. Stage magicians can identify the “right” sealed envelope by sensing

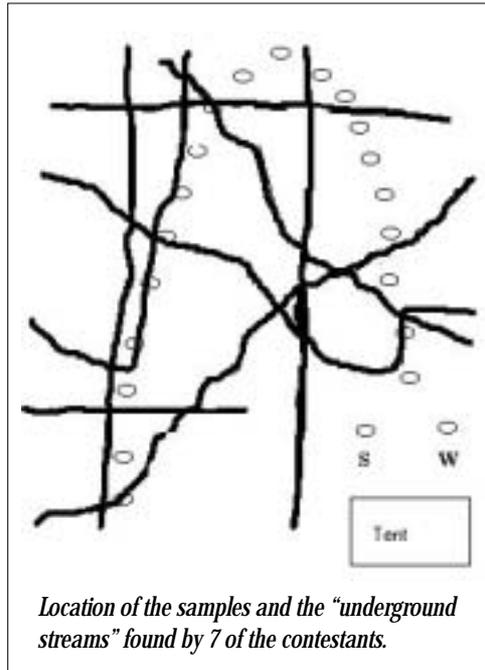
## Dowsing for Dowsers

the audience holding its breath when they get near it (woops, that was one of their secrets – now watch out for headlines “Skeptic Magically Sawn in Half” or “Man Is Mysteriously Turned Into White Pigeon”).

- All contestants were made to *Verify* their dowsing on two special calibration samples that were clearly labelled “water” and “sand”. Without doing this, the contestants could say that the test was not impartial – there was not enough water, too much plastic, grass too wet, a bad day, etc so that they could not possibly succeed. That may be OK for a medieval witch hunt, but for scientific research it must be a fair test with strong opportunities for the contestants and the Skeptics to fail. And that means that if divining is demonstrated then we must sincerely acknowledge it\*\* – caught in our own trap, as it were.

I have not discussed yet how we managed the crowd and the contestants, which occupied several people. Before the day, substantial work was devoted to preparing forms to be filled in by each contestant – serial number, name, address etc and a statement that dowsing for water is what they claim to be able to do – and room for optional details including phone number, age, how many years dowsing etc. The rest of the form was taken up with a score card for the 20 samples, and for us to mark how many were correct. We provided a prominent space on the form for comments on how we could improve the event – we did genuinely want to hear about improvements, and we will act upon the comments that we received. Contestants formed a queue and were issued with a serial number and entry form. They then went around the course at

their own speed, dowsing and filling out their score card. The completed sheets were collected at the end of the course. The time taken by individuals to complete the course varied enormously, from under a minute to nearly 2 hours (with much revisiting and changing of mind on each sample). We needed at least two helpers to be on the course at all times, in order to keep the crowd away and



*Location of the samples and the “underground streams” found by 7 of the contestants.*

ensure privacy for the diviners, and to help generally.

Of course everyone wanted to know their score right away, but we could not reveal what was in the samples until all contestants had finished. Some found it impossible to work in the melee of people, so we brought them back in the early afternoon when things were quieter. Others began to hang around and interact with the incoming contestants – we had to ask these to move away from the course. With very few exceptions, everyone behaved as a gentleman (or lady) should, and the event was marked by a wonderful feeling of niceness and of working together. We announced that the results would be published at 3:30pm. One eager contestant decided to rest his ample frame on a nearby chair until then, hopefully feeling grateful to the lady who brought the chair for herself to sit on.

Some contestants – 7 of the 52 – complained about underground streams. One Skeptic, Peter Hogan, had the brilliant idea of asking them to sketch the position of their underground stream, getting 7 utterly different answers.

Eventually, we consented to move one or two samples. Then when some contestants saw that we were moving the samples about, they returned to the field and asked for more and more movements, revising and re-revising their guesses until it all got a bit out of hand. So, next year we will set aside a 2-hour time window for diviners to check over the empty site, so that the samples can be placed in acceptable positions and stay there.

The two Skeptics who had handled the samples soon forgot what was in which; I ought to know because I was one of them (I think). The day moved on. An exuberant child ran across the field and trod on sample #1, showing it to be sand and not water. A passing dog marked sample #17. A light rain began to fall, threatening to wet the samples enough to reveal the contents. To be able to announce all the results quickly, at 3pm one Skeptic picked up all the samples and made an informed estimate of the contents, and then marked all the contestants’ sheets on that basis. Each bottle was then opened and tipped out to reveal sand or water; the informed estimates were found to be all correct, so that all the marked contestant sheets were immediately ready for release. (If the Skeptic had been wrong on a small number of samples, the sheets would have been easy to correct). Instead, we should have displayed the answers on a white board, with a histogram of the results as at the top of this article.

The “winning” contestant had never divined before – she was the wife of a local backhoe operator and both had been fairly skeptical of the whole thing. She got 14/20 guesses right, which is well within the bounds of chance. So we shouldn’t call her the “winner” – more like “the least incompetent loser”. The results of 20 guesses can be expressed in

\*\* To illustrate this impartiality, in a recent e-mail to a UFO fan I promised “if you can produce some evidence, I will not only believe [your] story, but I will publish a full analysis and personal retraction in *Sky & Space*, and I will sponsor this event as a claimant for the Skeptics \$110,000 Prize for demonstration of phenomena unknown to science. Over to you.”

1,048,576 ways – of these, one way has all 20 guesses right, another 20 ways have 19 right and one wrong guess, and a further 190 have two wrong guesses\*\*\*. It turns out that there's about a 1 in 50 chance of getting 15 right and 5 wrong (in any order). But with 52 diviners we did 52 tests, so it wouldn't be surprising if one of them got 15/20 right – which nobody did.

The lady who got the least bad score of 14/20 right was immediately photographed and interviewed by the local newshounds. We tried to point out that there was no winner, but that would only spoil the story ... and we heard that she later went to see another diviner for training. So one thing we achieved that day was to convince an innocent bystander that dowsing works! Five people got 13/20 correct, again not newsworthy, although one of them still thinks that 13/20 right was a perfect score and has been trying to sue us for the \$110,000. In fact, as the histogram of results at the beginning of the article shows, the answers overall were slightly worse than random, although not significantly. Using the chi-squared test, I calculated that if we were to hold this competition thousands of times, with 52 diviners completing the full course each time, then 42% of the results would be more remarkable than these – not really enough for a career in dowsing.

The excuses for failing now began to flow thick and fast:

- One diviner complained that his rod was upset by people standing nearby with gold coins in their pockets (presumably \$1 and \$2 coins, which are only gold coloured)

\*\*\* The first wrong one can be any of samples 1–20; the second can also be any of 1–20 except it can't be the same as the first, so there are 20 x 19 possibilities. But since the order doesn't matter, we have counted them all twice. Getting #7 and #15 wrong is the same as #15 and #7, etc – hence  $20 \times 19 / 2 = 190$

- One complained about residual orange juice in the samples (which consisted of clean water or dry sand in well-cleaned 2-litre milk and OJ bottles).

- Several complained about residual water in the sand, despite our tipping it all out and showing it to be dry. OK then, dampness in the sand. The test was conducted on the Mitta Putting Green, the most thoroughly irrigated piece of green grass anywhere between Albury and Omeo.



*Dowsers dowsing at Mitta Mitta*

- And the ditherers' lament: "If I had not changed my mind then I would have been right". What a useful observation; carve it on my tombstone – no, on second thoughts don't.

I decided to get the result announced over the PA – the Mitta Muster was in full swing, with whip-cracking demonstrations, obstacle races for dogs, line dancing etc. Now here's a Skeptical Challenge:

Objective: Explain the Poisson and Gaussian normal statistical distributions, the Binomial Theorem and the Chi Squared Test, and then tell the diviners that they have failed to achieve anything.

Media Provided: Microphone and PA system, but the audience can't see you very well

Audience: 52 diviners and 800 high-plain cattlemen in mid-party, whose entertainment has been temporarily halted so that you can speak.

Location: The middle of the footy field – making your way back through the stunned crowd afterwards.

At the same occasion we also conducted a gold-divining test involving one gold and 3 dud samples, with the expected results.

Returning to the Skeptics Bunker we wrote a press release and faxed it off immediately. The phone rang within half an hour and some of us were being interviewed the following morning. If you don't follow up an event like this right away, it's not news and it's dead. I can't emphasise this enough: organising an event involves two essential things: (a) the event and (b) a press release. At the end of your event, I reckon you have then done about half the work. Articles ran in newspapers for weeks afterwards, along with a lively exchange of letters with disappointed diviners looking for an 'out'. James Randi picked it up and publicised the results. We wrote a letter to every diviner, and sent them a full copy of everyone's results. This was the biggest divining competition ever held; it put Mitta Mitta on the world stage.

After the event we had a big party at a local member's house. As a designated driver I drank only water, but nobody bothered to tell me it was piped straight from the Mitta River – everyone else had only hangovers the next day, but I was in a much worse state. We also went for joy rides in a local member's small aeroplane (causing some people's joy to appear in colour). Overall we all had great fun, it was a nice excursion and even most of the diviners were happy with the event. We have been invited back for 2002, when we hope to conduct a better organised event in the Mitta tennis court, which is fenced off so that we can control the crowd and ensure some privacy for the contestants. We'll involve some prominent diviners with the protocol and get them to divine the area for underground streams first. We'll use 30 samples, show the results on a white board and get the media in.



# Mustering at Mitta on the Great Divining Range

*The Bard is back in Melbourne town from quite a long sabbatical*

*When she is busy penning verse, as you know she's quite fanatical*

*And Mitta Mitta for a name has such poetic possibilities*

*That the Muse has come to pander to your skeptic sensibilities*

*The Mitta Mitta Muster was a wonder to remember*

*The best fun we've had by far since early last November*

*When gathered we in Sydney town for the Skeptics World Convention*

*And water dowsing as a feat rated not a mention*

*We braved the Never Never up Mitta Mitta way*

*In the border highlands where dowsing rods hold sway*

*And we'd test some diviners on the Mitta Muster Day*

*There was Rosemary and Steve, and Peter and Bob*

*Who hung out with the Kelly Gang, Russell and Rob*

*There's nothing like plying a Skeptic with food*

*It's a guaranteed way to create a good mood*

*And at Wombat Gully they laid on the tucker*

*All in all, the weekend turned out rather pukka*

*Of Mitta's sixty townsfolk, six are paid-up Skeptics*

*How's that measure up for a good dose of the peptics*

*For all the other locals who swear by dowsing's worth*

*And for untold generations have been salt of the earth*

*The test would be conducted on the Mitta putting course*

*In the Borderline region up near the Murray's source*

*The local diviners would show us their mettle*

*Is divining for real? That's what we would settle*

*Diviners one and all would be subjected to the test*

*It sure would be interesting to see which one was best*

*The number of targets was decided at twenty*

*For fifteen correct, we'd think that was plenty*

*To make the grade for a formal try*

*At the hundred & ten grand in the prize money pie*

*The top score was got by a novice diviner*

*And not, as you'd think, by some crusty old-timer*

*Who'd have us believe he's the world's greatest shot*

*At finding some water in a well-hidden pot*

*There being no rods that were offered for hire*

*The winner used Dowser Bob's own piece of wire*

*It must've been spiked with a spell of some sort*

*Otherwise, how to explain such a rort!*

*"You Skeptics have picked an impossible spot"*

*Some dowsers muttered when they realised their lot*

*They detected no energies unknown to science*

*On dowsing tools, all had misplaced their reliance*

*The excuses for failure turned out to be legion*

*There never were so many streams in one region*

*"The ground is so riddled with rivers and pipes*

*That it left me confused" was one of the gripes*

*The proceedings nearly succumbed to the throttle*

*When Terry the Dog peed all over one bottle*

*But not one diviner divined with his rod*

*That Terry had given them all a big prod*

*Thirteen was unlucky for one of the dowsers*

*Who declared that the Skeptics were swindlers and wowers*

*He said thirteen bottles must have held water*

*And he'd got thirteen right, so really we oughta*

*Pay him the money, though thirteen were sand*

*But a bird in the bush is not one in the hand*

*And a bottle of water is distinctly not sand*

*One entrant took hours all the targets to fix*

*In the end all he scored was a measly six*

*"The ones that I changed had been right at the start"*

*Methought "Yet another bearded old fart!"*

*Said one, "The fourth is brackish brew"*

*I really thought he'd start to stew*

*When I said it came straight from a watery hose*

*And brought the discussion thereby to a close*

*"There's too much action underground for rods to be of use*

*I'll use the pendulum instead" was one guy's fresh excuse*

*But the pendulum did no more good, his scores were not that great*

*He had two gos and managed just a nine and then an eight*

*"Brolly Boy" got twelve correct, with hand and with umbrella*

*He could dowse with anything - what a clever fella!*

*One bloke saw on sample five an orange juicish stain*

*"This water is contaminated" he ventured to complain*

*But Dowser Bob was standing near and would not let this go*

*He poured some out and drank it to fend off such a blow*

*To the Skeptics' credibility in carrying out this test*

*I fear complainants one by one each came off second best*

*So all of us Skeptics deserve a good cheer*

*We'll go back to Mitta for the Muster next year*

*To see if those dowsers can do it or not*

*We'll give them the job of selecting a spot*

*Where there's no water flowing under the ground*

*And there'll be no reason the Skeptics to hound*

*But ...*

*We'll never never know if we never never go*

*To the Mitta Mitta Muster for the great divining show.*

*(9-10 March 2002)*

**Rosemary Sceats**



# Language and History

**Mark exposes further examples of how bad linguistics is used to support bad history**



*Mark Newbrook is a professional linguist and a regular contributor on linguistic matters to the Skeptic.*

## **Dr Tomatis and the human ear**

Keen readers will remember the musicologist Godwin and his Seven Vowels. Another writer with non-standard ideas about phonetics was the mid-late C20 French thinker Alfred Tomatis. Tomatis started a movement which represents itself as scientific but – because of its failure to break into the mainstream – is often found promoting itself at psychic fairs and the like. The idea is that we are mostly poor listeners, because we have not been trained to listen properly; as a result, we are often poor speakers too, because we cannot produce sounds which we have not heard correctly. Tomatis clearly did know some basic linguistics – though mainly through French-language material, which would certainly have given him a skewed view of the discipline. But his more innovative ideas are often refuted by the findings of phoneticians; eg, his claim that each language or accent has a characteristic frequency range which must be heard and reproduced in order to

speak ‘correctly’ is simply wrong. And his idea that most people are ‘poor’ speakers even of their own first languages/accents is hard to sustain. Whether Tomatis’ methods have any success or not, his linguistic explanations are not to be taken seriously.

