

Skeptic

a person in a state of terminal caution

Margaret Mahy

Genealogy and Gender

Dunedin Ghost Tour

Bent Spoon 2005

Magnetic Water Treatment

Skeptic

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Modern Version
These modern versions of Marriage (left),

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Letters for the Forum may be edited as space requires - up to 250 words is preferred. Please indicate the publication and date of all clip-pings for the Newsfront.

Material supplied by email or IBM-compatible disk is appreciated.

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A steamy weekend

IN Retrospect, it was a cunning move to give us each a Hopi ear candle. Wrapped in pretty cellophane, the little beeswax treats – if used correctly – would ensure people would be in prime mental health. This is essential if you're attending the NZ Skeptics annual conference, as we were. The candles are an amazing elimination technique which improve mental clarity, energy and well-being. By inserting them – lit – into the ear canal, they allow glucose and oxygen to enter the brain, restoring neural functions. Of course, expecting a bunch of skeptics to follow instructions was perhaps asking too much. They put them on the ends of their noses. They twirled them and flung them. Anywhere but lit and inserted in the ear.

I didn't see what Jeremy Wells, winner of one of this year's Bravo Awards, did with his candle but maybe all will be revealed in the Eating Media Lunch episode he and his team were filming.

All in all, it was a cracker of a conference. About 70 skeptics from throughout New Zealand flocked to Rotorua for a weekend of convivial sceptical thinking and mingling. Rotorua historian and local character Don Stafford kicked it all off with a talk on the area's long pre-European history. Then, on Saturday night, he led us on a tour through Rotorua's famous bath house, down deep underground where the plumbing now lies exposed and one or two ghosts and the odd taniwha hang out.

Organised stirringly by Keith Garratt, Munir Kadri and Bill Buckland, the two-day event saw a range of talks that got the sceptical juices flowing. Raymond Bradley put Intelligent Design "theory" in its proper philosophical context, then Keith gave us his thoughts on genealogy, reprinted in this issue. Consumer's Martin Craig gave an update on the Maria Duval scam and an insight into the institute's way of thinking. Watch out for his byline.

A highlight was the Saturday afternoon session on medical matters, with a strong turnout from local doctors. Harry Pert spoke on the balance between art and artifice in medicine, Kinsley Logan considered reasons why alternative medicine continues to attract patients, and clinical rheumatologist John Petrie told how the defensive application of medicine-based evidence can be to the detriment of the individual. His strong comments on MSD's withdrawal of Vioxx were particularly interesting. Joanna Wojnar's presentation on the use of natural products as sources for new pharmaceuticals complemented these admirably. And Hamish Campbell rounded off Sunday with a wide-ranging and entertaining talk on his experiences as resident geologist at Te Papa and elsewhere.

Best of all was the chance to spend a bit of time with like-minded people, with lots of conversation and good humour. Perhaps the Hopi ear candles did something after all.

Annette

Genealogy and gender

Keith Garratt

Genealogy as normally practised gives us a very misleading view of our genetic heritage. This article was originally presented at the 2005 Skeptics Conference in Rotorua.

OVER recent years, there has been a huge surge of interest in tracing family genealogies. Genealogy has always been important for Maori, but pakeha New Zealanders seem to have come to it more recently. For many New Zealanders of European ancestry, there is a fascination in learning about our roots in the old world, and in discovering what caused our forebears to uproot themselves and come to the other side of the globe.

I imagine that most people reading this have found themselves involved at some level in a family genealogical search. I certainly have, and this has caused me to give a lot of thought to what it all really means, and what it tells me about myself.

Alas, I suspect that in some cases, the underlying motivation for tracing genealogy could be the hope of unearthing a famous ancestor, or a rich maiden great-aunt with a fortune looking for a home. I have seen several examples where New Zealand families have paid many thousands of dollars to have their genealogy researched by the appropriate authorities in Britain. In each case, the pattern of the resulting family tree has been similar. The family line was

traced back several generations to a male ancestor in the 19th Century, then a single dotted line projected back hypothetically several centuries to a male of the same or similar surname with some claim to fame or prestige, with no evidence of an actual



relationship. For example, one discovered a supposed ancestor who was Lord Mayor of London, while another claimed that the current family descended from a noble in Cromwell's court with a name that was only vaguely similar.

I am not knocking genealogy. Personally, I am interested to increase my abysmal knowledge of where my various grandparents and great-grandparents originated, and how and why they came to New Zealand. However, the more that I get involved, the more I have become sceptical about the traditional approach to genealogy. I have come to the

conclusion that genealogy as often practised is a very artificial and largely meaningless construct driven by ancient religious tradition and a huge historical gender bias.

My interest was first piqued a few years ago when I read an account of the lives of Nicholas and Alexandra, the last Tsar and Tsarina of Russia. Nicholas was the last Tsar of the Romanov dynasty, which had ruled Russia for some 300 years. For the Romanovs, the tradition was that the eldest son and heir would be found a suitable bride among the royal houses of Europe, and this continued through the

generations. This meant that the Russian Romanov blood was diluted 50% at each generation. Someone calculated that, as a result, the last Tsar, the supreme ruler of Russia, had only 1/128 Russian blood. Of course, with the amount of interbreeding that occurred among the royal families of Europe, this was probably not strictly accurate. Nevertheless, it makes the point that, because of the historical tradition of a male-dominated patrilineal society and a corresponding lack of recognition of the female contribution, our view of heredity can be very skewed. While I am sure that some Russians were

conscious that their ruler was not totally Russian, I imagine that the Tsar was not promoted as being “99% Russia-free.”

Surnames are irrelevant

The normal way people research their genealogy is to trace one surname back through the centuries, which of course means following the male line. There are many internet sites devoted to tracing a particular family line. I find this approach to genealogy to be rather pointless and artificial. The fact that we carry a particular surname has little relevance in genetic or historical terms, nor do I find that it means much at a personal interest level. We are all in fact the product of an almost infinite mixing of genes. Probably the easiest way to demonstrate the point is to use my own genealogy back to my great-grandparents' generation as an example.

If I construct a conventional “top-down” Garratt family tree with the apex as my great-grandfather George Garratt and his wife Jane (nee Higbed), I find that at my generation I have eight first cousins, none named Garratt, and a multitude of second cousins. Some of those have the Garratt surname. However, the only common relatives I have with those Garratt second cousins are great-grand-parents George and Jane. I share none of my other six great-grand-parents with them.

If I work in the opposite direction and trace my background as far back as my eight great-grandparents, it becomes apparent that while my name is Garratt, I am equally a Higbed, a

Dunne, a Sears, a Woodley, an Ayers, a Wagborne, and a Turner. I would like to find out more about each of these lines, and how they came to be in New Zealand. Interestingly, I have found that it is much harder to trace the backgrounds of my female great-grandparents than

I realise that I am actually the mix of a huge number of unknown people

those of the males. Even enquiries to elderly aunts tend to bring blank stares when I ask about their mothers' backgrounds. I presume that this is because in those earlier generations the wives' identities were considered to be subsumed in that of their husbands.

Personally, I find there is little point in trying to track back further than my great-grandparents, as any meaningful relationship of those historical people to myself becomes very tenuous. If we go a few generations further back, the numbers increase exponentially to the point that I realise that I am actually the mix of a huge number of unknown people.

