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Skepticism—Wet & Dry

Vicki Hyde

In the arguments for and against being definitively skeptical, the social climate and moral responsibilities of skepticism are often overlooked. This is an abridged version of the after-dinner speech given at this year's NZCSICOP Conference.

As a Skeptic, how do you react when you're at a party and someone asks you your star sign?

What do you do? Do you compromise your skeptical principles, smile winningly and admit to being a Virgo, but it doesn't really count 'cos you've got Scorpio rising? Do you attempt to laugh it off by claiming to be an Asparagus? Do you tell them that you don't believe in such rubbish and go off in search of a more skeptical soulmate?

There is that awkward dichotomy between the dry and wet skeptic, the advocate and their silent partner. Most Skeptics vacillate between the two, dampening or drying out.

Dry skepticism — the skepticism of those who pounce on pseudoscience and denounce it for being silly, stupid or downright dangerous — is unpopular. It's usually painted as dog-

matic, narrow-minded, heavy-handed and even reactionary.

The problem is, many of the same character traits exist in those people confronting us. Ever tried to suggest to a dried-in-the-horn Steinerite that maybe dried cow manure isn't the answer to falling soil fertility? You won't get very far.

Rationality Rules

A willingness to look at a subject rationally is supposed to be the hallmark of the scientist, and indeed, many

scientists are willing to take a look at possibilities. Think about the cold fusion fracas of a few years ago — lights burned late in laboratories around the world. No-one was sure how it was done, if it was done, but if there was the possibility, by god, they were going to try it out.

Those areas which do have true validity, where something really is happening will eventually overwhelm any dissent from scientific orthodoxy by the sheer weight of proof, by observation, by experimentation and by reason. It may take a while, but it'll get there eventually.

Sure, the idea of meteorites was poo-pooed for a long time, but the principle of "show me" works pretty well. But for

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Even Skeptics Believe in National Radio

In a memorable encounter, National Radio's Maggie Barry recently talked to the Hon Graham Lee, Minister of Civil Defence. As noted elsewhere in this issue, Mr Lee welcomed the prophecy of a British cleric that the Taupo region would be hit by a mammoth earthquake on November 15th.

How could an official in the Minister's position take such a prediction seriously?, Maggie wanted to know.

"Oh," he responded, "the Ministry takes all predictions seriously, unless they come from utterly crack quarters — and we do have a share of that...but I'm just glad that, at this time, we've got a large amount of church-based people now involved in civil defence leading the way..."

While Mr Lee admitted that he didn't know any of the details of the preacher's predictions and had done nothing to examine this preacher's credentials — a curiously cavalier attitude toward potential mass death in Taupo — he thought it was good to see people getting in behind the prediction.

Maggie continued: "I must confess to certain surprise, Minister, that in civil defence you should take a prophecy seriously which has no scientific basis."

"Well," — he was beginning to squirm — "then again, we don't know necessarily from the seismologists when we're going to have an earthquake either — they will say that theirs is an imprecise science as well."

Maggie wondered "really whether it doesn't cheapen the currency a little — of the seismological predictions — when we have a Minister of Civil Defence actually going back to biblical sources and taking those seriously."

She persisted: "Isn't this basically superstition, Minister, rather than something a Minister of the Crown should be giving serious credence to?"

"Well, if it was superstition, I wouldn't certainly be saying anything about it at all. But...uh...no, not at all. Well...uh...people can...can...uh...certainly have the right to view prophecy, I s'pose, view with different views from my own, but..." And so on, to near incoherence.

For me, one point emerged most starkly from the encounter. The general level of information and critical discourse in our society depends not only on robust interviewers such as Maggie Barry, or our own Vicki Hyde, who later pummeled the Minister in a *Sunday Supplement* presentation. In New Zealand, it depends significantly on the existence of National Radio itself.

That's why, during the formation of the Friends of National Radio, there has been so much support expressed to me personally by members of the New Zealand Skeptics — we're all in the business of promoting more information, rational discussion and inquiry.

New Zealanders depend on news, information and critical analysis adequate to the challenges of the day. Commercial radio here, as elsewhere in the world, is not up to the job. New Zealand requires broadcast services designed essentially not to raise advertising revenue, but to raise our understanding of ourselves and of the world.



Join, or send donations to:
Friends of National Radio,
1 Waitaki Street, Christchurch 7

Contributions should be directed to:

Dr Denis Dutton, Editor, School of Fine Arts, University of Canterbury, Christchurch

When sending clippings, please indicate source publication and date published.

It would be greatly appreciated if articles (especially long ones) were provided on any size IBM disk as ASCII (preferably), Wordstar or Word Perfect files. Do enclose a hard-copy too, please, as the Editor doesn't understand binary. Disks will be faithfully returned if clearly labelled.