## **Saturn in Nevada**

In the end, the Neo-Velikovskyan Saturnists did not invite me to their big convention in Nevada as promised. They have also failed to respond to my queries on this front. I was to speak on their interpretation of ancient language data as supporting their theory of a global catastrophe in late pre-historic times, and to indicate what evidence might confirm or refute such an interpretation. Never mind! I am obtaining the main relevant work by their chief supporting linguist, the late Roger Wescott, and will report further.

Someone the Saturnists did invite was Halton Arp, the professional astronomer whose career has been blighted by an unusually hidebound

American establishment; for this reason, he is something of a hero to the Neo-Velikovskyans. As they well know, he does not actually accept their views, although he tells me that some of the Saturnist committee people do know a lot of astronomy – which is more than can be said for their personal command of linguistics. One speaker at the convention was full of praise for another fringe hero, the maverick scientist Rupert Sheldrake; in contrast, Taylor's review of Sheldrake's latest major book (*Journal Of Parapsychology*, summarised in *Skeptical Inquirer*) describes it as totally lacking in scholarly merit.

### Media events

*The Australian* carried Halpern's anti-linguistics diatribe (see last instalment) in its Higher Ed section; but two weeks later it carried my rejoinder. Later, SBS screened a series of documentaries dealing with Richard Rudgley's ideas about Stone Age civilisations (see the reviews of Rudgley's two books by Peter Hiscock & me in earlier issues). On this occasion, I was less successful; my suggestions about the desirability of presenting a critical response went ignored. I hear, however, that Rudgley's latest book (which I had pre-ordered) has been cancelled (not sure why).

### More from New Zealand

Martin Doutre in New Zealand likes the ideas of the dreaded Gene Matlock, and Matlock eventually wrote to him to thank him for his support and to discuss how very troublesome and closed-minded I am. I attempted to send Doutre a response; but in the meantime he had accidentally discovered that Alan Seath (one of the least fringe of the NZ diffusionists) and I had been discussing his ideas without telling him (big sin!). In fury he had fixed his site so that it now knocks back by return post anything from Seath or me. I asked Seath to give me the email addresses of those who he thought might be interested in my response, and he identified John Tasker, an-

other erudite non-mainstreamer whose books I know. I sent the response to Tasker directly, and he replied expressing interest.

In the meantime, I had a snail-mail exchange with Joan Leaf, an NZ amateur historian and genealogist who is in agreement with Doutre in accepting Barry Brailsford's idea of a prehistoric world civilisation centred on a mixed Polynesian/ non-Polynesian culture based in the South Island. Like a number of fringe NZ thinkers, Leaf regards orally transmitted stories and genealogies as very reliable; but her book (more are coming!) does not require an academic response because she presents her account as a narrative without any references or notes on archaeological or other evidence. She struggles to deal with critical comments and is mercifully unlikely to have much influence.

Brailsford himself was a mainstream archaeologist, but he went feral after supposedly becoming enlightened by contact with Maori elders. He and his followers use the name *Waitaha* for their supposed civilisation and for those such as themselves (whether or not connected with the Maori) who now honour it and revive its practices. This is very confusing, given that the term has a more specific uncontroversial reference to one of the main South Island Maori tribal groups. In the mid 1990s, Brailsford's big book *Song Of The Waitaha* was distributed to all schools in the country in an attempt to take over the education of the young about early NZ; it is now difficult to find a copy, but smaller books by Brailsford do circulate. He is cited as including linguistic evidence in his material, so I wrote to him asking him either to sell me the big book (no go; they have none to spare) or provide a summary of his linguistic claims. One of his followers responded with a one-page email containing claims similar to those of Tregear (see last instalment) and one wholly unsurprising and unreferenced claim about early Maori. I asked for more details and comment; but I received only a gener-

alised rant from Brailsford himself, accusing me of inability to appreciate the indigenous non-scientific path to deep truths and also of arrogance in asking for evidence in support of the empirical claims made by Maori elders and by the Dalai Lama (who reportedly endorses Brailsford's ideas about ancient links between Tibet and NZ). I responded, indicating that I had no wish to engage in a general debate but merely to obtain relevant details. But I gather that I should count myself lucky to have got any response at all from the big guru of the Waitaha.

I obtained an Indian book which is cited by Brailsford & Co in support of their claims about the Maori coming from India. This book is in fact a work of fiction, openly presented as such! It does have an introduction in which the author claims that the narrative is based on fact and that the Vedic diasporas described really did occur, but no actual evidence for these claims is given in the text.

More recently, I came upon a website promoting the idea that there was Scots Gaelic settlement of NZ well before C18. This is part of a diffusionist scenario which resembles Brailsford's in general terms but is utterly opposed to his ideas in that it minimises the positive influence of the Maori. The author, Bryan Mitchell, accuses contemporary Maori of inconsistency in denying that some unearched human remains and artefacts involve their own ancestors but still claiming control over them and thus blocking analysis (shades of Kow Swamp!). Mitchell, along with Doutre and others, believes that this involves a conspiracy involving Maori activists, politicians and academics, aimed at hindering the study of what they regard as strong evidence for pre-Maori settlement in NZ. This view is exaggerated, although it is arguably true that it has become 'politically incorrect' to dispute the mainstream view that NZ was uninhabited until the Maori and other Polynesians began to arrive around 800 CE. On the other hand, this is just what the evidence (reasonably interpreted and

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bar a few pieces of rogue data which could involve errors) appears to suggest – unfortunately for both Brailsford and Mitchell.

One possible exception involves Polynesian rat bones which some radiocarbon dates place around 2000 BP. However, Atholl Anderson argues persuasively that they may be much more recent than that. In any case, one early Polynesian landfall in NZ would not amount to a lost civilisation, which is what these authors want.

In respect of evidence which favours his own view specifically, Mitchell adumbrates that he can provide a list of Maori placenames from Northland which are in fact Gaelic-derived; but so far he has failed to do so. He knows a little linguistics but his philology is of the usual amateur brand. He also talks about atrocities perpetrated by the Maori, refers to God several times and in fact seems to regard the archaeological mainstream and the NZ authorities as not only biased in favour of the Maori but also ‘un-Godly’!

### **Linguists and theosophists**

I attended one of the regular Sunday talks put on by the Melbourne Theosophical Society; it was called ‘Mind Your Language’ and I had seen it advertised in their bookshop. The speaker was one Trevor Walsh, who was introduced as a student of Sanskrit; in his own intro he declared that he had done some linguistics as well. The content was about language with a view to theosophical beliefs; the linguistics was a mixture of basic-level truths, contentious claims that the speaker treated as clearly true and gross errors: eg, ‘Very ancient languages had no grammar’; ‘There are five basic vowel sounds’. The latter is again reminiscent of Godwin and his Seven Vowels, although it became clear that no-one present knew of that work. Most of Walsh’s claims – including his attribution of a key ancestral role to the ever-popular Sanskrit - are in fact simply ‘revelations’ straight out of *The Secret Doctrine*, the major work by the Theosophists’ C19 founder,

Blavatsky. The gross error and incoherence involved demonstrate that Blavatsky was not all that strong in linguistics, even for her day!

In question-time I introduced myself, to Walsh’s alarm, and politely listed his five biggest errors. (I also pointed out that his awe at the fact that many different ancient societies discovered the value of pi - ‘This is surely very significant’ - was out of place, given that all that is needed is the ability to draw a circle, use a tape-measure and do some basic arithmetic!) It emerged that he is a 1st Year undergraduate at another local university and knows no more about linguistics than an average 1st Year would be expected to know. I suggested that he refrain from speaking on matters in which he is not expert to non-specialist audiences who would typically know even less and might be misled even by his honest errors. He claimed to be following his lecturers (whom I know) and the textbook; but in that case he has grotesquely misunderstood much of this material! Some of the audience then asked Walsh questions which he was unable to answer but which I could have answered easily and helpfully (he made no attempt to bring me in).

Afterwards some of the audience approached me with genuine questions (one asked fairly sensibly about dyslexia and mental representations but rather spoiled it by stating that she is a psychic who channels blue-eyed humanoid ufonauts speaking English with a BBC accent!). The chairperson then invited me to address the Society myself (!). I gave him my details but pointed out that *qua* linguist I could say little – or little positive – about theosophy or the occult and that *qua* human I could not endorse their overall account of the universe. So far he has not got back to me.

### **Theomatics, not to be confused with theosophy**

Lucas & Washburn’s *Theomatics* was something of a late-1970s precursor to *The Bible Code*; in fact, there have been many such efforts to prove that

the Bible or some other religious text is reliable by finding numerical and/or verbal patterns in the text which allegedly could not have got there by chance and which often carry important messages (prophecies, etc). As we all know, the cases for these claims are typically much weaker in statistical terms than their proponents suggest (see, eg, Brendan McKay on *The Bible Code*). But what has not always been made so clear is that in many cases their linguistics is also less than competent. For instance, Lucas & Washburn – misinterpreting a reference work – claim that there are no rules at all for the use or non-use of the Greek definite article (the equivalent of *the*); they therefore claim that God was free to include the article or not in each New Testament phrase, in order to make the numbers add up. Anyone who has learned any Ancient Greek will at once realise that this is nonsense!

### **Hawaiian *Huna* and the Bible**

Another writer who found hidden messages in the Bible was Max Freedom Long. Long lived in Hawaii, met *kahunas* with supposed psychic powers and came to believe that Jesus had studied in an ancient Polynesian mystical tradition called *Huna* which had once prevailed in Egypt (he has some novel interpretations of hieroglyphs!) and elsewhere in the ancient world. Jesus and his apostles accordingly inserted secret messages in the texts of the Gospels, which are much more important than the overt message of the texts. These messages are in a secret language or ‘code’ which is the ancestor of Polynesian (and is still spoken by a tribe in Morocco!). Confusingly, Long’s specific claims often seem to involve current Hawaiian, not early Polynesian. He clearly did not know linguistics and his interpretations require large amounts of special pleading if they are to be deemed remotely plausible. But there is apparently still something of an occult tradition based on his works. One additional problem for his theory involves the fact that he finds evidence of knowledge of the ‘code’ only in the Four Gospels, not in the rest of

the New Testament (he thus rejects Paul *et al.*). But it is generally agreed that *Luke* and *Acts Of The Apostles* had the same author!

### Lukin on Ockham's Razor

Annabelle Lukin, a Sydney linguist, spoke recently on Robyn Williams' ABC radio show *Ockham's Razor*. Most of her material was excellent; but I was worried about the close parallel she drew between child language acquisition and the historical development of languages. She gave the sentences 1) *Some animals escape from other dangerous animals by running very fast* and 2) *Some animals rely on their great speed to escape from danger*. Now it is true that, as she says, children acquire forms like 1) earlier than they acquire forms like 2). And it is also true that English and some other European languages had forms like 1) earlier than forms like 2). But this is by no means a universal tendency, even within Indo-European. For instance, Greek used forms like 2)

(with abstract nouns and infinitive verbs) much more extensively in classical times than it does today. This calls into question Lukin's analogy, especially if it is intended not merely as an analogy but as a genuine theoretical claim.

Indeed, it is very strange to take a genuinely evolutionary view of language changes which began so recently. English is attested only since about 700 CE and is treated as beginning in about 500 CE. But this date is arbitrary; it is set up very largely for a non-linguistic reason (the arrival in Britain of groups whose language was to become English). English was not 'born' then like a child, as a wholly new entity. The analogy with child language acquisition fails here. Indeed, the Germanic ancestors of English existed long before 500 CE, and their Indo-European ancestors existed before that, and so on back to the origin of human language perhaps 150,000 years ago. If the pattern involving a shift from 1) to 2) is evolutionary: what happened in

these earlier stages? Or is this a cyclic change that repeats itself? Too much is being made here of one body of historical data.

It is interesting that – in a much more amateurish way – Walsh (see above) made a similar claim about strong analogies between child language acquisition and the long-term historical development of languages. This idea is in fact quite widespread and perhaps relates to the more familiar but long-outdated idea that embryo development recapitulates swathes of evolutionary change.

### Envoi

Oak now says that he knows astrology is valid because in 1945 (when he was 28) an Indian astrologer made three predictions which proved accurate. One of these was that Oak himself would be a great man. (The other two involved political events which were obviously predictable in 1945.)



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# Stop it!!!!

One of the banes of any editor's existence is the fact that the person who designed the qwerty keyboard made a fateful decision that simultaneous depression of the "shift" and "1" keys, allowed writers to come up with the "!". It is called an "exclamation mark", meaning it should follow an exclamation, just as a "question mark" [?] should follow a question. An exclamation mark should not be seen as an alternative, at least in formal works for publication, to the "full stop" [.] (or "period" as our Usanian cousins call it – we have no idea what euphemism they use for the regular culmination of the menstrual cycle) for terminating a sentence.

"Bugger me!" is an acceptable use of the offending punctuation and it can be very! very: very; very? (very) occasionally used in other situations

for dramatic effect – !?, but its use should be restricted to that. Furthermore, the use of more than one !!!!! is considered a capital offence (or possibly CAPITAL OFFENCE) – apropos which, the use of CAPITALS in inappropriate places should also be avoided, as should the introduction of long passages in parentheses ( ) in the middle of sentences) by the International Brotherhood of Editors. Authors are adjured to abjure it, or at least to be homoeopathic in its application! Please?!?!?!?

(Failure to abide by this request might well result in a visit from editorial assistants, Messrs Lefty and Spike, who will perform operations resulting in the disablement of this function on offending keyboards (or fingers).)

While we're having an editorial whinge (an editor's prerogative) we'd

just like to remind authors that while the apostrophe can normally be used to denote *either* a noun's possessive (genitive) case, or to indicate a contraction in a word, in the unique case of the word "its" it *only* applies to the latter, ie it's is *always* it is; it's *never* used in the context "the tree lost it's branches"!

### Warning

While correspondence *may* be entered into regarding these matters, those seeking to outpedant the pedant should remember Rule 1 of the *Codes of Practice of the International Brotherhood of Editors*, to wit: "The Editor might not always be right, but the Editor *always* has the last word."