Biblical underpinnings

Whatever our individual religious beliefs, there can be no doubting that many of our societal values and traditions are driven by biblical and Christian heritage. In our Christian-based society, the gender-biased view of heredity that virtually ignores the contribution of women to the mix is very ancient. If we go back to the Adam and Eve story in Genesis, we learn that they had

sons Cain and Abel. Cain killed Abel, then went out and took a wife, but there is no mention of who she was and where she came from. The most common explanation in Christian circles is that she was his sister, but that this creates no moral problem because God had not at that stage declared incest to be a sin.

However, this begs the question of why Genesis chooses to completely omit any reference to female children of Adam and Eve.

Whoever Cain's wife was, she was clearly heroically prolific, because Cain's next recorded move was to build a city.

According to the Bible story, at 130 years old Adam and Eve had another son called Seth. From that point, the genealogy of Adam and Eve's descendants through Seth are recorded through dozens of generations of males begat by males, with very little reference to who they were all doing the begetting with. Eventually, we reach Noah, who (after living 500 years) had three sons. Pre-sumably, in the course of 500 years he also had some daughters. However, there is no mention of them. In any case, they were dead out of luck. It was only Noah and his wife (unnamed), his sons and their wives (also unnamed) that got tickets for places in the Ark.

After the flood, human history was nearly back to square one, as it was now up to Noah's sons and their wives to start the system going again. They and succeeding generations all produced prolific numbers of sons, but no recorded daughters. If in fact the successive male generations had managed to keep the lineage

going without the help of females, this would have been a miracle that would overshadow the virgin birth.

Following the flood, the Bible's genealogy then follows the male descendants of Noah's son Shem through many generations, eventually reaching Abraham.

A small theological problem

We can now skip a few thousand years to where we find an account of 14 generations from Abraham to King David, again all through begettings by male descendants with little recorded help from any females. Then there are another 27 or 28 begettings to reach Joseph then on to Jesus, who, apparently on the basis of this genealogy, is referred to throughout the remainder of the New Testament as the son of David. This seems to be contradictory, as the New Testament gospels make it clear that Joseph was not the father of Jesus.

Without entering into the theological argument about this, it does provide an illustration of a major paradox in the tradition of tracing genealogy and descent through the male line. Motherhood is certain, fatherhood is not. It is naïve to believe that all those dozens or hundreds of generations from Adam to Jesus traces a true bloodline in times when contraception was not available.

We can now jump forward another two thousand years to the gospel according to Dan Brown, *The Da Vinci Code*. This is based on the theory put forward in the earlier book *Holy Blood, Holy Grail* – that Mary Magdalene was pregnant at the time of the crucifixion, fled to

France, gave birth to the child, who then bred with local kings. The suggestion is that there are direct descendants of Christ still alive, and that it is the holy bloodline that is the mystical Holy Grail. It is assumed that if this is proven true, it will somehow destroy the Roman Catholic church, although I cannot quite understand how. Supposedly, the church is in mortal fear that Christ's descendants will lay claim to the church.

If this is true, I find it is interesting to do some mathematics. If we assume that in the intervening 2000 years, there has been an average of four generations each century, then there have been 80 generations since that time. If we ignore the effects of possible intermarriage among the holy descendants, we find that the bloodline dilution is so great that if there are in fact current direct descendants of Christ, there is statistically little chance that their blood will contain one holy corpuscle. (It may be that they have all become homeopaths.)

The great genetic pyramid scheme

Even more interesting is to try to estimate how many current direct descendants of Christ there may be to lay claim to the church. As we are in the 21st Century, it is important that we take a politically correct gender-neutral and age-neutral approach by including direct descendants through all siblings of both sexes at each generation. I have to confess that when I tried to do this, the mathematics quickly got out of hand. If we assume that all marriages are to people

A theory of relatives

I feel the need to give a name to my alternative approach to genealogy and the identification of ancestral relatives. I have come up with the term Garratt's Theory of Relativity. (This does ring a bell with me as though it may have been used before, but never mind.)

I have also devised an equation to enable anybody to calculate the number of direct forebears that he or she had at any historical point in time. It is really very simple:

$E = m2^c$ (This also seems vaguely familiar.)

"E" is the entire number of your direct forebears, while "c" is the count of the number of generations that you want to go back. The "2^c" part of the equation reflects the simple fact that the number of your forebears theoretically doubles with each generation back – two parents, four grandparents, eight great-grandparents, etc.

Unfortunately, things are not quite that simple. A recurring theme in this paper is that such calculations are always distorted by interbreeding and various other factors. Therefore "M" is a misdemeanor index. It is a coefficient between zero and 1 to be fixed by each user of the formula, based on the estimated incidence of intermarriage, in-breeding, infidelity and incest that has occurred historically in his or her family.

outside the family, we soon get into the pyramid scheme trap, where there are simply not enough people around to provide a pool of new recruits. My calculations show that, without interbreeding, Christ's direct descendants would by now be sufficient to populate the galaxy, not just this world. Suffice to say that, on this basis, by about 400AD Christ's direct descendants out-numbered the entire population of France at that time.

Now, this is of course all theoretical nonsense which ignores the reality of intermarriage within the extended family. However, after 2000 years, if the Holy Blood/Holy Grail theory is correct, there must be many millions of people out there with an equal right to claim direct lineage from Christ and to inherit the church. In fact, it is certain that many skeptics are included. Are you ready to claim your share of the Vatican treasury?

In the television series, *The History of Britain*, there was often reference to the exploits of some British nobleman of 500 or 1000 years ago. The presenter would then interview the current holder of the title, being the current eldest son of the family. The first reaction was to think "Wow, isn't it amazing that he is the current incarnation of that long-lost notable." However, on brief reflection I realised that any surviving blood link after all those generations was virtually zero, if one takes into account the genetic contributions of the wives down the centuries. The chances of a surviving genetic link reduce even further unless one assumes that the successive generations of wives were all faithful to their

lords, and did not produce the eldest son by a dalliance with a passing knight or a gamekeeper called Mellors. It is probably fair to assume that a large proportion of the hereditary peers sitting in the House of Lords have no blood connection with the original holder of the title.

For that current nobleman, his view of say 500 years of genealogy is that he is the authentic carrier of the aristocratic bloodline (and the land, money, prestige and title). My view of my genealogy over the last 500 years is quite different. If I look back 500 years, mathematics tell me there were hundreds of thousands and perhaps millions of people back then who are equally my direct ancestors. I know that I can never trace them, but that does not change the reality. I console myself by believing that among all those ancestors, there must have been some of fame or notoriety.

We're all related

Looking at genealogy this way raises another interesting point. My eight great-grandparents all either emigrated to New Zealand or were born here. A large proportion of living New Zealanders also had forebears resident in New Zealand at that time, say the mid to late 19th Century. Let us assume conservatively that there are a million fourth and fifth generation New Zealanders who could identify eight ancestors living in New Zealand in 1870. (This does not seem unreasonable, given that the fifth generation group would only need to have had one half of their 16 great-great grandparents in New

Zealand.) This gives us a theoretical eight million ancestors at a time when the total population of New Zealand was around 250,000. This means of course that there is a very high incidence of sharing of ancestors of that period. As a result, there is a very high chance that any two New Zealanders are related at some level. This of course provides an explanation of apparent coincidences in discovering relatives.