Final Deadline for next issue:

February 20th, 1992

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every idea that did eventually pan out, there are thousands which have fallen and sunk without trace.

What are we to do with fringe ideas — reject all and miss the one good idea in a thousand, or spend time and money on all? In these days of funding shortages and falling staff levels, can we really expect our scientists to investigate all the claims of the fringe followers?

Needles and Haystacks

I have a male colleague who puts it this way: think of science as a search for a tiny valuable needle in a huge haystack. You're hunting for it, not really sure if it's there or not. Suddenly you come across the farmer's daughter. No matter how alluring or interesting she may be, she's not going to be much help. Odds on, you'd never find the needle you wanted and the farmer's daughter would distract you sufficiently that you'd forget what you were doing there in the first place.

So you ignore her, stand up and beg to differ. What have you achieved? You're not going to convert the True Believer, but you may make

some of the less convinced ones think a little more, you may even touch a faint skeptical nerve in one or two.

Who knows, maybe you'll even find a grain of truth hiding under the large quantity of cow manure that's been spread around.

It can be too easy to dismiss things out-of-hand and become as rigid and ridiculous in one's beliefs as those you purport to challenge.

Think about this — if you plough at the time of the new moon, the harmonic influences and astral harmonies will ensure that you get less weeds than if you plow during the day.

Let me put it another way. Plow during the day and the flash of sunlight as you turn the sod will encourage germination in the weed seeds you uncover. Do this at night and there's less likelihood of weeds germinating.

More believable? Same knowledge, just cast in a different way. For many dry skeptics, the argument becomes more important than the actual search for understanding and

knowledge. It can be too easy to dismiss things out-of-hand, and become as rigid and as ridiculous in one's beliefs as those you purport to challenge.

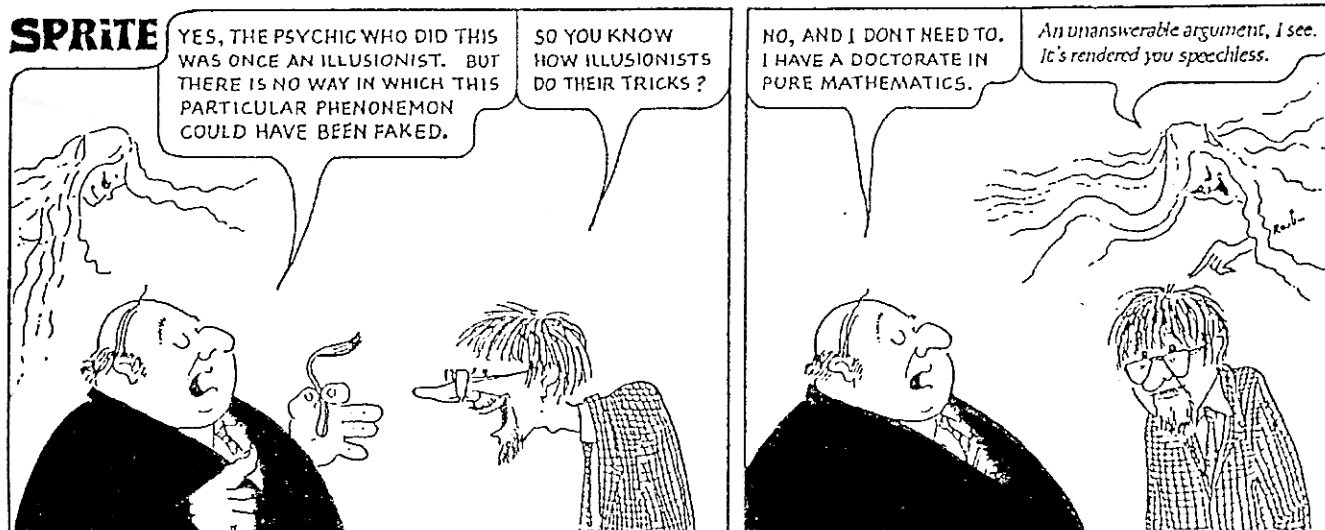
So you have to be prepared to listen at least a little to what is being said and to think about it — make the effort to spot the needle even if there are more interesting things in the haystack.

Science progresses through challenge. Pseudoscience sidesteps challenge, bursts triumphant from the haystack and announces to the world "Look what we've found!" Small wonder no-one wants to know about your needle, no matter how bright and shiny it is.

That's one of the most frustrating things about being a skeptic — how well purveyors of crank ideas communicate, and how readily their ideas are promoted and supported by the media.