**Etaoin Shrdlu  
Pedantry Editor**

# The Evolution of Religion

**This author asks, “Is religion simply a result of our evolution as a species?”**



Helen Lawrence, from Tasmania, is an occasional contributor to the *Skeptic*, and is the author of “The Hominid Succession” in the Summer 1999 issue (19:3).

Most of what we believe to be true is based on some sort of evidence, and yet a very large number of humans rely on ‘a friend behind phenomena’, as Gilbert Murray put it (*Humanist Essays*), with no hard evidence that a friend in this context exists. This curious dependence on a mythical figurehead seems to be apparent everywhere in human communities, but how did it evolve?

Explorers have reported sacred rites, ordained by gods, practised in almost every corner of the settled world. Words like ‘pagan’ and ‘heathen’ were invented to describe alien kinds of worship. But how did all these different belief systems come to have a common theme? Clive Gamble has an answer. Speaking about hunter-fisher-gatherers, in *Timewalkers*, he writes:

*Where long term survival information is coded into (such) oral traditions it is common to find it sanctified and linked to ritual performances.*

If religion evolved along with *Homo sapiens*, it explains why it is so important to us, so common in substance, so varied in detail, and so

impossible to shed. And a hypothesis with the ability to *explain* has clout.

Facts support this paradigm. Walter Burkert (*Creation of the Sacred*) provides a wealth of evidence, documenting the way humans have memorised, chanted and ritualised religion as a means to an end – survival on earth. Information equates to survival, and ritual helps to instil a memory for generations to come, particularly *sacred* ritual (though it may be degraded into believing that the *rite* ensures the survival). A further step is to adopt certain behaviour in order to enhance survival of the individual throughout eternity.

Egyptian civilisation illustrates this. In ancient Egypt, eschatology was at a high level of sophistication not since improved upon, and long before that, the important dead were furnished with grave goods to support their continued existence. Unfortunately, material goods were not matched with information; a reliable map to the hereafter would have been useful.

Out of interest, I began to study evidence that religion was engendered and inspired by us, ie by *Homo* as against *Homo sapiens*, for ele-

## Evolution of Religion

ments of religious behaviour may, I think, be deduced from stone tools, which can be dated back two million years.

### Were tools sacred objects?

Chimpanzees use fortuitous tools littered about the landscape, but these tools; stones, tree branches and the like, show little sign of being purpose made. Religion demands a degree of foresight, hindsight and lasting commitment not apparent until stone shaping began and became a habit. Learned behaviour that carries down the generations seems to correlate with brain volume. Provisioned macaques given unwashed potatoes to supplement their diet, learned that they were nicer washed, so, following the example of a smart female monkey, the entire group washed their potatoes before eating them. However, the custom died out within a couple of generations, (Toshisada Nishida, 1987). Higher on the primate scale are gorillas, whose brains are larger relative to body weight. We have seen them in the wild on our TV screens in the series *Congo*, routinely washing their food free of mud. *Homo* made fire, no doubt washed edible greenery, and learned not only to make shaped stone tools designed for diverse purposes, but also to pass on the technique effectively.

The earliest kind of simple shaping of stone was done over a very long period. Was this because it did the job so well that nothing else could be envisaged? Or was it because the tools were considered sacred objects because they produced a livelihood? Were they regarded as clever? Magic? Having an element of control over the beings they served?

As tools became more sophisticated and were made from wood, bone, shell, and antler they can be associated with specific tribal groupings. Small differences came to represent the trademark of the group. The differences identified the group along

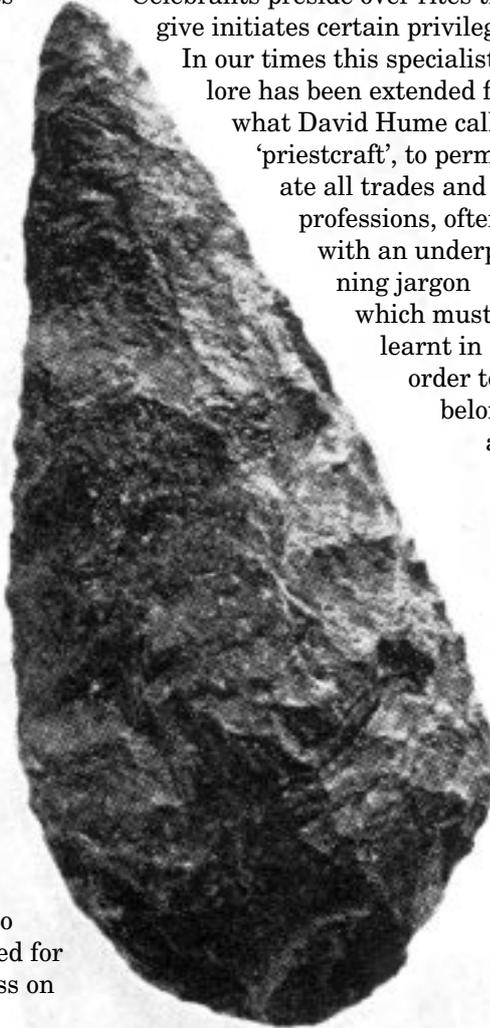
with body paint and hairstyle. These differences acted as a cohesive safety factor. Ritual and secrecy surrounded them and the secrets could be passed on within the group.

### The language of secrecy

Secrecy is an element of religion.

Celebrants preside over rites that give initiates certain privileges.

In our times this specialist lore has been extended from what David Hume calls 'priestcraft', to permeate all trades and professions, often with an underpinning jargon which must be learnt in order to belong and



sometimes with a test period of initiation.

Religion is not unparalleled for insisting on a sense of belonging. The association of language with secret ritual is interesting. The medieval church held a large section of the population in thrall for a thousand years by using a language only a small number could understand. Icons were developed as simple encapsulation of a belief, sacred to some, unholy images to others. Icon has become a secular word, used to sanctify all sorts of profane things like Coca-Cola. Did language develop

in the same way as jargon does, as a mark of prestige, of being an initiate of a certain society?

### Religious similarities

Given that the details of religion are very different, why are there so many similarities across continents and nations? The religious answer is that irrespective of how misguided and far from the "the truth" some may be, all religions come from the same source – God. Another answer is that they are human inventions, different, yet familiar. Early religion was based on supposed evidence that certain behaviour would produce meals. For an airline, proving it is airworthy is a modern equivalent as regards the vital element of survival. A massive amount of technical information is essential for its safety record. Even the most devout would not expect an airline to run on prayer. Prayer takes over when there is no available pertinent information. Prayer runs on hope, not mechanical know-how. Survival is a matter of expediency. All sentient beings strive to survive, whether the wish is a conscious one or not. Therefore religion, which is primarily about survival, has a common theme.

### Exploitation of differences

When we examine the social evolution of hunter-fisher-gatherers, we see how one group could identify themselves from another and how this became the basis for competition and/or cooperation. Signs and symbols became ritualised and distinction between groups, important for identification, resulted in a plethora of varied accoutrements clinging to religion. In a modern global situation, these separating factors, which could be dismissed as irrelevant, instead, too often, have led to bloodshed. Everyone knows why that is, but we all seem powerless to prevent it, possibly because these differences have been sanctified eons ago. Of course, it is clear that groups fight each other for reasons other than religious differences, such as having enough to eat or wanting more territory. But not only is the sanctification

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of differences divisive, the whole process is singularly exposed to exploitation. The way to grab power is to espouse a cause, and what could be more empowering than a ready-made platform with a figurehead guaranteed not to interfere, and a set of identifying criteria that makes members think they are morally superior? A quote attributed to Yasser Arafat is appropriate at this juncture. He is reported to have said, "It's all about which of us has the better imaginary friend!"

Why are we so powerless to prevent struggle on such a basis? Is it because the criteria for belonging were laid down by this impossible-to-prove founder who has decreed that everyone outside the group is in the wrong? Are we then destined to suffer these inflammatory separations until the sun cools or an asteroid hits us? Perhaps a more likely scenario is that we desecrate the Earth to such an extent that it can no longer support life as we know it.

### **Saving graces, but are they saving enough?**

Our history warns us but also heartens us. Humanity is capable of introspection and of re-thinking its philosophies. Tools *did* change and this is well documented in Australia. There was a "renaissance" in the Holocene period (last ten thousand years) when stone tools underwent a sea change (Lourandos, 1983) to become smaller, more varied and more efficient after thousands of years of apparent stasis. Tool sophistication was accompanied by alliances between tribes and exchanges during "ceremonial events", an example of putting ritual to peaceable (and profitable) account.

The Greeks in the time of Plato and Aristotle founded another mind-bending change. But perhaps more pertinent to our time is the great leap in thinking that took place in the period known as the Enlightenment. During hundreds of years previously, enormous effort went into Christianising Greek philosophy to

fit the prevailing myth of an Earth-centred universe. Building on the findings of Copernicus and Galileo and many others responsible for significant scientific achievements, Enlightenment philosophers set about demonstrating the irrationalities of a circular cosmological argument for the existence of God, although some of them subscribed to a god-designed world. The deist argument, based on the bountiful beauty and essential goodness of the earth rings a little hollow today when we know so much more about the dog-eat-dog side of Nature.

The acquisition of flexible language capable of expressing abstract ideas has caused an exponential change in the history of *Homo*. Robin Dunbar floats the idea that language may have taken over from primate grooming as a societal adhesive. Language is the nuts and bolts of our information/communication network, a safety valve if wisely used.

Somewhere along the line it became necessary to account for the world and its contents, to have a figure or figures to praise or blame. There had to be a way of understanding the universe and finding a *raison d'être*. We are not really any nearer the truth now, in spite of (probably) knowing how the universe began. Knowing how does not give us knowing why or what was the *first cause*, or even if there was one.

### **Conclusion**

So what I set out to consider (not prove) was that religion evolved along with us. Keeping an open mind, it is just possible that a controlling figurehead decided that this was the way he/she/it *wanted* to instil religion. No doubt such a belief has been a comfort to countless millions. All religions claim to be a social recipe designed to create good relations *within* the group. The other side of the coin is the inherent tendency to produce fanatics, and, like everything else, it has gone global. In *Holy War*, a detailed account of how Middle East turmoil today harks back to attitudes at the time of the

Crusades, Karen Armstrong sees the only solution is to bring Muslims, Jews and Christians into equal partnership. Armstrong is an ex-nun – now Middle East journalist. Her unbiased synthesis throws light on the historical origins of the present appalling situation. However, any solution is fraught with difficulty, in that each faith itself is split into 'tribal' entities unable or unwilling to agree on the way forward.

Loyalty within the group is necessary for social animals, but can be misplaced, with outsiders branded as anathema to be misrepresented and demonised. Propaganda, practised unspoken by wily primates (monkeys and apes), has now reached its zenith in human-primate society. With us, religion, mainstream and otherwise, is deeply into that form of persuasion. If man-made religion began as a survival strategy, it now harbours inherent dangers not only for the world's ecosystems but also for the peace and security of the human race.

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# Joe Nickell

## Skeptical Investigator

**Richard Cadena interviewed  
Joe Nickell at the World  
Convention in 2000.**



*Richard Cadena is a computer professional and regular contributor to the Skeptic.*

Joe Nickell is a senior research fellow for the Committee for the Scientific Investigation of Claims of the Paranormal. He is a former stage magician and has spent more than 20 years looking into paranormal claims. Dr Nickell is the author of many books including *Inquest on the Shroud of Turin* and a children's book, *The Magic Detectives*. He is also the author of "Investigative Files" column for *Skeptical Inquirer* magazine.

*Richard Cadena: First question is the basic "How did you get started in Skepticism"?*

Joe Nickell: As a child, I wanted to be a magician, detective and many other things and as I grew up I found that I still wanted to do those things. So I actually did them. I think the mixture of being a magician and a detective coalesced to make me a paranormal investigator. I was strongly influenced in that direction by James Randi when I was resident magician at the Houdini Magical Hall of Fame in Niagara Falls, Canada.

*RC: But there certainly are non-skeptical detectives and non-skeptical magicians?*

JN: Regrettably, because all those people should be skeptical (small laugh).

*RC: Is there something that made you*

*not fall into that 'regrettable' category?*

JN: I had probably always been something of a skeptic. In high school, I became a skeptic regarding religion. In college, I was attracted to New Age claims but I began to be disillusioned with those. Really my immersion in magic made me see how so many things that pose as the paranormal are really magician's tricks or should be looked at with the same critical eye. Once I became a professional magician, I began to see how many things that were passing as the paranormal were clearly not.

*RC: You've been quoted as describing yourself as being raised "fantasy-prone". My first question is "Is that true"?*

JN: (quizzically) Where did that come from?

*RC: It came from your talk with PHACT (PHiladelphia Association of Critical Thinking).*

JN: OK

*RC: It says you were raised "fantasy-prone" and I'm wondering, "What does that mean?"*

JN: That may be an overstatement. Certainly, I have a number of the traits that you would associate with fantasy-proneness. As a child I was able to spend a lot of time by myself, in reading and artwork, being a detective and all the things I wanted to

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be. So I've had a rich imaginative life as a child. Again, wanting to be many different things. That is normal for a child but maybe I was more intense. I could tap into my imagination as an artist and a writer. Even today I would say that I value the traits of - maybe fantasy would not be the way I would always put it but certainly I value what creativity I might have and the ability to imagine scenarios, to write and create. Whenever people think of me as a dastardly skeptic I always like to point out that I am a sensitive, romantic poet (laughs)

*RC: And who could argue with that. As you were talking about, when you were young and wanted to be different things, well, you've certainly gone out had many different roles, jobs...*  
JN: (laughing) I've had a chequered past.