One may ask whether all this has any importance. Personally, I find my approach to genealogy to be more meaningful in helping me to understand who I am and how I came to be here. Also, I believe that it is more valuable than the traditional approach in helping to understand our genetic makeup, for example in tracing and understanding hereditary conditions.

However, I think that there is a deeper issue. New Zealand has always been at the forefront of the fight to ensure gender equality. However, the notion that wives are mere child-producing chattels and housekeepers for their husbands dies hard in some sectors of New Zealand society. We live in a country where it is still possible to produce an aspiring male Prime Minister with archaic attitudes to the role and place of women. The traditional approach to genealogy serves to reinforce historical attitudes about the subservience and assumed unimportance of women that have no place in the 21st Century.

Following a 30 year career in the public service, Keith Garratt spent some 10 years as an international environmental management consultant. He is now semi-retired in Rotorua.

Don't step in the ectoplasm

Doug Fraser

Surfing on the massive wave kicked up by the craze for things paranormal is Dunedin's spookiest entrepreneur, Andrew Smith – host of Dunedin's Hair Raiser Ghost Walk. Is it all nonsense, or is there something mysterious afoot?

“HAIR Raiser Ghost Walk: See you there if you dare,” taunts the advertisement in the Yellow Pages. I’ve never been one to turn down a dare, so on a cold Friday evening I found myself in the Octagon with seven other ‘ghost tourists’, ready for a spiritual experience hosted by Andrew Smith.

Smith says he got into the spook business through his interest in local history; his research uncovered “ghost stories and strange tales.” He announces he’s been doing tours for three years, and although he started out as a sceptic, ‘things happened’ and he became a ‘believer’. He has since appeared as an expert on Ghost Hunt, a TV series that purports to investigate hauntings throughout New Zealand.

Our entire tour is done on foot, at a relaxed strolling pace. This is quite convenient since the central city is packed with mysterious old buildings in close proximity. At \$20 per person, it seems to be a lucrative business, and in fact Smith has started similar operations in Oamaru and Queenstown, making himself a veritable magnate of supernatural sightseeing.

6:01pm – Haunted Corner

It’s a suitably sombre evening: chilly, misty and grey. The tour

group gathers, as instructed, outside the Information Centre in the Town Hall – which, we are quick to learn, is haunted. Yes, this was the site of Dunedin’s first hospital, now frequented by an apparition known only as the



Dunedin: City of Spooks?

‘Grey Lady’. Little is known about her, but there’s speculation she was a nurse, or a patient who went insane after losing a child. To this day, says Andrew, some staff in the Information Centre feel uneasy when they’re alone in the staffroom or basement. I look around curiously, but see nothing out of the ordinary.

Municipal Lane, the narrow alleyway between the Town Hall

and public library, is apparently better known as the ‘Corridor of Death’ to Dunedin’s spectrolologist community. It is said to be the coldest spot in Dunedin, a fact highly suggestive of ghost infestation (I was unable to confirm this with the local MetService office). Personally I think it is more to do with some sort of wind-tunnel effect, but that is too boring to be right.

After the tour I return to speak to Roy, an employee in the Information Centre, who claims he’s “never heard or seen anything” remotely ghostly. He pauses for a moment, then volunteers there had been a “bad smell out back,” but that just turned out to be clogged grease traps.

I nod sagely. Without doubt, this was no ordinary drain-clogging; it was the work of the Grey Lady. Ghost story #1: Confirmed.

6:08pm – Security Building

We walk a short distance east, and find ourselves at the foot of the impressive Security Building on Stuart St. This is the site of one of Dunedin’s most mysterious unsolved murders. James Ward, a popular lawyer, was killed by a letter bomb in his first floor office here in 1962. Does his restless spirit, torn with violence from the physical world,

still wander the cold stone corridors?

According to our guide, no one was ever arrested for the murder – and the room where Ward died has been subject to bizarre phenomena ever since. It was so bad, says Smith, that nobody would rent the room for years.

Later, I return to speak to Dick Young, the landlord of the building. He laughs and says the room where Ward died is as ordinary as any other room in the building, and has always been in use. The ghost stories are silliness, he chuckles.

Smith offers a counter-explanation for such inconsistencies: “often people are careful [what they say about ghosts], perhaps out of embarrassment... or fear.” As Young smiles and laughs at my ghost story, I swear that, for the briefest moment, I glimpse a look of pure terror in his eyes. Is he hiding a terrible secret? My head says no but my gut feeling is... *yes!* Ghost story #2: Confirmed.

6:17pm – Regent Theatre Back Lot

The tour group moves south and heads down a dim alleyway. Here, Smith tells us the story of one of Dunedin’s biggest disasters, the ‘Dunedin Holocaust’. Few people now know of the huge fire that destroyed much of the Octagon in 1879, killing at least 12 people. Putting aside for a moment whether ‘holocaust’ is an appropriate term for the accident, it was really interesting to hear about the local history, the old fire brigade system and the

demise of the chief arson suspect shortly after he escaped criminal charges. Our guide points out some of the remaining brickwork of the original building where the fire started – now part of the Regent Theatre. We’re told that the Regent Theatre and the nearby Ra Bar have been subject to many ghostly phenomena – especially the Ra Bar wine cellar, where a waitress once saw a floating ghost surrounded by a ring of fire.



Everything seems to add up, and we all know anecdotal evidence is infallible, so ... Ghost story #3: Confirmed.

6:27pm – First Church

We cross the road to the First Church, and Smith tells us the story of the apparition who supposedly stalks these hallowed grounds – a ‘silkie’, the tormented spirit of a jilted bride-to-be who committed suicide. This is a Very Special part of the tour, because not too long ago, a tour group *actually sighted* this ghost. Yes, apparently they saw a woman standing in the car park (60 feet away), who then walked off. When the group investigated, the woman could not be found.

But come on, a *car park*? People, let’s get one thing straight.

If you die and decide to become a ghost – presumably you have some choice in the matter – *please* select an appropriately spooky venue. Churches; old mansions; castles: yes. An asphalt car park: *no*. Well, it was a church car park, so I suppose she gets partial credit.

I was about to write the First Church apparition off as a load of rubbish – until I spoke to Russell, a respected senior member of First Church who had been a regular parishioner since 1966. He emphatically denied even hearing of the silkie. It was only then that I remembered the words of Prussian Statesman Otto von Bismarck, who remarked in 1815, “Never believe a ghost story until it has been officially denied.” Thanks for your ‘denial’, Russell. Verdict, Ghost Story #4: Confirmed.

6:36pm – Old Butcher’s Shop

We walk further along Moray Place, to another enclosed alleyway. Moisture drips from the roof and paint crumbles from the brick walls. This was the site of an old butcher’s shop. Graffiti on the wall here includes a picture of a ghost, helpfully announcing, “WOO, I am the ghost.” Andrew offers a convoluted story about butchers, burglars, a demon dog and a tragic death “right where we stand.” While he is talking, a car drives up the alleyway and some attractive young ladies get out. “Just ignore them, they’re the Dunedin Ghost Tour,” one remarks quietly, with a mix of amusement and exasperation. I was no longer paying attention to Andrew’s story, but the ghostly

graffiti (a poltergeist self-portrait?) convinced me that whatever he said was true. Ghost story #5: Confirmed.