Media Jugular

People ignored by the scientific community, particularly those with no scientific standing themselves, are not likely to use learned journals as an arena for debate. No, they tend to go straight



British & Irish Skeptic, Donald Rooum

A classic case was on *Beyond 2000*. A British astronomer — an astronomer note — was supporting astrology, saying that planetary magnetic interactions determine various personality factors. The report mentioned that his colleagues wouldn't take him seriously, and compared him to Einstein and Galileo, struggling against the close-mindedness of the scientific establishment.

Everyone loves an underdog, specially one whose cause can be put in the 10-15 seconds beloved by the live media.

Science can't work like this — by its very nature it needs to have room for caveats, to discuss other approaches, to reference sources.

Sadly, the ever-increasing tendency to

micro-miniaturise news has left science as a fact source and precious little else. Drop the context, leave out the contention, and you are left with what is often meaningless facts, or apparently magical processes.

Advertising Superstition

What chance does a person have of assessing the validity or otherwise of what they are being told? We are used to being told what to do, what products to buy, what things to believe. I read a comparison recently equating advertising's cultural function with that of superstitious beliefs.

Common repetition, unsupported claims, apparently magical properties — we’ve

all seen these, whether it's the hungry enzymes in your detergents or the pulling power of a sportscar.

One quote I liked said that advertising is aimed at the optimism of the credulous, rather than at the minds of the skeptical. Small wonder that the advertising-supported media operates along the same lines, pushing show over substance.



"I think you should be more explicit here in step two."

If I may be permitted to preen a little, I was rather flattered and somewhat flab-bagasted recently to be told by a potential advertiser that readers of the *New Zealand Science Monthly* were "too intelligent" to accept the generic message of a certain large telecommunications company.

Given the high proportion of skeptics among our readers, I have a certain degree of pride in this perception, however frustrating it is for the magazine's cashflow.

Be that as it may, combine a general ignorance of science and the scientific method with the tendency for people to believe authority figures and you produce a culture ripe for

a slide into superstition. It's very easy for people these days to use scientific jargon to give a respectable sound to a crazy idea. It works. You too can get \$70,000 to investigate "quantum particle analysis of Kirlian-type energy fields."

Scientists Not Immune

Scientists, themselves, are not immune to the odd dive into weird and wonderful beliefs, usually in an area outside their area of study. Social psychologist Kimball Young noticed this disconcerting fact, remarking in 1924 that "very often among scientists is found the most curious mixture of modernism in a specialised field, coupled with an intense adherence to some medieval or primitive superstition which is unworthy of them."

This has led to the suggestion of awarding a degree with wording along these lines:

The University certifies that John Wentworth Doe does not know about anything but biochemistry. Please pay no attention to any pronouncement he may make on any other subject, particularly when he joins with others of his kind to save the world from something or other. However, he has worked hard for this degree and is potentially a most valuable citizen. Please treat him kindly.

Most scientists, and many skeptics are more conspicuous by their absence from any controversy. Few

are prepared to be accused of the dogmatism and narrow-mindedness that seems to be the sobriquet of those with opinions.

Some have seen this, ironically, as a loss of faith — a loss of faith in the responsiveness of people to education, in their ability to reason. At times, it's not surprising that faith has been lost. It's all too easy to be overwhelmed in the flood of crystal holding, urine quaffing and channeling.

Admitting to being a Skeptic tends to make people rather defensive. In many ways, it's like admitting to being a feminist. Yes, I'm a Skeptic, but...

There's the belief that all points of view, all visions of the world have equal validity. The power of science itself has been undermined by the suggestion that it is all a subjective construct. Being logical is somehow equated with being

mechanistic, being rational now seems to mean lacking in imagination.

Social Skepticism

In these times of self-actualisation, self-awareness and self-monitoring, it is not the done thing to question people's beliefs, to make them uncomfortable. It's considered somehow "poor taste." You're supposed to be emotionally sensitive, non-confrontational and socially and environmentally friendly.

I'm not sure how wet skeptics can operate in this environment, except perhaps in the privacy of their own homes. There's a certain degree of smugness in this approach — a holier-than-thou attitude that no doubt provides a nice feeling of superiority without the danger of having to expose yourself.

Obviously there are times when it is pointless to argue a case, when you achieve noth-

ing except enmity and a further downgrading of skeptical mana if you press your views. An ounce of wit or courtesy will do far more to advance your case in many situations than any amount of authoritative citations.

There is the danger, however, that you miss the broader implications in your laid-back approach. After all, it can't harm people to believe in the benefits of creative visualisation, organic food and acupuncture, can it?

The report on the Bristol Cancer Centre has shown that it can. Cancer patients died faster under that alternative regime than those following alternative medicines.

Are we to sit idly by and let that happen for want of a little debate of the issues?

Vicki Hyde is the editor of the *New Zealand Science Monthly*.