*RC: Could you give me a short list of your jobs?*

JN: In my youth, I was a surveyor's chainman, a popcorn vendor, a professional sign painter and several others that would be associated with that, such as sign designer, calligrapher, and a portrait artist. Then I was civil rights worker, marched with Martin Luther King, and was in the VISTA program, Volunteers In Service To America. I was subsequently an advertising writer, a job I was working at when I really decided that I wanted to take up magic seriously. Saved my money and went out, against the advice of people who were saying "Don't quit your day job". Quit my day job and became a professional magician. That entailed me being a carnival pitchman, pitching magic at a carnival. Then I worked in the schools as Janus the Magician, Mendell the Mentalist, and Mister Twister the Magic Clown. Summers, I was resident magician at the Houdini Magical Hall of Fame. I was a detective a world famous detective agency, where I did both general work such as surveillance, bodyguarding politicians and undercover work where I infiltrated theft rings. There I got to play a number of roles. I spent the next couple of years in the Yukon Territory in Canada as

a blackjack dealer, museum exhibit designer, and riverboat manager-

*RC: Riverboat captain?*

JN: (wistfully) No, well, not really a captain. There was only one captain and I was his flunky. And a newspaper stringer. Then I went to Hollywood where I attended for a year Paul Stader's Hollywood Stunt School where I was a stuntman in a stunt show and an extra in a couple of movies. (laughing) Not my most successful work. I also worked as an armed guard to pay the bills. I decided to return to school, where I got a Masters and a Doctorate in English Literature, at the University of Kentucky, where I was an instructor of technical writing. As we know, in the meantime, I became a paranormal investigator and author of books. I'm now on my 17<sup>th</sup> book, which is probably about 14 too many (chuckling).

*RC: (jokingly) It is a good long list. You can't stick with one thing, can you?*

JN: It's not a complete list. It is safe to say that my resume began to look like a joke until people found out; no it was perfectly serious, then it looked a lot worse.

*RC: You've been in the paranormal business for a while. How has it changed over the years?*

JN: I think the paranormal has been around as long as mankind has been and I expect it always will be. It has changed its form. Today we have less interest in demon possession than we do UFO abductions. The nature of the belief has changed in many ways and changes constantly. Crop circles sprang up, the new kid on the block, paranormal-wise. There is always some level of the paranormal. Things wax and wane. They die down, they never die out entirely; so we have a resurgence of things like the Bermuda Triangle or spontaneous human combustion. Things that might be thought to be more or less stamped out and then they spring back for a new generation, a new run of crank books. The major change is an increasing interest by the mass media in the paranormal. The par-

anormal used to be a fringe thing that the media did. Maybe the obligatory Halloween story in the newspaper. I think in more recent years that has increased. That has had an effect on the public of spreading ideas faster. Also the internet (AKA the gossip net) is spreading silly ideas pretty fast; faster certainly than they can be investigated. It only takes a moment to foster an idea, to launch a claim and it can take months or years to properly investigate them, so I'm always in a deficit.

*RC: Do you think styptics are making some ground up on the paranormal or are we just shifting the playing field?*

JN: I said some time ago to Paul Kurtz that I thought the harder I worked the worse things got; and that maybe if I would just quit things would go back to a better state (laughing). I think you can say that broadly with the paranormal. The more successful styptics have been, it seems there has then been more media interest in the paranormal but, of course, that is not skeptical because they are looking for entertainment. So, in a way, we are not making things better. More objectively, and a good example is the Shroud of Turin but this applies to many areas of the paranormal, you could say that we have already won the intellectual battle. Skeptics have clearly shown the Shroud of Turin is a forgery from the middle of the 14<sup>th</sup> century. That is powerful scientific evidence and it is solid. But we are losing the propaganda battle, if you will. The other side is larger and willing to put out their view, I believe maybe even dishonestly, as propaganda with an agenda to, end justifies the means, to promote a world-view, or promote a religion in the case of the Shroud of Turin. We are just absolutely losing that battle.

*RC: Speaking of the Shroud, you certainly have spent a fair bit of time and effort involved in that. What part of the story has surprised you the most about it? The zealotry...?*

JN: Yes, the zealotry has certainly been breathtaking. When I started it

## Interview: Joe Nickell

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was for me just a very interesting mystery and one worth looking into and trying to solve. I spent a great deal of time in that pursuit and I think that mystery is, due to the efforts of a many people, basically solved. There are still some questions that could be settled, particularly if serious skeptical scientific investigators were allowed access to the Shroud as opposed to largely pro-Shroud zealots. I've been amazed at the willingness of the other side to continue to promote a lost cause.

When I say a lost cause, I mean everything about the Shroud of Turin shows that it is a fake. It has no history for 13 centuries, the earliest document is a bishop's report of the forger's confession; it has tempera paint all over it; it radiocarbon dates to the time of the forger's confession (chuckling). Just to name a few points. That evidence is corroborative and solid.

The other side doesn't even have a plausible hypothesis for the image formation, other than some vague pseudoscientific hint at resurrection radiance. An invocation of a miracle; which is, of course, not in any way scientific and, in fact, can be disproved that it is a radiation burst. That has been solidly disproved. The willingness of those people to continue despite even the radiocarbon dating; to simply start with the answer and accept only that evidence that fits it, dismissing or rationalising away the other. Which is the opposite of the scientific approach, which starts with evidence and is willing to go wherever that leads.

*RC: In your book, Inquest on the Shroud of Turin, you have an update at the end where you look at the theories that are rehashed continually.*

JN: Yes, and it has now reached a stage where, for me, it has ceased to be very intellectually interesting. It has become a propaganda war and styptics aren't as willing to be engaged just in a propaganda war. They feel like: well the truth should matter, we've got the truth, here it is. The other side is simply saying, as one person told me, you are missing

the point. The point isn't whether the Shroud of Turin is genuine or not, it is that if we can make people believe it is genuine then we can lead them to the true religion. This is just frightening to me. It smacks of a kind of authoritarianism and agenda promotion that I find regrettable. I



Joe Nickell

guess if anything about the Shroud disappoints me a lot, it would be that I had hoped more enlightened Catholics would join in the battle to tell the truth rather than just saying "well, we are not promoting the Shroud and we'll step over here and be quiet". Which is largely what I've seen.

*RC: What investigative stream, be it ghosts or UFOs, interests you the most?*

JN: Well, it is such a broad, interesting and colourful field but one that is particularly resonant with me is the idea of ghosts. I know from my own impulses how strong the desire to believe in ghosts is. In my case, I remember vividly when my grandmother died and how much I wished that were not the case. So, I find that idea of ghosts, from the personal grief of losing a loved one and wishing you could still communicate with them, to the literary interest in them, to ghosts as a link with the past, and of course one wishes for one's own personal survival, it is a strong urge. If we are voting, I vote

for ghosts (smiling). Unfortunately we aren't voting and I'm concluding, reluctantly, that it's very unlikely I'm going to find evidence for ghosts. After 30 years, I've found as we say "no haunted places, only haunted people". I persist because I believe it's not just a question of 'are there ghosts or are there not' but that the fact people believe in ghosts makes it an important issue and that studying hauntings ultimately tells us about ourselves. That's a valuable study.

*RC: If you could eliminate a stream of the paranormal, which one would you eliminate?*

JN: I'm not sure there is one topical area that I would pick as much as I would say I would like to in all the areas eliminate the most harmful area. That is, I'm less concerned with people simply believing they might be having an experience with a recently deceased father than I am a charlatan using their desire to believe to bilk them out of their money and time. I'm less worried about people believing in extraterrestrial life than I am the promotion of the idea that people are being abducted by aliens; which I find utterly abhorrent. The gurus who are hypnotising and otherwise enticing people into that false belief, whatever their intentions may be, I find reprehensible. And the same even with fortune telling; there is relatively harmless fortune telling and then there is the gypsy scam of getting you to bring your money to be blessed, taking elderly and relatively poor people's life savings. So it is those harmful aspects of the paranormal not any one category.

*RC: Other than Randi, who are your skeptical heroes? Or do you have any?*

JN: Oh, absolutely. Certainly I've mentioned Paul Kurtz who is to be extolled for founding CSICOP and helping to found groups all over the world. I certainly admire the work of many fellow researchers and investigators like Robert Baker, Barry Beyerstein, Ray Hyman, Phil Klass, Richard Wiseman and (pauses) I almost hesitate to mention anyone by

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name because of course I've now left out all sorts of people who are wondering why I didn't mention them, maybe first. There is just a long list of those people.

I personally feel I have no competitors because I think nearly all of us approach this in our own unique way. Phil Klass specialises in UFOs, James Randi in challenging people who claim they have special powers and he has probably no equal in that field, Ray Hyman and Richard Wiseman and others look into parapsychological claims from a research/scientific proof point of view. My interest is in case-by-case investigation of a wide variety of strange mysteries. There is certainly room for more (laughing). But none of us is quite like the other; we each come at it in our own way.

*RC: There is a story about a case you did involving identical criminals. Could you speak about that?*

JN: (in a dramatic narrator voice) The Case of the Two Will Wests. (now speaking normally) That really is one of my all-time favourite investigations.

*RC: Lucky I asked.*

JN: Because while it is only marginally paranormal, it could be considered paranormal in the case of synchronicity, but it is also a forensic mystery, a historic mystery. I'm interested not only in the paranormal but in any kind of mystery. My PhD in English focused on literary investigation, so give me a mystery and I'm a happy guy. It doesn't have to be paranormal. The case is about two criminal look-alikes who when one was in prison, in I believe 1903, a clerk thought he recognised him. At that time they were using a cumbersome system of anthropometric measurements called Bertillonage, and fingerprinting was still considered a novelty in America. The Bertillon system could not effectively tell the men apart. They not only looked alike but also had similar Bertillon measurements.

*RC: What kind of measurements were these?*

JN: Height, length of outstretched arms, length of right foot, length and width of the skull, mostly bone measurements. When they ran Will West's measurements through the system out came a card with the name and photographs of William West looking just like the same guy. It turned out that they were two distinct individuals. Contemporary reports said that when they were put in the same room they could scarcely tell them apart. They were as alike as twin brothers although they were unrelated.

As a kid I grew up on that story because that is the case that made fingerprinting successful in America. As a result of that case, fingerprinting was implemented in federal penitentiaries and became a historic fact. It is a wonderful story and then I became a skeptic. I realised that there was something funny about that story, it just sounded too good to be true. I suspected the obvious, that perhaps Will West and William West were identical twins, maybe separated early in life. Today we would settle it by DNA; even many years ago we could have settled it with a blood test.

But in such an old case, I had none of those tools. So I relied on their genetic traits in their fingerprints and ear patterns and other similarities. Also, historical records show that they were both born in the same year, both born in Texas, both born to a mother since deceased, and so on. Languishing in the files was a deposition from a fellow prisoner who deposed that he knew personally both Will West and William West of Oklahoma and knew them to be twin brothers. Finally, I found correspondence records that showed while in prison they wrote to the same brother, the same five sisters and the same Uncle George. Clearly they were identical twins and that was one of my most successful and interesting investigations.

*RC: How do people view you when you go to investigate a ghost and you say I'm with CSICOP or I'm a skeptic?*

JN: I often avoid mentioning the word skeptic or any buzzword that might suggest hostility and try to suggest that I am an investigator of paranormal claims, I'm open-minded and don't have an answer. I find that showing up and saying "I'm a skeptic" or horrors saying "I'm a debunker" is a mistake, oftentimes. Nothing wrong with at some point gently suggesting to people, I'm a skeptic, meaning I want to see proof but not a skeptic meaning debunker.

*RC: Your approach is more of: one gets more flies with honey than vinegar?*

JN: Generally, yes. I sometimes call for a kinder, gentler Skepticism. But when I do that I'm talking about people I largely regard as victims. People who may be deceived by others, or who may be deceived by themselves. I think those people deserve not to be thought of as hoaxers or crazy people or made a laughing stock simply because they believe something. I can be pretty nasty to people who I think are charlatans or are misleading others. I've sure gone pretty much for the jugular of those people on shows like Jerry Springer and other shows. I've met many people who believe in their field and to those people I try to treat them with respect.

*RC: I'd like you to speak about the Skeptiseum (<http://www.csicop.org/skeptiseum/>). What is it, how did it get started?*

JN: The Skeptiseum is a particularly pet project of mine. As a child I had a museum in my home. I collected things, had it organised, had display cards and everything. I had a particular upstairs room that I was able to use for that, when it wasn't a crime lab, or art studio, or something else. At times it was set up as a museum. So museums are in my blood.

I've worked in many museums and have a certificate in museology from the Canadian Museums Association. I've put together many collections from different fields over time. I like the use of artefacts as teaching aids and as something that provides tan-

## Interview: Joe Nickell

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gible links with things. It is one thing to know that people did trance writing in the spiritualist heyday and another to be able to handle, study and look at those trance writings, have them for research data.

I simply realised at one point that I had some interesting paranormal things that I had acquired as offshoots of my investigations. After I moved to Buffalo, I began to put a few things around my office. As people would come and see things in my office they would comment. I noticed that, as I knew, some people like to see artefacts. Not everyone likes a museum but many people do and I began to think in terms of creating a museum of the paranormal. I didn't get a lot of support for the idea of creating a physical museum at the Center for Inquiry, which in any case would be difficult and even at best there would be a limited number of people who would visit the Center for Inquiry in Buffalo.

Later I saw a program, I believe it was on CNN, about virtual museums. I became excited about that and about the same time CSICOP had been given some money to be used for our website. So, CSICOP was looking for a project and I had one. I gave some thought to the name and eventually, sort of inspired by Robert Ripley's Odditorium and similar clever names, I came up with the contraction for skeptical museum as Skeptiseum.

We launched it and bought a digital camera. The collection is entirely mine, CSICOP was not collecting things and has no capacity to spend money on them or store them. I continue to make that my responsibility (laughing). I store stuff in every nook and cranny in my office and my laboratory and in a few display cases in the building and my home. We mostly display it on the internet.

*RC: You have been to all of the World Conventions. How do you rate the Australian World Skeptical Convention?*

JN: The Australian World Skeptical Convention was probably the best. As you know, Australians are the most

wonderful people in the world. You're probably skeptical, and thinking that I say that to the people of every country that I visit. That's not entirely true.

*RC: Yah, you change the name to match the country you visit. You don't tell everyone that Australians are the best.*

JN: (laughing) That's right, that's right. (finally, stopping laughing) Actually, I do find Australians have a wonderful... (pauses) it is hard to generalise about a people, but to the extent that I've seen Australians, I like their relative openness and honesty. They are pretty direct people, they have a great sense of humour, almost to a fault, because they love to tease and poke friendly fun at, sometimes maybe without tact. I remember at the convention a guy from Japan was about to take my picture and one of the Australian skeptic women asked him if he had a wide-angle lens. (wryly) I thought that was particularly tactless. She could have gone all day without saying that.