6:49pm – Carnegie Centre

We continue the clockwise walk around Moray Place until we reach the Carnegie Centre, the site of Dunedin's first library. Smith lights a candle and leads us indoors. He tells us the story of "Mr Carnegie's ghost" who stalks this building and who has a penchant for walking through walls.

We are led deep into the bowels of the building, descending several flights of stairs into the dark basement. The atmosphere is musty and oppressive. We enter a small square room. This, says Andrew, was a World War Two air raid shelter; it was also the site of a gruesome death when a homeless man died and wasn't found for several days ("they called him the 'liquid man'"); and the sacrificial chamber of a group of Satanists ("who looked just like regular people"). It is also the origin of an "underground river... concentrating spiritual energy."

Strange, it looks like a concrete store-room to me; but then again, I am not attuned to the spirit world. There are some interesting theatrics as the candle flickers and Andrew symbolically offers one of the tour group as a "human sacrifice." If this isn't totally legitimate, then I don't know what is. Ghost story #6: Confirmed.

7:05pm – It's Over

Andrew finishes with a sombre warning: people who have taken the tour have later suffered

mysterious injuries. One person even suffered an unexplained black eye after taking the tour. He warns us to take care, "respect the spirits," and contact him if we suffer any bizarre injuries in the next few days.

We share a few personal stories, mostly about haunted cemeteries and ghost photographs, before climbing back out of the basement. I gulp down the sweet fresh air. The tour is over. Afterwards my fellow tourists agree the trip was worthwhile. One family group say it was "very convincing" and "well done," while a young couple tell me the tour was "a good look around... even if you're [a local], it's a good experience."

I feel disappointed (though unsurprised) that I didn't see a ghost myself. At least all the stories have been confirmed; and by "confirmed," I mean... "oh well, at least it was entertaining".

OK, perhaps I've been a little dismissive. Seriously, I ask, is there anything in this ghost tourism? I turn to our esteemed chair-entity Vicki Hyde, who said, *ex cathedra*:

"Ghost tours, haunted pubs and such tales have been a mainstay of the cultural tourism scene for hundreds of years. Few people – operators and visitors alike – take them particularly seriously. Although there's always a frisson of excitement that perhaps *this* is the night that the ghost really will appear, the most common result is a bit of entertainment, even a bit of education, but no ethereal existence manifesting itself..."

"[We] are not particularly worried about such light-hearted entertainment. We're more concerned about the highly lucrative and exploitative industry fostered by mediums, channellers and psychics who prey on the most vulnerable people in our society – those who have been recently bereaved or who, for some other reason, desperately want reassurance regarding the after-life. It's *that* industry we think deserves closer scrutiny."

So, there you have it: ghost tourism is even OK with the mean old NZ Skeptics provided you don't overcharge or exploit desperate people. (The exploitative ones – psychics like Jeanette Wilson who charge large amounts of cash to "communicate" with dead relatives of the vulnerable – deserve our unreserved scorn. While I'm ranting, I also demand that all of the actors, writers and producers associated with the TV show *Medium* be shot out of a cannon into the sun.)

The Dunedin Ghost Tour, by contrast, is good harmless fun, and relatively cheap for a personally guided tour of central Dunedin. If you're a skeptic like me, it's good for entertainment and educational value; if you're a believer, who knows – you *just might* be rewarded with a ghostly visitation.

Hair Raiser ghost tours depart from the Dunedin Information Centre daily at 6pm and last for about an hour. Bookings are essential.

A version of this article was first published in the Otago student magazine, Critic.

Don't bother watching the skies

COULD it be that visitations from flying saucers, which have been so frequent over the last 60 years, are now on the wane? Or is something more sinister going on? British UFO-watching clubs, it seems, may have to close because of a lack of sightings, and dwindling interest (*The Guardian*, 11 August).

Chris Parr, coordinator of the Cumbrian branch of the British UFO Hunters, has announced his group may be forced to wind up. There don't seem to be any UFOs in Cumbria any more.

"In Cumbria we have gone from 60 UFO sightings in 2003 to 40 in 2004 and none at all this year," said Parr. "It means that the number of people keeping their eyes on the skies is greatly diminished. We are a dying breed in this part of the country. I put it down to the end of *The X Files*, a lack of military exercises in the area that would produce UFO sightings, and a lack of strange phenomena."

A lack of strange phenomena or a shortage of strange people? *Guardian* journalist Stephen Moss suggested we take our pick.

It has not been a happy couple of years for ufology. The closure last year of UFO magazine, following the sudden death of its editor Graham Birdsall, was a disaster for the close-knit UFO-spotting community. UFO groups in Indiana and New Jersey are also struggling.

"The whole UFO thing is a kind of meme," says Susan Blackmore, a psychologist who studies paranormal activity. "It's a craze, a bit like sudoku. UFOs were just a rather long-lived version. But crazes thrive on novelty, and eventually that dies out. It's taken a long time, but it's good that the UFO era is over. My prediction is it will go away for a long time, then come back."

She says belief in UFOs and the existence of extraterrestrials, while mostly harmless, can in some cases be very damaging. "For most people, belief in them is neither here nor there, but some people can become very frightened and obsessed. It can also lead to an anti-science attitude and the belief that everything is being hushed up."

But all is not lost. Researcher Russ Kellett has documented 80 reports from North Yorkshire in the past eight months. Kellett is one of those who believes there is an official cover-up of the number of UFO incidents. "You can't have panic," he says. "All we can hope is that someone will bring the truth out about this."

Veteran ufologist Denis Plunkett, founder chairman of the British Flying Saucer Bureau, insists that ufology should not be written off. "Belief in UFOs and extraterrestrial life has gone up from 10% of the population to 80% over the 50-plus years the BFSB has existed."

Nick Pope, author of *Open Skies*, *Closed Minds*, used to run

the Ministry of Defence's UFO project. "I became more open when I was there," he says. "Now I won't rule out an extraterrestrial explanation. During my three-year tour of duty from 1991 to 94, I had to investigate 200 to 300 sightings a year ... with about 5% there was evidence of something more intriguing."

It was 1978, he says, that was "the peak in UFO sightings (it helped that Close Encounters of the Third Kind had been released the previous year), when there were 750 reports. We have seen these UFO waves many times."

David Clarke, a historian at Sheffield University and the *Fortean Times*' UFO correspondent, says people haven't stopped believing, but they do seem to be seeing far less than they did and it's not clear why. "There's been a massive drop in sightings since 1996, which is when *The X Files* was on TV. It may also be that since 9/11 people have had other things to worry about. There is not just less interest in UFOs, but in all supernatural phenomena. The MoD also lost interest in UFOs when the cold war ended: what they had really been looking for was Russian intruder aircraft. They only collate sightings now because MPs keep asking questions about UFOs."

Clarke thinks the rise and fall of ufology is a rich subject for study and is currently trying to attract funds for just such an undertaking. "I see it as part of

modern folk-lore,” he says. “UFOs are like modern-day angels, and descriptions of meeting aliens are just like descriptions of people meeting angels in the Middle Ages.”