I think the convention reflected that. People had a lot of fun there. People who had been other World Skeptic conferences commented on how much laughter there was. And it wasn't all my talk (laughing). Or Richard Wiseman's. Richard and I have a sense that one can give a presentation that is informative and responsible and entertaining. So Richard and I will tend to do magic tricks or use audiovisuals or whatever. Let's just say that not at all skeptical conventions have people been as entertaining, sometimes they have read impossibly dull papers.

*RC: Is this your first visit to Australia?*

JN: My first visit and as one gets older one fears that if it took me this long to get here once, the odds aren't great I'll be back. But I've left so much undone that I'm hoping to get back. I haven't spoken with Victorian Skeptics, I would like to do that, I haven't thrown a boomerang, and I haven't eaten every creature that is

here to be eaten (laughing). Although I have started on kangaroos, emus and crocodiles. I certainly seen a great deal of the country, been in the bush looking for the fabled Yowie, crossed sand dunes braving sand flies looking for the Mahogany Ship. There are many great areas and mysteries of Australia to see.

*RC: I'd like to get you to speak about your trip to a magician's grave.*

JN: I had researched the Davenport brothers, the notorious spiritualists. I had gotten a rare opportunity to examine their scrapbook, which had been recently discovered. I had visited Ira's grave. I was very interested in the story about the Davenports and when they were on tour in Australia and William Davenport died and was buried in Sydney.

Houdini came along many years later, when he was here to do the first flight of an airplane in Australia, and recognising the Davenports, not so much as charlatans but as fellow magicians because they would be tied up in a cabinet and musical instruments would play and therefore since they were tied up they couldn't be doing it and Houdini realised they were just escape artists like himself. Houdini went with some local magicians to the grave and seeing it in poor repair had it fixed it up and flowers put on the grave. Houdini came back to the US, discovered that Ira was still alive, an old man in Mayville New York, corresponded with him, Ira invited Houdini to come there and visit him, Houdini came there by train, Ira took him into his home. I'm sure that Houdini paid for the photographer to record this for history, the picture of them together.

This is just my supposition, but I suspect that in part because Ira was so moved at Houdini's generosity and fixing up his brother's grave, and flattered by the attention of a great man like Houdini, Ira was now living in obscurity, he confessed their tricks to Houdini. Putting a good face on their works, Ira represented himself to Houdini that, we were just entertainers, we didn't claim to be spiritu-

alists. That wasn't true, but Houdini seemed to believe it.

I think in the controversy between Houdini and Conan Doyle, both men were right and both men were wrong. Conan Doyle was right that the Davenport brothers did pretend to be spiritualists. They were in effect spiritualists, they performed in spiritualist conventions, performed with a spiritualist minister and clearly were associating themselves and representing themselves as spiritualists. On the other hand, Houdini was right, they were tricksters. In their scrapbook, there are clippings with headings like "Davenport brothers arrested" frequently.

*RC: They saved their own arrest reports?*

JN: Spell their name right and it was basically for the scrapbook. So, when I was coming here, it occurred to me that maybe I should complete my work with the Davenports by seeking out William's grave in the way Houdini did. I was assisted by a couple of local magicians, Peter Rodgers and Kent Blackmore. We were able to clean up William's grave and I bought a bouquet, which CSICOP paid for, on the way there. (laughing) CSICOP doesn't know that it bought flowers for a notorious spiritualist but it did. We had a, not so much a ceremony but a sort of, ceremonial cleaning of the grave, posing for photos in the way Houdini had done.

*RC: And who got to play the role of Houdini?*

JN: Well, I'm not sure. That question was jokingly asked and probably each of us imagined who he wanted to be in his own way (laughing). There may have been more than one Houdini there. Obviously, I felt an affinity because I had been resident

magician at the Houdini Hall of Fame, I had come from afar...

*RC: You are an American.*

JN: I'm American, they are not. Oh, and I brought the flowers. So I believe I have the better claim to have been Houdini although clearly I could hardly have looked less like Houdini



*Peter Rodgers, Joe Nickell and Kent Blackmore at William Davenport's grave, Rookwood*

(laughing). You would not pick me out in the photograph as the one most resembling Houdini.

*RC: Paul Kurtz, at the convention, spoke about how Skepticism was pointed toward the paranormal / supernatural and suggested over time it might move into other areas.*

JN: I think, broadly, Skepticism ought to enter everything. Skepticism, which is an attitude which says prove it to me, should look at politics, religion, medicine, everything including Skepticism. I think there is no, really basically no taboo area. But when I say that I don't mean that CSICOP Skepticism should do that. I think CSICOP is uniquely constituted with a particular expertise to look at paranormal and fringe science claims.

I'm not so interested in getting into areas of the environment, or religion, or any of a number of other areas where I think those are not only very controversial but I question whether CSICOP has the expertise to

do that. I think, yes, philosophical Skeptics should look at everything but particular skeptical investigators, like myself, ought to stick to areas where maybe, we know where of we speak.

*RC: When you were talking about your job as a bodyguard of politicians, I'm just wondering, you would have thrown yourself in the way of a bullet to save the life of a politician, would you?*

JN: Well, I was young and foolish (laughs).

I did work with a world famous detective agency, I'm not allowed to use their name for publicity purposes. People often ask me did it start with a P, did they go after the Jesse James gang? I just say no comment. I did do a lot of what's called general investigation but mostly that was between under

cover jobs. We young guys were doing undercover assignments including grand theft, drugs and arson. I used to single out a couple of the older detectives and loved being assigned on all-night stakeouts with them because there is not a lot to do except watching a place and maybe nothing is going to happen. I used that time to pump the guy for his secrets, his tricks, his adventures and just listening.

All the roles that I've done, and I've done some better than others, always my interest was in learning about that field as a window onto life. Thinking myself always as really a writer and poet. Someone interested in life in every way, soaking up every kind of experience and involved in interesting ways of looking at things.

*Richard Cadena: It certainly sounds like you've had an interesting life so far. Thank you for sharing some of it with us.*

Joe Nickell: Thank you.



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# Forum

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## A Non-existent Continent

W. A. R Richardson  
Macclesfield SA

My article 'Imaginography' (19:1) briefly examined the hypothetical *Jave-la-Grande* = Australia equation on the mid-XVIth century Dieppe maps, as just one example of how unreliable superficial coastal resemblances, alone, can be when attempting to identify enigmatic coastlines on old maps. Charts of familiar areas, the Mediterranean and Black seas, for example, were reasonably accurate by the standards of the time. But too many people today expect early maps and charts of newly discovered lands to have similar standards of accuracy. They are unaware of how incredibly inaccurate many were. Information from different sources could be combined, with no consistency of scale. Many coastlines, such as those of Mercator's southern continent, were but imaginative, graphic representations of written descriptions. Only the inscriptions can confirm what the cartographer concerned was depicting, or thought he was depicting.

### Recapitulation

My critical examination of the inscriptions on the enigmatic 'continent' of *Jave-la-Grande* reveals that it is a misconceived French construct consisting of three elements. Its north coast does not consist of Arnhem Land and Cape York Peninsula, as advocates of the Australian identification maintain. The inscriptions on it reveal unequivocally that it consists of the north coasts of Java and Sumbawa, a fact which several writers have completely disre-

garded. The west coast is a differently-scaled, mis-oriented, primitive, Portuguese sketch chart of SW Java. The east coast is similarly, a misplaced early sketch chart of the coast of Vietnam.

No other non-hypothetical XVIth century Portuguese chart of any of the south coast of Java appears to have survived, nor has any chart quite resembling this depiction of the coast of Vietnam. This would lead one to deduce that both were unique, early charts, probably captured by the French before they reached cartographers in Lisbon. The Vietnam original was probably made after the first official, abortive Portuguese voyage along the Vietnamese coast towards China, made by Fernão Peres de Andrade in 1516. The monsoon forced them to turn back in the vicinity of the Gulf of Tonkin, before they reached Hainan Island. The reasons which were probably responsible for French cartographers having so seriously misplaced the Javanese and Vietnamese coastal outlines need not be repeated here. They were stated in my previous article in *the Skeptic* (19:1 p.30).

The inscriptions on the east and west coasts do not, at first sight, provide any obvious, specific evidence of their identities. Some are in French, some in Portuguese, some in Gallicised Portuguese, and some in no obviously identifiable language(s). In my previous article space allowed only for the examination of very few examples. Nevertheless, I suggested that even on their evidence alone, my coastal identifications could only be convincingly rebutted by a case by case demolition, and by the provision of a more convinc-

ing explanation of each inscription, indicating its association with Australia.

### Rebuttals?

In *the Skeptic* 20:3, Alastair Tweeddale, with some experience of the difficulties of reading early handwriting, but apparently little of early maps and charts, and their inscriptions, sought to challenge three of the six interpretations I gave. He rightly stated that "in known contexts such as sentences," the "correct rendition" of problem words "can be fairly obvious". However, he went on to state that:

*with place-names on maps where there is no available external reference to the validity of the reading, any variation can only be hypothetical.*

This appears to imply that he is not aware of the existence of early XVIth century charts including Vietnam. In fact, such charts started appearing in the mid-1520s, and its coastal outline appears, correctly placed and scaled, on the Dieppe maps. Moreover, quite detailed XVIth century Portuguese sailing directions covering the coast of Vietnam have survived. So valid external references do exist, at least for *Jave-la-Grande's* east coast.

Tweeddale accepted my reading of the island of *Aliofer*, NE of it, as being a misreading of the Portuguese word *aljofar* ('seed pearl'), thus identifying what the Portuguese more properly knew as *ainão* (Hainan Island), which is off the south coast of China, north-east of Vietnam, and was famous for pearls. Yet *Aliofer* on the Dieppe maps, appears as an island in Indonesia.

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Clearly it is misplaced, for pearls were obtainable in only three places in Asia, the Persian Gulf, off the coast of Sri Lanka, and at Hainan. It should logically follow that the coast SW of it is that of Vietnam, for it most certainly is not part of the Persian Gulf or Sri Lanka.

Tweeddale did challenge my interpretations of *Coste dangereuse* and *Coste des herbaiges* as being mis-transcriptions of the original Portuguese, suggesting that they could just have been translations of Portuguese words. However, after deducing from the *Aliofer* = Hainan Island identification, and the general shape of *Jave-la-Grande*'s east coast, and especially the large, triangular, *cap de fremose* promontory, that it was Vietnam and the Mekong delta, I examined Portuguese XVIth and XVIIth century charts covering the area, and their sailing directions. No Portuguese or Vietnamese names that could have given rise to the two French inscriptions could be found, so there is no evidence to support the hypothesis that they might have been translations. (Helen Wallis's statement that the Vallard atlas's inscription *costa dangerosa* was the original Portuguese form which the French translated is incorrect.) No word for 'danger' cognate with that root exists in Portuguese, as Tweeddale correctly stated.

However, two inscriptions including the Portuguese word *costa* ('coast') did exist, *costa da uarela*, more frequently written *costa dauarela*, and *costa de champa*. The most easterly cape on the Vietnamese coast was called *Varel(l)a*, Malay for 'pagoda', because of the perceived likeness of a rock formation on it. (The Portuguese made frequent use of Malay pilots, and adopted a number of the names they used.) The coast immediately north of Cape Varel(l)a was known as the *costa dauarela*, 'the coast of the pagoda'. The French would almost certainly not have recognised the word(s) *dauarela*. It was quite a common occurrence in such circumstances for the scribe to write a word in his own language which 'looked like' the enigmatic word. Anyone familiar with XVIth century handwriting will know how frequently the letters *n* and

*u* were confused, and how often the old, long letter *s* was confused with an *f* or an *l*. *Coste dangereuse* ('dangerous coast') was a reasonably logical result. At least one Dieppe cartographer used a synonym, and wrote *Coste perilleuse* ('perilous coast'). *Coste des herbaiges* (mod. French *herbages*, 'coast of pastures') is a similar case. The south/central part of Vietnam was named *Champa*. The word *champa*, if unknown to the French, could well have been taken to be a mis-transcription of the French word *champs* ('fields'), only one letter different. *Herba(i)ges* is a near synonym.

Helen Wallis commented on the number of descriptive names she saw around the coasts of *Jave-la-Grande*, though in fact they are remarkably few, but she concluded that:

*it was apparently not a region of settled and civilised populations whose people would tell a visiting expedition the names of towns and other places (in fact there is no sign of towns).*

It is clear that she took those French inscriptions which were immediately recognisable at their face value. That interpretation, of course, fitted in well with her conception of *Jave-la-Grande* as Australia, with a nomadic, aboriginal population and no towns. She was not aware of the extreme complexity of inter-language place-name corruptions.

### Further inscriptions

Two further, similar inscriptions, which I did not mention before, are worth mentioning. *Baye perdue* (lit. 'lost bay') is evidently a mis-transcription of some early Portuguese rendering of the name of the Vietnamese bay and port of Phan Rang. On one mid-1520s chart it appears as *p° [puerto] de penara*, evidently a mis-transcription of something like *pandrā*, for the relevant British Admiralty pilot book spells it Pandaran. *Baye perdue* must have been a French attempt to 'make sense' of a puzzling inscription.

The inscription *coste de gracal* is a French mis-transcription of *costa do prael* ('coast of the reef'). The Portuguese very early appear to have be-

lieved that the islands and shoals still known as the Paracels extended much further south than they do. On some Dieppe maps that shoal is shown as extending almost as far south as *pulo condor* ('Gourd Island', yet another Malay name), in other words, the Con Son Islands off the Mekong delta. That southward extension survived on some charts, including British and Dutch ones, until the late XVIIIth century. A similar mis-transcription of *prael*, with a *g* given instead of a *p*, appears off Madagascar in the Mozambique Channel, on Pierre Desceliers' world map of 1550. It is named *I. de grace*, the final *l* having apparently been taken to be an abbreviation for *Ilha* ('island').

### Java identified

At least two people, Andrew Sharp and Edward Heawood, identified the west coast of *Jave-la-Grande*, as being the south-west coast of Java, from its shape alone. In my article I provided three inscription interpretations which confirm the Javanese identification.

I claimed that *Haure de Sylla* + the adjacent, nameless *cap* ('cape'), was the result of a Portuguese inscription which probably read *porto de sylla*, with its final syllable, *cap* for *cap*, probably written slightly apart from it, or more likely, on the line below. Such division of long words was a frequent cause of the appearance of two features, each identified by part of the divided word. This inscription identified the only really significant port on the south coast of Java, which the Dutch at the turn of the century spelled Tjilatjap, and is now spelled Cilacap.