Psychic fails to predict crystal ball blaze

A French amateur psychic’s powers were under sharp scrutiny after his crystal ball started an inferno that burnt out his flat (The Times, London, 12 August).

The fortune-telling device caused a fire that destroyed two other flats and rendered several more uninhabitable.

Herve Vandrot, 24, who studies botany at Edinburgh University, left the ball on a window-sill while he sauntered off to the city’s Royal Botanical Garden.

He returned surprised to find his top floor flat ablaze and suffered blistering to a hand after dashing in to rescue some coursework. He was dragged out of the building by some of the 35 firefighters who rushed to tackle the inferno.

Vandrot had only been in the flat for two weeks. After a night in hospital, he insisted the crystal ball was not to blame. “I don’t think it is capable of doing that. I think it was an electrical fault; the plug of my computer was melted.”

However, the firefighters said they could see it coming. “Strong sunlight through glass, particularly if the glass is filled with liquid like a goldfish bowl, concentrates the sun’s rays and acts like a magnifying glass,” a spokesman said. “The fire had

been started by the ball concentrating sunshine on a pile of washing.”

Homeopathy flunks again

It should be no surprise to our regular readers, but The Lancet has published a study showing homeopathy to be no better than placebo (NZ Herald, 27 August).

Researchers from the University of Berne, Switzerland, studied the results of 110 trials involving homeopathy and placebo treatments for problems ranging from respiratory infections to post-surgical pain relief.

They also looked at 110 trials that used conventional medicine against placebo treatments. While small trials that were considered low quality showed some benefit for homeopathy over placebo, there was no difference between the two in higher-quality, larger trials. But the benefits of conventional medicine were seen over all the studies.

The study concluded: “When the analysis was restricted to large trials of high quality there was no convincing evidence that homeopathy was superior to placebo, whereas for conventional medicine an important effect remained.”

This suggests that homeopathy works if you believe in it, according to Professor Matthias Egger. “Our study powerfully illustrates the interplay and cumulative effect of different sources of bias.”

Feet a shaky basis for health?

The Dominion Post (5 September) devoted half a page to

reflexology which, according to practitioner Tessa Therkleson, is the key to unravelling problems of the body and mind.

It is, she says, based on the principle that areas on the feet and hands correspond to the glands, organs and other parts of the body. Reflexologists believe the technique can be used to treat diabetes, multiple sclerosis, arthritis, Parkinson’s disease and many other conditions, including aches and indigestion.

Mrs Therkleson says she is aware many think reflexology is nonsense for the gullible. “I thought it was pretty incredible too, till I began doing it in 2000. I was shocked at how effective it was.”

Wellington podiatrist and skeptic Leo Brown was less enthusiastic, though declared himself tolerant of different approaches. While he acknowledged many patients reported benefits he said it was worrying that maps showing the location of different parts of the body on points of the foot varied between different schools of reflexology.

He also had reservations about a lack of a disciplinary body for reflexologists, who complete a one-year diploma, and the fact that registration is voluntary, not mandatory. “I want to be generous but I can’t allow myself.”

He admitted it was difficult to provide scientific evidence for intangible benefits, but added, “It’s not unreasonable to assume that if someone is feeling a great sense of wellbeing, then they’ll improve.”

Dilutions of Grandeur gain TEC

2005 Bent Spoon

THE Tertiary Education Commission was suffering from “dilutions of grandeur” when they identified homeopathic training as a nationally important strategic priority for New Zealand. That’s the reason the NZ Skeptics have given the TEC the Bent Spoon Award for the most publicly gullible action of 2005.

Homeopathy involves diluting substances with water over and over again until there is nothing left of the original material. Homeopaths believe that the water molecules somehow “remember” what was once in the water and that this gives the water curative properties. The Bay of Plenty Homeopathy College has been receiving money from the Tertiary Education Commission’s strategic priorities fund to run its Diploma of Homeopathy (Animal Health).

“Homeopathy does not present a sound basis for medical treatment, whether on people or animals,” says Skeptic chair-entity Vicki Hyde.

When the TEC was challenged earlier this year, its acting chair Kaye Turner defended the funding by saying that the course is important to the organic export industry, which relies on non-chemical treatments for animals.

“The organic industry does not have to – and should not – jeopardise its standing by supporting pseudoscientific notions that call into question its credibility. Quite apart from the lack of research supporting homeopathic dilutions, there are potential animal welfare issues if you treat sick animals with nothing more than diluted water,” says Hyde.

Media reports indicated that the major push for the course did not come from the large organic producers likely to be involved in strategic export production, but in fact from the homeopathic industry itself.

Of 500 applicants to the strategic fund, only 49 were successful, with the private training establishment sitting in the \$50,000 - 100,000 funding band.

Hyde says that she was not surprised to see that the college’s website points out that their diploma is “approved by NZQA and for student loans and allowances by the Ministry of Education”.



“Getting funding for and apparent educational sanction for such courses does nothing more than assist the commercial operations of such questionable educational enterprises. If the organic industry is to grow, it deserves to be served by better science and better trained people.”

In a more promising vein, nominations for the NZ Skeptics Bravo Awards out-stripped Bent Spoon nominations this year.

“We’re delighted this is the case and hope it’s the start of a long-term trend,” says Hyde.

The Awards are to:

- Rose Hipkins for her excellent comments regarding Intelligent Design on Campbell Live, (September 2, 2005)
- Chris Barton of the NZ Herald, for “Mannatech’s sugar-coated moneymaker”, a first-rate piece of critical analysis (July 17, 2005)
- Tim Watkins, deputy editor of The Listener for his “Star Power” editorial critical of the anti-vaccination campaigners (June 18, 2005)
- Jeremy Wells for his amusingly scathing look at the psychic and medium business on Eating Media Lunch (April 19, 2005)

Cables and fat field marshals give a lift

What a great Skeptic the winter edition is, thorough forethought all around, with even a hint of hope about the clairvoyant decision. Which is good because although I enjoy reading the magazine it's often quite depressing.

I would just like to say that, yes Hugh I did read that article, but it wasn't what prompted my rave on stereo equipment. That was a result of trying to explain to a technically qualified, stereo component developer friend why I would not accept the results of a review on cables when I did not know if the person reviewing the cables could tell one from another without knowing which had been plugged in. He seemed totally unable to grasp the fact that the reviewer may well have been influenced by other factors, or just blowing smoke. That was what caused me to write to various electronic/stereo magazines and Consumer to try to find out what sort of testing was done. The length question can be solved simply by buying stereo cable off large reels having measured the distance between your amplifier and your speakers however. Strip the ends, shove them in the holes, and screw them down – which gives just as good a connection as anything according to a physicist friend of mine. The other guy is hot on deoxygenated cable whatever that is. (Expensive though I bet.)

I presume that John Welch realises that Hermann Goering

was much slimmer in World War I, in fact he couldn't fit into a World War II fighter plane by 1943 even though they were marginally larger. My own father settled down into civilian life without a great deal of trouble, but I had a teacher who had earned a DFC, who had definitely been affected by the war. I wouldn't criticise someone who's been traumatised by war without walking a mile in their shoes. On the issue of what people put into their mouths he should get hold of Muscle: a writer's trip through a sport with no boundaries, by

Theoretically Speaking

Quote seen recently:

"Gravity is only a theory, so should be taught alongside the theory of 'Intelligent Falling'."

John Hotten, as a doctor he would be horrified at what these people do to their bodies. Parts of it are very funny too. His comment about pharmacists rings bells with me as I went to the chemist the other day for some hydrocortisone for a small rash which I hope is caused by shaving. I was offered some sort of homoeopathic cream if that's not a contradiction in terms, but when I said "I prefer drugs thanks" I got a very grudging "Oh I suppose that *will* clear it up a bit quicker".

Thanks for the lift guys.

Bob Metcalfe

More curly water

It is always satisfying to have one's scientific hunches validated by other researchers. A few years ago I wrote on "Curly Water" for New Zealand Skeptic, in which I suggested that cucumbers grew in a circular shape because the water used to irrigate passed through a coiled hosepipe between tap and garden.

Now, thanks to Ben Goldacre (www.guardian.co.uk/life/badscience) I can report on the properties of "spiralised water", as described by Jacqueline Young on the BBC Health website:

"Water may also be used in healing. Some people believe water is a powerful messenger that can hold electromagnetic traces as a type of 'memory'. This principle is applied in homeopathy, where it's believed that the more a substance is diluted the more potent it becomes. However, this theory remains controversial."

"Implosion researchers have found that if water is put through a spiral its electrical field changes and it then appears to have a potent, restorative effect on cells. In one study, seedlings watered with spiralised water grew significantly faster, higher and stronger than those given ordinary water. Using this technique on drinking water is said to be beneficial for health."

There is one important difference between my writing and Young's. My piece was a spoof; Young and, sadly, the BBC, appear to be serious.

Bernard Howard
Christchurch

Magnets repelled

Martin Craig

Magnetic fields are no better for your water or your car than they are for your arthritis

POWERMAX magnetic water-treatment conditioners have been controversial since they were introduced in New Zealand in 1998. Now they've been withdrawn and the Consumer's Institute believes customers are due a refund.

Questionable science

Powermax is simple – two magnets clip to your water pipe. It's imported by Pat Julian of Julian's Electrical and Energy Conservation in Inglewood. Julian's is also the importer of a similar dubious gadget, Fuelmax.

Julian has made many claims about Powermax's powers. These include: eliminating bacteria and parasites; dissolving faecal wastes; removing silt, chlorine and scale; stabilising pH; and stopping diarrhoea in cows.

Julian's website said Powermax worked on the principle of "magnetic frequency resonance". That might sound scientific but a Google search shows this was the only website in the world to use the term!

The website also gave a brief explanation of how it works. "In simple terms, when the water passes through the magnetic field the magnetic polarity of the molecules reverse. The molecules separate, break down into microscopic size and remain in suspension."

We asked two professional chemists to assess these claims.

Both agreed that the statements were meaningless. One told us it generated gales of laughter from his colleagues. The other said, "It's all gobbledegook wrapped up with some scientific buzzwords to make it sound authentic to the average Joe Blow." Neither scientist believed the Powermax could do what it claimed to do.

We asked importer Pat Julian about his website and its claims. He said the information on the website came from the manufacturer, International Research and Development (IR&D). "It's not just something we had dreamed up – we don't work like that." Julian also offered to provide customer testimonials.

Questionable products

Readers started asking Consumer's Institute about Powermax in 1999. We said then we had doubts that the magnets could affect bacteria.

Our doubts were borne out in 2001 when the Commerce Commission took Julian's to court. Julian admitted that "Powermax does not and cannot" treat water for bacteria, parasites, giardia, cryptosporidium or faecal wastes. "People believing these spurious claims and then drinking or swimming in dirty water 'conditioned' by Powermax are at risk of potentially serious illness," Commission chair John Belgrave said. Julian says he refunded dissatisfied customers at the time.

The Commission also criticised Julian for accepting IR&D's claims. "Distributors are responsible for the goods they provide and must take reasonable steps to check them. They cannot simply rely on claims made by a manufacturer," the Commission said.

Then in 2001 Julian took exception to a TV One item about Powermax. He tried to sue for defamation but the case was settled this year before it got to court.

And this year US courts ordered IR&D to stop promoting Fuelmax.

Fuelmax is a magnetic gizmo for fuel lines in motor vehicles. The court decision related to claims that Fuelmax reduced emissions and fuel consumption. Julian's withdrew Fuelmax in May as a result. Last month, after more questions from us about Powermax's claimed performance, Julian withdrew that product from the market too.

Questionable claims

Julian says all the technical information for Fuelmax and Powermax came from manufacturer IR&D. He told us he was disappointed with the US court decision.

"IR&D certainly have not been honest with us. The technical explanations used in our sales literature came from the information supplied by them, and

we are therefore currently investigating the question of taking legal action in the US to recover the costs of what is unsaleable stock.”

This raises two points. First, Julian was warned in 2001 that he could not rely on IR&D’s claims and he should check them out himself. And if he wants IR&D to repay him for unsaleable stock, then it’s only fair that he should refund anyone who bought a Fuelmax or Powermax from him.

Pat Julian says he still believes in magnetic water and fuel treatment, and he plans to import a similar range of products from a new manufacturer.

Consumer’s view

Anyone using Powermax or Fuelmax should return them to Julian’s Electrical and demand a refund. We believe you are

entitled to one under the Consumer Guarantees Act, as the products are not fit for the purpose they were sold for. And Julian was warned in 2001 that he cannot rely on claims made by manufacturers. We hope he won’t fall into this trap again.

Martin Craig is an investigative writer at the Consumer’s Institute. This article appeared originally in Consumer magazine. The institute is currently interested in magnetic and other fuel-saving devices. If you spot any, please send email to Martin@consumer.org.nz

Nessie hunter is no more

Frank Searle, who produced 20 pictures of the Loch Ness monster and did more than anyone to make it a major tourist attraction, died on March 26 aged 84 (Dominion Post, 7 July).

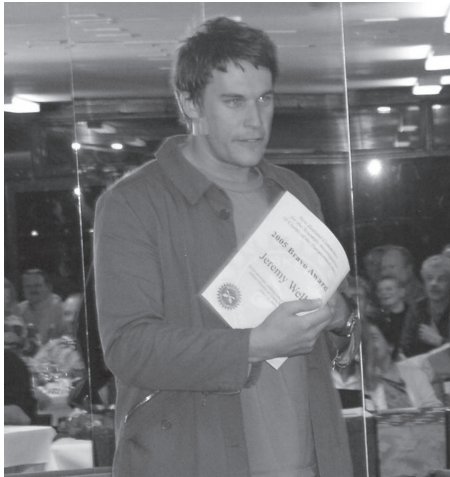
Searle claimed to have put in 20,000 hours of monster spotting, but most now believe he concocted his pictures using fenceposts, logs, tarpaulins and old socks. In 1985 he fled after police interviewed him about a petrol-bombing, and practically nothing is known of his life since.