Tweeddale commented that the south coast was 'unknown to the Portuguese' and 'was not known over 30 years later, in Mercator's 1569 map'. While it is true that no known surviving Portuguese XVIth century chart that I am aware of seems to have named the port, that does not necessarily mean that no Portuguese had reached it; moreover, one cannot be certain that its non-appearance on Mercator's world map of 1569 is evidence that it was unknown to the Portuguese. It would certainly have been of no interest to them, since all com-

merce was restricted to the north coast. However, it is worth mentioning that Sir Francis Drake, on his circumnavigation, stayed at Cilacap from 11th to 26th of March 1580, entertaining, and being entertained by the local 'rajahs'. Tweeddale's objection that my hypothetical Portuguese rendering *sylla + cap* implies major changes in the local pronunciation between the 1540s and the arrival of the Dutch some sixty years later, is the result of a misunderstanding. The exotic sound in Indonesian, which the Dutch spelled with *tj*, appears twice in Tjilatjap. Portuguese XVIth century charts recorded Indonesian placenames containing that sound in four different ways, with *s*, *c*, *ç*, and *ch*. A Frenchman, confronted with the inscription *porto de sylla + the apparently separate 'word' cap*, with an apparently hard *c* before *a*, in the vicinity of a nameless cape, would quite logically presume that it was the French word *cap* ('cape').

Tweeddale did not even mention two of my Javanese inscription elucidations. Could he find no counter to them? One was *B. de gao*. The word *gao* is a now obsolete Portuguese word meaning Javanese, also spelled *jao*. *Gaoa* was one of the then numerous variant spellings of Java. What has that inscription got to do with Australia?

### A spicy clue

The other 'word', which on the Harleian map appears to read *quabesequiesce*, figures in several variant renderings on other Dieppe maps. Pierre Desceliers apparently thought that the first few letters were some Portuguese variant spelling of *cabo* ('cape'), so 'translated' the 'word' into French, as *cap* and gave *quiesce* as its name. The Harleian spelling bears no resemblance to any French or Portuguese word, and none to any placename that I have managed to trace. A long search found the first six letters, *Quabes*, in the Elizabethan English translation of Jan Huyghen van Linschoten's *Itinerario*. It is the name of a now little known, but then very valuable spice, 'cubeb' in English, which was grown exclusively in Sunda, the western third of Java. (The Dutch

original had *Quabeb*). The rest of the 'word' seemed to be a mis-transcription of two Portuguese words, *aqui esta* ('is here'). This identification was confirmed by a parallel inscription on a Spanish map of 1522 by Nuño García de Toreno. It appears to read *biliqualiabiqui*. It is another faulty amalgamation of three mis-transcribed words, *bili quabab aqui* ('buy [in Malay, now spelled *beli*] cubeb here'). Such inscriptions indicating the source of spices appeared on a number of early maps, most notably on the famous Cantino map of 1502.

### A state neither snowy nor black

Two more inscriptions which further confirm the identification of *Jave-la Grande*'s west coast as Java's west and south-west coasts rather than the north-west coast of Australia are *y<sup>e</sup> de neige*, (on Desliens' 1541 map *y<sup>e</sup> negre*), and *y<sup>e</sup> de Laine*, (on some Dieppe maps apparently *y<sup>e</sup> de Lame*). (The undotted letter *i* caused much confusion in conjunction with the letters *n*, *u*, and *m*.)

As can be seen on the map in my previous article, the inscriptions (*y<sup>e</sup> de neige* 'island of snow', hardly appropriate off the coast of either Java or Australia, and *y<sup>e</sup> negre* 'black island') appear very near the *gao* inscription. It seems certain that *neige* and *negre* were both French attempts to make sense of the Malay word *negri* ('town' or 'state'). (The English XVIIth century cartographer, William Hack(e), on a chart of Sunda Strait copied from a Dutch one, rendered the word *Negery* three times as 'Black'). I suspect that the Portuguese original had the words *negri* and *gao* ('Javanese town') close to one another, but on different levels, and consequently the French attached them to different features (cf *Sylla* and *cap* above).

The island named *y<sup>e</sup> de laine* ('isle of wool') appears off the place where *IAVE* is separated from *IAVE LA GRANDE* by a fictitious river named *R. grande* on the Harleian map (Fig. 1 – [see box, next page]). The south-western extremity of Java is a peninsula called *Ujung Kulon* ('Western Headland'). The isthmus separating it from the mainland is very low-lying, so that from a distance *Ujung Kulon*

can be easily mistaken for an island. Its most northerly point is called *Tanjung Alangalang* ('reedy headland'). This same name, applied to a similar feature elsewhere in Indonesia, was recorded by the Portuguese as *allāallā*. The French, seeing *allā*, *alā*, or *a lā*, could well have attached the word *laine* to the 'island', since *a lā* means '(the) wool' in Portuguese. The same conclusion could possibly have been reached from the frequent Portuguese spelling of the peninsula's name as *iunculā*.

This identification would seem to be confirmed by the shape of the coast north of it. It figures on a Dutch map of 1598 by Willem Lodewyckz, based on a Portuguese one (Fig. 2). The names east of *Palimban*, (which was destroyed in the eruption of Krakatau in 1883), are those of the Sunda Strait coast of Java. The names south-west of *Palimban* are *Issebongor*, *Issesucar*, and *Junculan*. They are not towns, even though the map depicts them as such. That sketch of coast is a misplaced, misoriented, larger-scaled, primitive, *aide-mémoire* 'map' of part of that same stretch of Sunda Strait coast. The modern forms of the three names are *Cibungur*, *Ciseukeut*, (*ci* being 'river' in Sundanese), and *Ujung Kulon*. The first two are the names of rivers which flow into *Teluk Lada*, the third, as we have seen, is the peninsula at the south-western extremity of Java.

That particular *aide-mémoire* coast mystified the Dutch, for no such north-south coastline exists. However, eastwards from *Ujung Kulon*, there is a fairly straight stretch of coast. Even after they had charted it, the Dutch spread out those three names along it, though they clearly did not know what features they really referred to. A later French cartographer, Guillaume de l'Isle, decided that the second *s* of *Issebongor* was a mistake for an *l*, so he divided the word, and attached it, as *Isle bongor*, to an offshore island.

Inscriptions matter, but the ways in which they can be transformed and migrate are legion. Tweeddale took me to task for pointing out errors in Helen Wallis's arguments, though he called it 'politely denigrating' her, a term I am sure she would thoroughly have disap-

proved of. We were great friends, and on at least three occasions when she was to lecture on *Jave-la-Grande*, she made sure that I was given the opportunity to present my case on the same platform. Tweeddale also sought to cite two professional cartographers against me, Brigadier Lawrence FitzGerald and Matthew Flinders. Name-dropping on the topic of *Jave-la-Grande*'s identity has been a common tactic employed by those who support the Australian identification. It impresses those who have not examined all aspects of the evidence in detail.

Scholarly research would come to an abrupt end if all the pronouncements of even the most famous and illustrious scholars were to be accepted without question. They are all human, and *ipso facto* fallible. Helen Wallis chose to discount the place-name evidence, except in the commonly-cited, cart-before-the-horse case of *coste dangereuse*, which could only legitimately be considered as possibly indicating the Great Barrier Reef coast if it had already been proved that *Jave-la-grande*'s east coast is Australia's east coast. There is more than one danger-

ous coast in the world. Kenneth McIntyre made a point of disregarding place-names, specifically because they were 'too difficult', hardly an acceptable excuse.

Brigadier FitzGerald, not being a historical linguist, was not equipped to deal with them, so ignored them. His treatment of *Jave-la-Grande*'s identity was based solidly on the premise that it was Australia and he was determined to prove it. Consequently, his visual identification correspondences were dictated by his preconception of its identity. No independent confirma-



Fig. 1.

The northern part of Jave-la-Grande (ie Java itself) on the Harleian world map (c. 1547). (Photographic reproduction from Charles H. Coote, *Autotype Facsimiles of Three Mappemondes, Aberdeen, 1898*).

Note in particular the positions of pallimbam (1) on the unnamed Sunda Strait, and the island y<sup>e</sup> de Laine (2) south-west of it.

Compare the outline of the actually non-existent stretch of coast between them with the same coast on Fig. 2.



Fig. 2.

North-west Java. Part of a large-scale chart of 1598 by Willem Lodewycz based on a Portuguese chart. Note the positions of Palimban (1) and the three 'towns' of Issebongor (3), Issecucar (4) and Junculan (5).

As in the case of Fig. 1, that coast does not actually exist. It is the result of some early XVIIth century Portuguese cartographer having ignorantly attached an aide-mémoire 'map' of part of the Java shore of Sunda Strait to the south-western end of a genuine chart of Sunda Strait. The aide-mémoire section, which bears no resemblance whatsoever to the coast that its place-names (the rivers Cibungur and Ciseukout, and Ujung Kulon, the south-western extremity of Java) declare it to represent, persisted throughout much of the XVIIth century on smaller-scale Portuguese charts. The 'scale' is quite unrelated to that prevailing elsewhere. The cartographer responsible cannot have realised the nature, 'scale', or orientation of the 'map' he was dealing with, but merely knew (thought?) that it represented part of Java. In much the same way, the French attached a genuine, primitive, differently-scaled, sketch chart of the south-west coast of Java to the southern end of the aide-mémoire 'map'. It probably lacked orientation, and may well have had on it the inscription IAUVA MAIOR, the name by which the Portuguese, following Marco Polo, frequently referred to Java itself. The French translated it as Jave-la Grande.

tion of his identifications was provided. His training as an accurate, XXth century cartographer probably blinded him to the possibility that XVIth century cartographers could have seriously misplaced features, or compiled charts from differently-scaled components.

### What of Flinders?

Tweeddale cited an oft-quoted passage from Flinders' *Journal* of 1814, but failed to see one particularly significant point. Flinders considered that it was 'a part of the west and north west coasts where the coincidence of form is most striking'. The part where most observers today find a 'striking', though deceptive, 'coincidence' is between the two east coasts, and especially their northern halves. (The huge, triangular *cap de fremose* promontory has been a puzzling anomaly for those who believe that *Jave-la-Grande* is Australia, since nothing like it exists on Australia's east coast. Ingenious, but unacceptable hypotheses have been concocted in attempts to explain it away).

It seems unlikely that Flinders paid any attention to the inscriptions on the west and north-west coasts, and even if he had, he would probably have been unable to make anything of them, though one would have expected him to have noticed that the north coast names were Javanese. From a note in his *Journal* there can be little doubt that he heard of the Rotz and Harleian maps from the first volume of James Burney's monumental work published in 1803. One cannot tell from Flinders' text which maps he had seen, though he probably saw Alexander Dalrymple's facsimile of the eastern section of the Harleian. Burney's description confuses the Rotz hemisphere and Harleian maps, a fact which no previous commentator seems to have noticed. Both Burney and Dalrymple were leading advocates of the Australian identification, and Flinders may have been influenced by them. His claimed support for the Australian identification is very half-hearted. His observation that 'conjecture bears so large a share' in that identification never gets quoted.

### Examining *all* the evidence

Tweeddale concludes that 'If William of Occam were called on to adjudicate between Australia and Vietnam for *Jave-la-Grande* he would surely agree with Matthew Flinders that Australia, on present knowledge, is the simplest solution until disproved. Richardson's arguments have not done this'. Readers may not have observed that he omits Java altogether from this pronouncement, despite the fact that it provides some 50% of 'present knowledge' on the subject. When he earlier quoted William of Occam's dictum *Entia non sunt multiplicanda praeter necessitatem* against me in English, as 'the simplest solution *which satisfies the available data* is to be preferred until disproved', he failed to observe the significance of the words I have italicised.

William of Occam's reputation surely suggests that were he in a position to adjudicate on such a problem, he would at least have taken the trouble to examine all the available data. Tweeddale conspicuously failed to do so. He appears to have reached his judgement on the evidence of part of my brief article in *the Skeptic*, and on an article of 1987 in *The Mahogany Ship Relic or Legend* (ed. Bill Potter).

He does not appear to have examined any of the articles listed at the end of my *Skeptic* article, nor any of the other articles cited in them. Had he done so, I imagine he would have been more circumspect in his observations. He appears to have been unaware of the frequent inclusion on early charts of material which had not at the time been seen or charted by European mariners, which inevitably meant that accuracy of outline and consistency of scale in such cases were impossible. He does not seem to have realised that XVIth century charts and sailing directions covering Vietnam still existed, thus providing comparative inscriptions. His critique of those three (out of six) inscription interpretations that he *did* challenge reveals that he seems to have had little or no experience of inter-language place-name corruptions which were so very common on XVIth century manuscript charts.

Tweeddale not merely failed to demolish any of my *Jave-la-Grande* inscription interpretations; he made no attempt to reinterpret any to make them relevant to Australia. The key to the identity of *Jave-la-Grande* lies in the inscriptions on it. As Tweeddale himself correctly points out, comparative readings from other sources are really needed to prove the validity of any hypothetical elucidations of problematic inscriptions. Such sources do exist, in the form of other, roughly contemporaneous maps and charts, as well as sailing directions and travellers' narratives. They support the validity of my interpretations.

### Notes

Besides the works cited at the end of my previous article (19:1), two more detailed treatments may be of interest:

'Is *Jave-la-Grande* Australia? The linguistic evidence concerning the west coast', *The Globe*, 19 (1983), 9-46.

'*Jave-la-Grande*: a place-name chart of its east coast', *The Great Circle*, 6.1 (1984), 1-23.

A brief, general article on place-name corruption on maps is:

'The origin of place-names on maps', *The Map Collector*, 55 (1991), 18-23

For reproductions of Portuguese maps see:

Armando Cortesão and Avelino Teixeira da Mota, *Portugaliae Monumenta Cartographica*, Lisbon, 1960 (6 vols)

For Portuguese sailing directions see:

Pierre-Yves Manguin, *Les portugais sur les côtes du Viêt-Nam et du Campã*, Paris, 1972



## Response on Posture

Max Banfield  
Modbury SA

Thank you for arranging the review of my book "The Posture Theory" in *the Skeptic* (20:1 p.60-63). The reviewer, Laurie Eddie, was critical of some of the main ideas of my book and questioned the merit of the methods used in drawing my conclusions. I have responded to the criticism of the ideas by introducing new essays on particular subjects into the latest (11th) edition of my book. I will therefore not respond to these in any detail here but will briefly discuss the criticism of my methods.

The reviewer suggested that:

- (1) I seemed to be preoccupied with the subject of posture and health in arguing that bad posture could cause almost every disease known to Western man;
- (2) he explained that many of my reference texts were obsolete medical books or books of domestic use; and
- (3) he implied that I did not take into account the many other factors which could contribute to health problems now, or particularly in the nineteenth century.

However I developed my interest in medicine in order to find an explanation and method of treating a set of symptoms. In the course of time I was using *Index Medicus* to locate relevant articles in the latest medical research journals which were available at the Barr Smith Medical library at the University of Adelaide. This information revealed the confusion and disagreements of various researchers in relation to the various conditions, in particular neuro-circulatory asthenia.

After five years I identified that a stooped posture could compress every internal organ, to cause this condition and many others, and it should not be a surprise to anyone that it could cause or contribute to almost every human disease. I also considered the fact that

people had been studying disease for thousands of years, and that surely in that time, someone would have had an interest in the same subjects, or that other clues to the nature of those ailments would be available.

I was aware that the symptoms caused by poor posture were due to compression, and that there was no clear evidence of their existence (within the very conspicuous limitations of modern diagnostic technology), so they were also clustered under the heading of hypochondria which generally refers to imaginary illness. I therefore became curious about that name, and found that the word hypochondria was derived from an ancient Greek medical theory that it was due to a disorder of the upper abdomen: hypo = below, chondros = the cartilages (of the ribs). This was consistent with my suggestion that poor posture creates a lot of mechanical pressure in that anatomical region, so it was a supporting clue. I then wanted to know at what time in history the meaning of the word changed, and because of this, and for many other reasons, I began collecting old medical books. In the process I acquired books which represented every decade of the twentieth century, and I gained a familiarity with the medical ideas of the late 19th century, and through other studies, some information about 17th century medical ideas.

This proved to me to be very useful in understanding the way in which the medical profession have been dealing with undetectable illnesses, and how they changed their ideas whenever new technology, such as blood tests, or X-rays, or MRIs revealed the reality of the conditions which were previously deemed to be imaginary.

In the process of reading these old texts taken from all sources of society, not just modern academic medical texts, I gained a broad understanding of disease. Consequently I focus on posture and health because my book is about that aspect, and not because I am ignorant of every other factor which contributes to disease, and the use of my old books gave me considerable advantages and should not be regarded as a source of criticism.

In particular, all of the modern

health authorities with all of their technology, and all of their scientific journals had failed to find any consistency in the information that I was studying, yet, with the additional resources that I used I could, and did, develop a clear understanding of the problems.

### Ills of the famous

As a final matter, I have been including some essays on the health of famous people who had been diagnosed as hypochondriacs to show evidence that their illnesses were real, or that the aspects of the mind which supposedly caused their ailments were not consistent with their actual personality, and where evident, that postural factors contributed to their illnesses.

One of these people was Charles Darwin, who started getting his health problems after he returned from his ship voyage and began sitting at a desk and writing his theory of evolution. I suggested that this was due to his stooped posture while writing in a slouched position onto a writing platform which had been custom built into the arms of his oversized armchair. However I was also aware that his health problems could have been related to a previous illness that he had which may have been Chagas' disease which was contracted from the bite of a bug in South America, but many medical writers have disputed this, and I had read some articles about this with the view of doing a broader review of his health. He had outspoken religious views which would have offended the people he met in South America and they could have poisoned a drink that he had on the night before becoming ill. The drink could have also been contaminated with a local virus that the natives had developed an immunity to, or he could have had a massive hangover followed by an infection.

However the clues to confirm this were not readily available to me so I kept the ideas for possible later use. In the meantime I connected to the internet and typed the word hypochondria into the search engine and found an article about Alexander Leeper, who was described as having massive hypochondria. I then went to the library

## Forum

and borrowed a book about Leeper and noted that he was described as having a similar illness and a similar sequel of health problems to those of Robert Louis Stevenson so I then borrowed a biography of RLS. Stevenson was described as having psychosomatic illnesses, and his wife was described as a hypochondriac. Stevenson had a thin, gangly, and stooped physique, so some of his symptoms were related to his posture, and he lived in the late nineteenth century, and I had medical books which were written and published shortly after his death, and still within the lifetime of his wife, and Leeper. The clues about the Stevenson's health problems leapt off of many pages, and as I wrote individual essays on each ailment the volume of information eventually amounted to a 250 page book. Many

doctors of that time did not believe that microscopic germs could cause disease and would passionately oppose the idea, and when one doctor came to treat Louis for an infectious illness he entered his room coughing and sneezing. Some doctors were arguing that tuberculosis was a psychosomatic complaint which had no organic basis, and one biographer was arguing that his illnesses were always and without exception preceded by stress. I have provided ample evidence about the true infectious nature of his ailments, caused by the living conditions and the environmental pollution of the period, and the fact that he travelled extensively to countries where highly contagious plagues were raging when immunisation and antibiotics were not available.

I stopped writing because, if readers are not convinced of the reality of

his ailments after reading 250 pages of evidence, they never would be. This new book is called *The Health Biographies of Alexander Leeper, Robert Louis Stevenson, and Fanny Stevenson*. If any Skeptic wishes to review my book for this magazine they are welcome to. It is primarily a biography, so all influences on health are considered, and the references are appropriate for the time and subject, and include a review of the 1882-3 editions of the British medical journal, *The Lancet* which Fanny Stevenson subscribed to in order to find the cause of her husband's ailments. The book is available in many Australian public libraries and can be readily accessed by interlibrary loan. Further information is available on the web page <http://www.chariot.net.au/~posture>



## Blatant Plug

# THE NAKED SKEPTIC

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# Take an Internet Dip in *The Skeptic Tank*

In the dark dim days of 1996, I shared a house with the well-known Sydney entertainer, Stefan Sojka. Our day would start at about 3pm when we would wake up, get ready for the night's gig, travel, set up, do the gig, pack up, come home and jump straight onto the Internet until we fell asleep at about 6am.

As it turned out, we were doing some cutting edge stuff with web page design and animations. It seems all that time spend over a computer

screen paid off as now in 2001, Stefan is the drive-time (or anti drive-time as he calls it) DJ on netFM, an Internet radio station based in Sydney.

During his first week on air, Stefan called me up and asked if the Skeptics would like to appear on his new show. Needless to say I jumped at the offer! Joining me on the first show were Richard Lead and Helen Vnuk from the NSW committee.

Although we had no set topic, Stefan told us to sit back and just chat about the Skeptics and Skeptical things in general. To our delight, the show went over very well with Richard Lead telling the global audience how to pull off a scam or two, Helen Vnuk lamenting the growth of alternative medicine and ended with a demonstra-

tion of spoon bending by your correspondent.



*Radio stations have Disc Jockeys - The Skeptic Tank has Dick Jockeys. Richards Lead and Saunders in full flow.*

We stayed for almost an hour with Stefan playing songs along the way. During the song breaks we quickly discussed what to talk about next, laughed loudly and carried on with the show.

After it was over, Stefan, Richard and I headed off for a fine dinner in the city and decided to come back the following week to do another show.

In the weeks that followed, Skeptics Karen Stollznov from NSW and Steve Roberts from Victoria both appeared on the show, covering such topics as ghosts, Internet myths, psychic twins, reflexology, UFOs, pyramid schemes, the Skeptics Convention in Brisbane, the Great Skeptic CD and anything else that cropped up as part of the flow of conversation.

People from all over the planet can listen in for a Skeptical point of view and talk to us live via their computers using a 'chat' screen from the [www.netFM.net](http://www.netFM.net) web site. We are told that anywhere from 10,000 to 50,000 people tune in to the show each week. One of these people, calling himself 'Dr. Feg', subjected we should call our segment *The Skeptic Tank*. The name stuck.

We plan to have many more Skeptics join us in the *Tank* to talk about their areas of interest. We also make sure that in the each show our own web site [www.skeptics.com.au](http://www.skeptics.com.au) gets a mention even going so far as to spell out the word 'S-K-E-P-T-I-C-S.'

One of the best things about the whole experience is the chance to dine with fellow Skeptics and Stefan after the show where the conversation carries on for hours! *The Skeptic Tank* can be heard worldwide by visiting [www.netFM.net](http://www.netFM.net) each Thursday at 6pm Sydney Time. Our thanks go to Stefan Sojka and the management of netFM for having Australian Skeptics on board.

**Richard Saunders**

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# Letters

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## ■ LUTEC Financing

Richard Lead  
Sydney NSW

Congratulations to Ian Bryce for his in-depth research into the LUTEC “free energy” machine (21:3).

I was amused by the response of the inventors, Lou Brits and John Christie, and not just from their implied threat against publication of Ian’s research.

Lou and John seem to claim some kind of fiscal rectitude by only accepting public investments in their revolutionary invention in \$500,000 lumps. I suggest to them they have no practical alternative to this policy.

Section 727 of the *Corporations Act 2001* contains important investor-protection provisions. It enacts that before a person offers securities to public investors, a prospectus for the offer must be lodged with the Australian Securities and Investments Commission. The ASIC examines such prospectuses with the proverbial fine-tooth comb, and solicitations to invest in a perpetual-motion machine would not survive the most superficial scrutiny by a professionally sceptical ASIC officer. But section 708 of the said Act contains exemptions to the requirement to have a vetted prospectus. Without wishing to bore the reader rigid, subsection 8 contains the so-called ‘sophisticated-investor’ exemptions, meaning an investor with a minimum of (you guessed it) \$500,000 to invest may do so without the protection of a registered prospectus.

I really wonder why Lou and John would waste their time with a pesky multitude of \$500,000 investors. I will happily introduce them to venture capitalists, any one of whom has access to investment sums far in excess of LUTEC’s needs. The only due diligence such professional investors will insist on is a technical analysis of the ‘free-energy’ machine by a person with the qualifications and experience of an Ian Bryce.

It makes you think, and it should make you sceptical.

Hearty congratulations to the ASIC in so quickly shutting down the B.A.N.K. Inc website after formal complaints from the Australian Skeptics.

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## ■ More language

Mark Newbrook  
Linguistics, Monash University

Douglas Beath comments (21:3, p 67) on my piece on spelling reform (21:2, p 42). But he appears rather confused; in response, I would make the following points:

1) I did not ‘dismiss’ spelling reform altogether. I argued against certain types of reform proposal, and I pointed out that many reform advocates know too little about how languages work. In cases where all accents agree against redundant or misleading traditional spellings - and where there are no major etymological or structural counter-arguments - I would happily accept reform. For instance, I would accept many (not all) applications of SR1; and I would certainly accept one-off reforms such as the cutting of *-b-* in *debt*.

2) Children who are ‘creative spellers’ may sometimes initiate a general reform; but Douglas’ informal use of the term *logical* is tendentious here, and in any case these matters are much more complex than he suggests. What suits young learners does not necessarily suit fluent adult readers and writers. The latter are demonstrably aided by non-phonemic representations of homophones; some psycholinguists do not even believe that ordinary language users think in phonemes as normally conceived. And there are much better defences of traditional spelling than mere conservatism. For instance, traditional spelling is accent-neutral, overall, and thus imports no general accent bias.

3) Indeed, if phonemic spelling is to be experienced as a significant improvement on traditional spelling, it will

## ■ Langaage, language

Bob Steiner,  
El Cerrito, California, USA

The many areas of life in which people advocate government decree over free choice is frightening. Douglas Beath [*Letters*, 21:3] states:

*The nations that take a practical interest in their language occasionally decree small (and painless) adjustments in spelling to accord with evolving pronunciation.*

He advocates

*... a succession (SR1, SR2, etc.; say one per year) of small spelling simplifications and rationalisations . . . SR1 calls for the letter e to be used in all cases of the clear short vowel sound as in bet.*

Newly published books would become obsolete in one year. The classics of literature would become unintelligible in one decade. For the elderly, highway traffic signs would not be red.

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have to conform with a speaker's phonology. But the phonology of English is extremely varied. This involves not only phonetic detail but entire vowel systems and the like. Naturally, there are many words which are not phonemically different in different accents; but there are very many others, including many of the most common, which are. A phonemic spelling which is accurate for an educated SE England accent is inaccurate in various places from the point of view of educated Australian speech and wildly wrong for all American accents. In addition, the speech of many individuals varies in these respects. Accents are certainly not 'red herrings' in this context. Phonemic spelling forces a choice between accent bias and unmanageable orthographical diversity – both disastrous. (It also has other disadvantages, which may or may not be decisive but must be attended to.)

4) In most Scottish accents, the phonemic contrast between long and short A is absent or in doubt. Australians and most English people do have the contrast, and therefore have a 'choice' in words such as castle; but if Douglas has a clear choice he is an unusual Scot. More importantly, this point shows that Douglas is mistaken in thinking that one can ignore the distinction between *sound* and *phoneme*; doing this causes untold confusion. Douglas is making a further error if by precision he implies that *phoneme* is the more linguistically precise of the two notions; but his wording is ambiguous at this point. (As Barry Williams suggests, I myself have short A in words such as castle, at almost 100% frequency.)

5) Given Douglas' comment on *car park*: would he then recommend that those who have no consonantal /r/ in these words but have a long A in *castle* etc spell these latter words with -ar-? Or what? (I am grateful to Jane Curtain for making this point.)

## ■ A Skeptical theologian

*Tony Kelly*

I see that I get a couple of mentions in the Spring 2001 issue of *the Sceptic*. This is not inappropriate, as I am sceptical both as a philosopher and as a theologian. Both philosophy and theology set out originally to explain the world - natural theology being a part of philosophy. Any explanation of the world requires that all the available evidence be taken into account. The practical present-day difference between philosophy – when it is concerned with first order questions rather than trivia - and theology, is that theology takes into account so-called revelation, as well as other available evidence. I have proposed a natural explanation of what has been taken to be revelation. Perhaps the frequent focus of academic philosophy on matters I regard as trivial, to the general exclusion of first-order questions, is due to the failure to take all the available evidence into account. My thesis, published as *The Process of the Cosmos: Philosophical Theology and Cosmology* (1999) USA, Dissertation.com, is a natural theology in the Aristotelian tradition. It is freely available on my Web Page at <<http://members.dingoblue.net.au/~abkelly/>>, together with other short papers, many of which are based on aspects of my thesis.