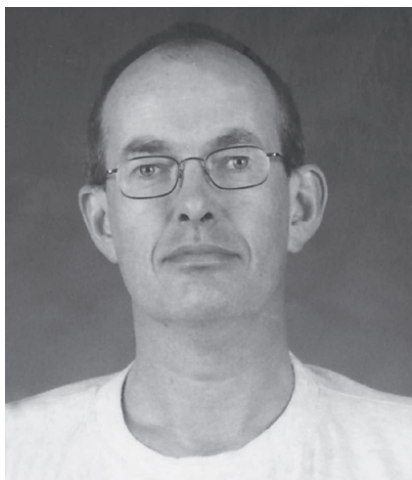
Only the most ungenerous doubt that he set out with the best intentions, but he had little equipment and it wasn’t until 1972 that he recorded his first “sighting” – a two-humped creature according to some, a log to others. His other photos, over the next five years, included one which was shown to be based on a postcard of a brontosaurus. Searle also damaged his reputation with pictures of UFOs, and was reviled by other monster-hunters who said he was harming “genuine” research.

What a good conference that was...



Clockwise from top: Ian Short contemplates a Hopi ear candle; the chair-entity and conference organisers show how it’s done; Jeremy Wells receives his Bravo; Don Stafford (right) relates the history of the Bath House.





Alternative health care – there are better alternatives

locations where political considerations conspire against the weight of scientific evidence.

White-Tail Spider Bite Hysteria

Doctors in New Zealand as well as Australia continue to diagnose ‘white-tail spider bites’ as an explanation for all sorts of unexplained skin conditions. In New Zealand this is frequently a ploy so that costs of treatment can be shifted to ACC. I have personally seen one patient with a typical boil who told me that she had no idea what had caused it but the GP went ahead and diagnosed a white tail spider bite. This sort of nonsense has assumed the proportions of an urban myth. Dr Geoff Isbister, an Australian, has published two large studies of alleged spider bites and concluded that reports of death and tissue damage were based on “weak circumstantial evidence.”

Credulous Reporters

A blind woman has reportedly baffled scientists by demonstrating an ability to distinguish colours by touch. She described her ability as being “a combination of pure learning and concentration.” As Homer Simpson would say: Doh! (Hey guys – perhaps she’s not really blind?)

In Moldova, bank clerks have been hypnotised into handing over money to a bank robber who puts his victims into a trance, leaving them with no memory of handing over the cash. Why is it that the word “accomplice” springs to mind?

Christchurch Press, 15 October

Deer Velvet

Many years ago when I was an active hunter it was astonishing how much money could be had from selling deer velvet. This industry is now worth \$30 million with most exports to Korea where it is used as a “wellness tonic”, often mixed into a broth with ginseng and liquorice. Have any readers tried this?

Dr Tong Ren Tang has set up a company promoting the use of deer velvet in traditional Chinese medicines, which are being promoted and sold in Asian countries. He quoted its use 2000 years ago by a Chinese emperor worn out by too many concubines. Given that the majority of traditional Chinese medicines are either useless or dangerous I am happy that we can export an equally useless product such as deer velvet. The industry is however struggling due to low prices and the high value of the dollar. Why not give the Asians a taste of their own medicine?

DURING my recent overseas trip I had two stopovers in Hong Kong. The South China Morning Post (3 October) reports that demand from patients has led to a policy where acupuncture treatment will be allowed for patients recovering from stroke and cancer. This is rather an unfortunate move because a very recent study found no difference between acupuncture and sham acupuncture in their ability to perform daily activities of living or in their health-related quality of life. The study involved 116 patients who received 12 treatment sessions during a two-week period. [Park J and others, 2005: Acupuncture for subacute stroke rehabilitation. Archives of Internal Medicine 165: 2026-2031, 2005].

Skeptical readers familiar with the scientific literature will know already that acupuncture is ineffective. Herbalists were reported as being upset at being so far excluded from the new treatment guidelines.

The Hong Kong Public Doctors’ Association president, Dr Tat-Ming, expressed concern that unproven remedies were being endorsed. I can only echo his concerns but this development will soon be repeated in many

We should promote velvet for the treatment of say impotence and arthritis and adulterate it with viagra and ibuprofen. After all, such Chinese medicines have been sold in New Zealand. These products would obviously really work and would revitalise the deer velvet industry.

Noni Juice

Have any readers tried this stuff? I have not seen it in health food shops but it seems to be gaining in popularity and sells for about NZ\$10 for 1.5L in the Cook Islands and up to £150 in the Northern Hemisphere. It is claimed to have benefits for everything from high blood pressure to senility. This absurd range of indications is the hallmark of quackery. In the US the FDA has taken action against the distributors for making unsubstantiated therapeutic claims. Similar claims in NZ would be a breach of the Medicines Act and one firm has already been warned for claiming that Noni juice could make cancer tumours disappear.

Rumpology

A few years ago I was at a conference where Ken Ring gave a terrific exhibition of cold reading and showed how you

could 'read' any part of the body because the whole thing depends of course on the 'patter'.

Jackie Stallone (mother of Sylvester) has taken to reading buttocks (NZ Woman's Weekly, 14 February)! Is this where Jeremy Wells got his idea from for reading "pubic auras"? Jackie believes our buttocks are as unique as our palms and she claims to have done such readings for the British Royal family. Her abilities extend to other members of the family. Her psychic dogs predicted that Dubya would win the US Presidential election. Jackie was recently kicked off a television program but I have an idea for a new programme for her and her family. How about "Lifestyles of the rich and stupid" for a title?

Echinacea Flunks

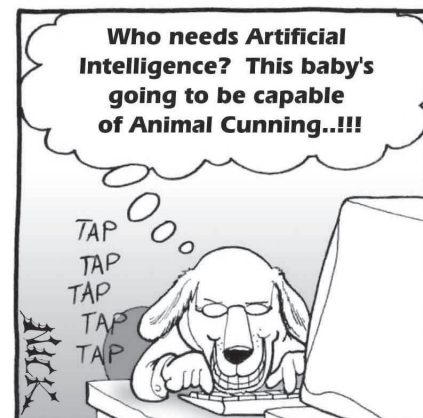
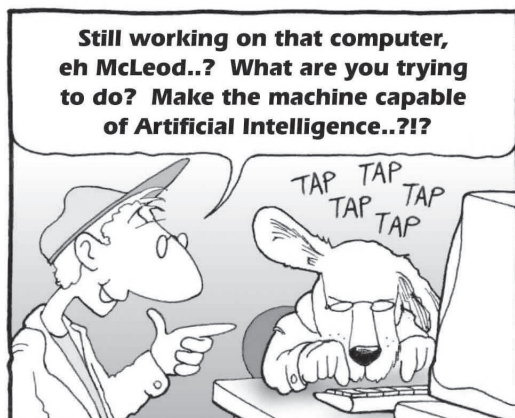
A study published in the New England Journal of Medicine has shown that Echinacea is a placebo (Marlborough Express, 28 July). This comes as no surprise but will make little difference to sales of this product that is promoted for the relief of colds. The people who buy these products do not read or understand scientific studies. There seems to be no correlation between intelligence and the use of these

products. It remains to be seen whether the World Health Organisation will remove their endorsement of this useless product.

Water Quackery

Water is such an essential item that it is a good source for any quack enterprise. Take homeopathy for example. Suckers are encouraged to buy 'healing' solutions that are actually pure water. Cheap, harmless and very profitable.