There is also a recent paper on *An Evolutionary Christology*, in which I propose a natural-theological explanation of what theologians call the "Christ-event". The paper on *Understanding Aboriginal Culture* is on the same URL. In this paper I do not claim that there are: "discrete 'races' with distinctive psychological characteristics caused by genetic factors", as you report. I attribute the cause to the nature of the culture. That a human culture is a process of self-creation is self-evident, as people make cultures and cultures, to a significant extent, make the people of that culture. That the psychological characteristics of races are transmitted by genetic factors appears to be the case, from the evidence. However there is another PhD in the

discovery of the link between cause and transmission.

That there are 'races' is supported by Glen Gordon's paper on *Genetic Distance and Language Affinities Between Autochthonous Human Populations*" at <<http://www.friesian.com/trees.htm>>

I accept Aristotle's argument for the existence of a deity. The nature and operation of that deity is another matter, to which I have proposed some answers. Aristotle was able to argue his way up from the contingent world to the necessity of a God. I think the case is a lot stronger now, for a self-existent deity to account for contingent existents, given Big Bang Cosmology. I would be interested in other answers to the fundamental philosophical question, "Why is there anything at all?" I prefer to publish on the Web, as at age 73 I do not have all the time in the world. I am happy to discuss my work on your pages. I also have an open discussion available on the Web, under the heading *The Secret of the Universe* at:<http://www.voicemag.net/forum/philosophy>

## ■ A Skeptical reply

*Mark Newbrook*  
*Monash University*

I may have slightly misunderstood Kelly's position on culture and the psychological characteristics of ethnic groups; I confess that I find his writing hard to follow at times. But what he now says seems to differ from what I said in my summary only to a small degree. Even if Kelly's account has culture-specific psychological traits arising originally through non-genetic factors, he still holds that they are transmitted genetically. Any long-standing trait of this nature will therefore have a genetic origin for current members of the culture. This, in fact, appears to be a still more unlikely position than I suggested earlier, since it seems to involve the genetic inheritance of acquired characteristics.

I have looked at the paper by Gordon to which Kelly refers, and the accom-

panying material. It must first be said clearly that the early diversification of human language is a very complex and uncertain matter and that linguistic and genetic affinity do not by any means always run in parallel. This is why Cavalli-Sforza's findings, interesting as they are, are not decisive as far as linguistics is concerned. (See also my earlier remarks in *the Skeptic* on Kaulins). Furthermore, Gordon admits that he is an amateur (albeit a well-read one) with a Nostratic axe to grind. He rejects various positions (which themselves vary in degree of likelihood) for reasons of very varied strength. Gordon makes a few good points, but his general views certainly cannot be cited as if they were authoritative, still less decisive.

As far as I know, Kelly is in a very small minority in believing that the evidence suggests that psychological characteristics of so-called races are transmitted by genetic factors (however they may originally have arisen). The fact that humans have diverged physically does not imply that there are discrete 'races'.

Furthermore, there is much psychological and cultural diversity which is very obviously NOT associated with the physical diversity. For example, it is very clear indeed that specific linguistic phenomena are NOT transmitted genetically. Zulu children raised from birth by Inuit would speak Inuit natively with no trace of Zulu, and I suggest that they would think and behave like Inuits as well, except only for their responses to local perceptions of their unusual appearance.

Kelly's philosophical and theological ideas are interesting and repay attention. But I am not persuaded by his arguments about the importance and implications of 'revelation', or by his view that atheistic views of the universe do not hold up (against theistic views or more generally).

Kelly certainly did complain that he struggled to publish his ideas because of various prejudices against them. Now his emphasis appears different. But if he wants to publish in *the Skeptic* he should submit some of his material.

### ■ What alternatives?

*Gavan O'Connor*  
*Wembley WA*

Dodie Lake, in her defence of unscientific medical procedures, makes the claim, "Orthodox medical training teaches the diagnosis of disease and the use of drugs to suppress the symptoms." (21/3 p64)

If this is so, then doctors would be taught to treat bacterial meningitis with paracetamol to reduce the fever and headache, an anti-emetic to control the nausea and vomiting and perhaps a muscle relaxant for the neck stiffness. Can Ms Lake produce just one doctor who has been taught this?

No matter how many sensible suggestions the naturopaths make about a healthy lifestyle, their failure to stick to the facts and to use logically consistent arguments destroys their credibility.

### ■ What alternatives II

*Dodie Lake*  
*Pagewood NSW*

Thank-you for allowing me to express my opinion via your journal. I was disappointed though, that I had to do so under the watchful eye of one of the solid members of the old boys club. I now know what it feels like to be told, "... yes you may go out in public, but you must wear a veil." This to me, is not what healthy scepticism is about. After all we're not writing for the *Catholic Weekly*! Publish and be damned I say. Disagree if you must but respect the right of those whose opinions differ.

To Dr Richard Gordon I say? I am unaware of any dictionary that defines the word alternative as 'unscientific'. I believe alternative means, a different way, or a choice of two or more. And yes I can have it both ways, as one does not negate the other. I think you are offended by my use of the word, because you obviously believe that peo-

ple should not have a choice. You would, otherwise, have let your readers come to their own conclusion on the subject without your guidance.

A lifestyle incorporating a healthy diet, exercise and self-management is by definition, orthomolecular. Prevention of unnecessary disease is the aim. Healthy parents are more likely to produce healthy offspring.

There is a great deal of research, both clinical and empirical to back up evidence that toxic substances found in junk foods, have alarmingly adverse effects on children. Many drugs including those used in the past such as thalidomide, and those used in the present such as ritalin are also cause for concern.

I do not think there is anything scientific about pouring drugs into an already grossly unhealthy body. It may be simpler, as you say, but that certainly does not make it right.

### ■ A response

*Sister Justina of the Sacred Spleen*  
*Spiritual Adviser to the Editor*  
*(Member of the Old Girl's Club)*

There are a couple of differences, Dodie; we *did* publish your piece (can you imagine any AltMed journal publishing a critical piece from a Skeptic?); and if you publish opposing views in the *Catholic Weekly*, your soul might well be consigned to eternal perdition, whereas in *the Skeptic*, all you attract is ... well, Skepticism.

I think Dr Gordon's point was that when "alternative" is immediately followed by "medicine" then that makes it a synonym for "unscientific" (ie, if it were scientific, it would be medicine, not alternative).

Regarding definitions, as "orthomolecular" does not appear in any of my dictionaries, I guess you can define it in any way you like. I'd also suggest that healthy food and lifestyle is something that anyone (including doctors) would advocate, and it is hardly any sort of "alternative" practice.

■ **Health fundamentalism**

*Warwick Finch  
Chisholm ACT*

I've been contemplating for some time the subject of just how the anti-vaccination crowd can possibly exist in modern society. I have kept a keen eye on Peter Bowditch's excellent web site [www.ratbags.com](http://www.ratbags.com) (one of my favourite Monday morning activities!) and have really, truly attempted to understand these people.

My downfall was in attempting to understand their motivations by assuming that they are reasonable people who have reached their erroneous position through quiet contemplation and research. This is a simply not the case. The only way their behaviour makes any kind of sense is within the framework of a fundamentalist religion. Like hard-core MLMers, creationists, and other fundamentalists, most fans of alt-med are immune to facts, evidence and the real world around them. Their position seems to give them purpose and focus in their lives and something to believe in. As with other fundamentalists, they are compelled to evangelise and bring the rest of the "unsaved" into the fold.

In one of the strangest quirks of modern, science-based society they have been somewhat successful. Instead of these people and their ilk being dismissed out of hand as loopy eccentrics and discarded into societies waste-basket, they are courted, televised and treated as though they have something to add to the store of human knowledge.

So my advice would be not to bother trying to understand why someone would possibly want a medieval healthcare system re-introduced. Or what possible benefit they could find in returning our median life span to 30 miserable, disease-ridden years. Doing so will only hurt your brain. However if you view their activities as you would a fundamentalist religion it actually makes a little more sense.



# 2002 Eureka Prizes Launched

We are pleased to announce that Australian Skeptics will again, for the sixth year, be sponsoring the Australian Skeptics Eureka Prize for Critical Thinking, as part of the 2002 Australian Museum Eureka Prizes, Australia's pre-eminent and most comprehensive national science awards.

The 2002 Eureka series is the biggest ever with 16 prizes worth almost \$160,000. Three new prizes are launched in 2002: \$10,000 Institution of Engineers Australia Eureka Prize for Engineering Journalism; the \$10,000 Australian Catholic University Eureka Prize for Research in Ethics; and the \$10,000 Pfizer Eureka Prize for Health and Medical Research Journalism.

These join the established Skeptics prize, and other prizes for promotion of science; environmental and science journalism; environmental education programs; industry commitment to science; secondary school biological and earth sciences; engineering innovation; biodiversity and scientific research; and science book authorship.

The Eureka Prizes represent an extraordinary cooperative partnership between the federal and NSW state governments, educational institutions and a range of private sector organisations and companies.

Individuals and organisations can play a critical role in maintaining the vitality of the program by identifying suitable candidates for these prestigious awards. We encourage our subscribers, not only to consider nominations for the Australian Skeptics Prize, but also for the other awards on offer.

Information on the full range of prizes on offer in 2002 and entry/nomination forms is available from the Australian Museum's webpage at <http://www.amonline.net.au/eureka>. Entries in most prizes close on Friday 17 May 2002, with winners to be announced in August 2002 at a gala award ceremony during National Science Week.

And keep your eyes peeled for the announcement of another Australian Skeptics/Australian Museum exciting joint venture soon.

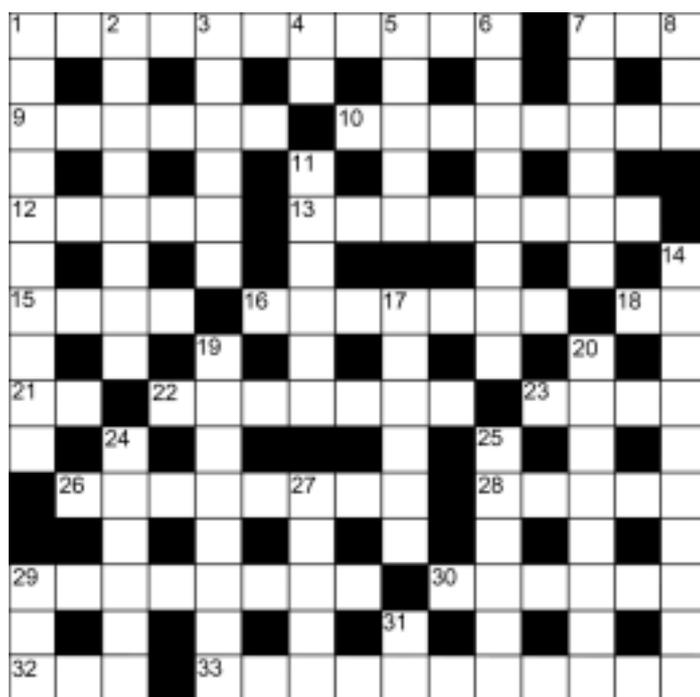
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## Competition

### Skeptic Crossword No 13



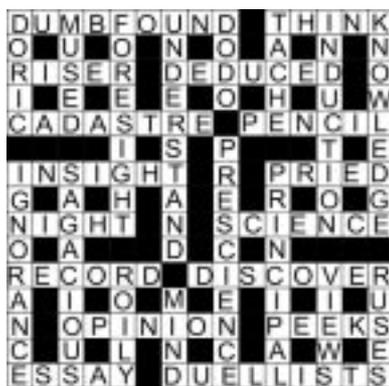
Return to Skeptic Xword  
PO Box 268, Roseville 2069

Name: \_\_\_\_\_

Address: \_\_\_\_\_

Entries will not be opened until Feb 1. The first correct entry opened will receive a book by Richard Dawkins

### Solution to Crossword No 12



The winner of Skeptic Crossword No 12, and a copy of Richard Dawkins' *Climbing Mount Improbable*, is Len Kane of Birkdale Qld.

The latest in our long line of excuses concerns an incorrect return address listed above. Fortunately most entrants saw through our cunning strategy to avoid work and sent it to PO Box 268 (not 368) anyway.

Well done all.

#### Across

- 1&10. Dubious remedies or snake oil? . (11,8)
7. One on one charged particle. (3)
9. Gambol, but do it softly where the French do it loudly. (6)
10. see 1 across.
12. First class 8 down for the older woman. (5)
13. Sex meter taken to outer limits. (8)
15. Spots from a broken cane. (4)
16. Fashion out of three hundred ton, love. (7)
18. Shout of reticent Vietnamese Santa? (2)
21. He backs an interrogatory. (2)
22. Pointed items, but not required endlessly. (7)
23. Stratagem sure is confused. (4)
26. Four in the priest makes you better? (8)
28. Piece of paper signifies ownership - certainly not a useless piece of paper. (5)
29. Fit coins into falsehoods. (8)
30. It will mislead you about where to park de bum. (6)
32. Editor's version of electronic data systems. (1-1-1)
33. A nutty pharo cured by form of 1&10 across. (11)

#### Down

1. ... Beta whistles and Gamma shouts. It's all in the mind, you know. (5,5)
2. Travelling by rail to go teaching. (8)
3. Noisy bat? Whichever way you spell it you will end up in court. (6)
4. Conversation with a throat doctor after hours. (2)
5. Hamfisted and backward writer is in it. (5)
6. Even dice need proof.(8)
7. I gets up and smells the flowers. (6)
8. She was born a woman. (3)
11. Top performance by a platter is proof enough.(6)
14. Form of 1&10 across where a little is too much. (10)
17. Harsh needlework?(6)
19. Not ideas I'd use to calm things down. (8)
20. It's edible but it will ruin tent. (8)
24. Ducks make dodgy doctors? (6)
25. Nodded off? Please straighten out.(6)
27. Au contraire, expanded isn't it? (2,3)
29. Cost added to fie, fo and fum. (3)
31. Now is the time for an imperial title.(1-1)