Ecoworld NZ Ltd sold units which were claimed to treat water but contained no mechanism or filter apart from a sealed unit containing 'living water' from an Austrian glacier. Tests (those pesky tests!) however, showed no difference between 'treated' water and untreated water. A Judge said that promotional material "contained inconsistencies, quackery and pseudoscience" and fined the company \$60,000. The Ecoworld Company directors are clearly not up to the task and are as dumb as the people buying their product. If you are selling a useless product the last thing you want is to attract the attention of the Commerce Commission.



Mormons still opposing science

Raymond Richards

The Mormon church: anti-science and pro-repression. Still.



THE Church of Jesus Christ of Latter-day Saints, often called the Mormon church, has long been an enemy of science and the free exchange of ideas. It is hostile to the theory of evolution, for example, and to Mormons and non-Mormons who reject the church's claim to be the fount of absolute truth. The latest news shows that the situation is not getting any better. The Mormon church still opposes some important scientific advances and people who discuss them. The church does this because the discoveries contradict traditional Mormon doctrines and because the science undermines the claim of church leaders to be the infallible voice of God.

That the Book of Mormon is full of nonsense should come as no surprise to any skeptic. After all, it was dictated in 1830 by Joe Smith, who was not a scholar or researcher; he was a farmer's son with an interest in the weird and a teller of tall tales. Smith had been arrested for taking money in return for using a 'magic' stone to look for buried treasure. He then used the same stone to pretend to translate the ancient history of America from hieroglyphics on ancient, gold plates he dug up. He said an angel showed him where to find them.

The Church of Jesus Christ of Latter-day Saints, however, insists the Book of Mormon is the truest book ever written and that its revelations trump research. Because the book is divinely inspired scripture, what it says goes. Scholars supposedly have it all wrong. So, when the Lord's word says America was settled about 600 B.C. by a tribe of Israelites known as Lamanites who crossed the seas from Arabia, the matter is concluded. The Lamanites supposedly were the ancestors of the Native Americans.

Mormons who doubt this fantasy are guilty of the sin of apostasy, and the church seeks to banish them in periodic purges. In 1993, six Mormon scholars were stripped of their church membership for questioning church teaching. Others excommunicated since then include David Wright, a professor of Hebrew studies at Brandeis University who was thrown out in 1994 for writing articles that said the Book of Mormon is a 19th-century creation of Joe Smith, not an ancient text. Margaret Toscano, a classics professor at the University of Utah, was excommunicated in 2000 for writing on feminist issues after being ordered not to.

The last few years have seen two famous cases of the church censoring the same scientific information. In 2002, Thomas W. Murphy was a doctoral candidate at the University of Washington and chair of the Anthropology Department at Edmonds Community College. He published an article about how DNA evidence destroys the Book of Mormon claim that Native Americans are descended from Israelites. He was ordered to recant or face excommunication in a trial for apostasy. After an outpouring of public support for Murphy – a modern Galileo – the church postponed indefinitely his trial.

Most recent was the case of Simon Southerton, a geneticist who works in Australia. He was raised a Mormon, but after training as a scientist, he saw that DNA evidence contradicts history told in the Book of Mormon. Scientists have developed DNA testing to the stage where the genetic code in a drop of saliva can yield traces of racial ancestry that entered a person's family tree thousands of years ago. Native Americans have been tracked back to Siberia before their migration to America over 14,000 years ago. They are Mongoloid in origin, not Semitic. In 1998 Southerton decided to leave the church because he could

no longer believe some of its teachings. Last year, he published *Losing a Lost Tribe: Native Americans, DNA and the Book of Mormon*. His book tells how DNA data about Native Americans does not support the Mormon belief that the continent's early inhabitants were descendants of Israelites. Church leaders discussed the book at length with him. He told them it was odd for the church to pursue someone who had not been active in the church for seven years. After a three-hour meeting on 31 July 2005 in Canberra, church authorities excommunicated Southerton – for “having an inappropriate relationship with a woman.” Southerton does not deny the relationship, which occurred two years ago, while he was separated. He refused to discuss his personal life at the meeting, instead asking his inquisitors why he was not answering to charges of apostasy. The church representatives said that if he tried to talk about DNA, then the meeting would be completed in his absence. It is easy to read between the lines.

Dr Simon Southerton's excommunication makes him the seventh author from the Salt Lake City-based publisher Signature Books to be expelled from the church after writing a work contrary to Mormon dogma. The Church of Jesus Christ of Latter-day Saints, which claims to have 12 million members around the world, remains a force for ignorance and repression.

Dr Raymond Richards is a senior lecturer in History and American Studies at Waikato University. He can be reached at ray@waikato.ac.nz

A small success story

Jay Mann

Just once in a while, speaking up can make a difference.

AS I entered my favourite local pharmacy, I was disturbed to read a sign on the window announcing that a certain iridologist would be holding consultations at this shop at a future date.

I asked the pharmacist if he really felt this was helping the community or his image. He asked what the problem was. I said that I had to rely on his professional expertise for assistance in choosing between competing products, and his promotion of iridology would make me (and others) dubious about his professional judgment. I'm afraid I described the field of iridology with some strong epithets, moderated only by the presence of female assistants and shoppers.

After promising him more factual information, I went home and dug out the Truth Kit on Iridology prepared by Dr John Welch a few years ago. I left this with the chemist, promising him that he'd be unhappy when reading it. My expectations were minimal, for I'd also noted an ad in a local old-folks publication promising that this pharmacy regularly had visits from the iridologist. There was clearly some degree of commitment by the pharmacy.

To my utter surprise, on a later visit to the shop, the Truth Kit was returned with a comment that the iridologist would not be returning again. The pharmacist had not stopped with the truth kit, but had (very properly) obtained

an independent opinion about iridology. We agreed that a 'discipline' purporting to diagnose illness, that would misdiagnose non-existent problems while missing actual disorders, was not acceptable.

This was my first success in modifying a misleading action by a chemist shop. I've had total failures: another chemist was selling oxygenated vitamin water, and my protestations that these claims were nonsense were met by the statement that “many people think it's very powerful”. Success was due to the fact that iridology makes specific claims for efficacy and accuracy, and these claims had been demolished by the Truth Kit.

Most health products are sold with no real claim to do anything. The labels will say, for example, “This plant is traditionally used to treat xxxx,” or “This product supports liver/heart/circulation/brain function”. Cleverly worded but meaningless statements like this are neither provable nor disprovable.

On the other hand, it's not the job of skeptics to stop people from wasting their money on magic water or enchanted inositol pills. (If that is our self-appointed task, perhaps we should start by investigating the claims of financial advisers compared with their actual results.)

Jay Mann is a plant biochemist whose waistline confirms his lifelong interest in edible plants.

If undelivered, return to:

NZ Skeptics
PO Box 29-492
Christchurch

New Zealand
Permit No. 3357

Permit 

Paranormal New Zealand

Next year chair entity Vicki Hyde plans to be working on a new book, Paranormal New Zealand, which will be written in time for filling your favourite skeptic's Christmas stocking! She'll be looking for ideas and information that will help demonstrate everything from how to go on a ghost hunt to exploring why stories of moas and UFOs hold such fascination. If you have any inspiring ideas, get in touch.

chair@skeptics.org.nz

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