Great Skeptics of History, No. 3

Christopher Urswick, was almoner (an alms-giver or mediæval social worker) to Henry VII. His account of the king's run-in with an astrologer was repeated, with glee, by Erasmus.

Henry had been for some time in a declining state of health, and this had encouraged a saucy astrologer to foretell his death, and that it should happen before the year expired. The wise king had more mind to expose him than to punish him. So he sent to the man, and talked friendly with him, seeming not to know anything of his insolent prophecy.

The king gravely asked him whether any future events could be foretold by the stars; "Yes, Sir" (says the man) "without all doubt." "Well, have you any skill in the art of foretelling?" The man affirmed that he had very good skill. "Come then," says the king, "tell me where you are to be in the Christmas holidays that are now coming."

The man faltered at first, and then plainly confessed he could not tell where. "Oh!" says the king, "I am a better astrologer than you. I can tell where you will be — in the Tower of London," and accordingly commanded him to be committed a prisoner thither. And when he had lain there till his spirit of divination was a little cooled, the king ordered him to be dismissed for a silly fellow. (VH)



School Teachers and Skepticism

Russell Dear

The debate over how "dry" a skeptic should be in promoting skepticism does not appear to take into account the dangers of ridicule in hardening the very views we are attempting to counter. This is particularly so in schools, where both teachers and pupils have things to learn.

There has been a lot of discussion recently among our British counterparts about "wet" and "dry" skeptics. Apparently a dry skeptic is one who is ready to denounce all supposedly paranormal claims as absurd. A wet skeptic, on the other hand, is one who thinks that all claims deserve reasoned and thoughtful consideration.

David Fisher, past secretary of the UK Skeptics, goes so far as to call them "super" and "milksoop" skeptics, and suggests that the time has come for the two groups to separate. He finds the attitude of the milksoop skeptics too condescending and at variance with commonsense.

After decades, centuries, or millennia of failure to provide concrete evidence, why not pre-judge telepathy, homeopathy, and astrology, at least. Why give the miracle-mongers the benefit of the doubt? The dice are usually already weighted heavily in their favour by economic power, the bottomless gullibility of the general public, and a greater affinity with the media.¹

To a large extent I agree with David Fisher's point of view. Over the years I have become very dogmatic about issues such as crystal healing, tarot readings and the existence of ghosts. I find it very difficult not to ridicule these beliefs when I come across them. What worries me is

that I might begin ridiculing not just the beliefs but the people who hold them.

Some years ago, my son and a few of his friends formed an anti-religious group. It soon became evident to me that their discussions centred around the non-existence of God, and that members were spending all their energies attempting to disprove God's existence (which perhaps suggested that some doubts were held on the issue).

My response was, why not accept that the question of God's existence is not provable, assume that no God exists and look at the consequences of this assumption. To a large extent I feel the same way about many paranormal questions. I no longer wish to attempt to persuade people, for example, that tarot card reading is nonsense or that crystal healing is a sham.

Apathy or Irrelevance?

Most people don't talk much about their beliefs and certainly wouldn't join a group like Skeptics. It would be a mistake, though, to assume that such people are apathetic. In an editorial of the above-mentioned anti-religious group's newsletter, a comment that people would not talk about religion because they were apathetic on the subject resulted in a letter which stated:

Apathy, of course, is the wrong word. If a subject is too ridiculous to think about, we are not going to waste time on it, are we? How much time do you spend thinking about ... gremlins...?²

Far from being apathetic, it looks as though we have here a super-skeptic.

There are two main reasons why I do not hold steadfastly to the super-skeptic view. They arise from my chosen profession as a teacher.

Paranormal Teachers

In all the schools of which I have knowledge there are teachers who hold paranormal beliefs. Indeed, I would venture to say that such teachers are in the majority in virtually all schools. Further, I would say that in many schools there are teachers who hold extreme paranormal beliefs which must affect their teaching. In my own experience I have come across science teachers who have a strong predilection for pseudoscientific beliefs.

One head of a science department with whom I worked believed resolutely in the effectiveness of dowsing as a scientific method. This appears to be a common belief among teachers. He also believed that Uri Geller had the paranormal ability to bend spoons, repair watches, etc. As supporting "evidence" he told me that

after watching a Geller TV show he checked a broken watch in a drawer and found that it was ticking again. Another science teacher of my acquaintance dosed himself, his family and even his dog with herbal remedies whenever one of them felt "one degree under." When asked about dosage rates he implied that such rates were not important for natural remedies.

In addition, there are schools that have creationists on their science staff³ and there are many teachers of many subjects who believe in virgin birth and miracle cures.

Since skeptics, wet or dry, are in the minority and most people hold some level of paranormal belief, it is not surprising or particularly worrying, you may say, that teachers conform in this respect. I strongly disagree.

Teachers, particularly science teachers, holding strong paranormal beliefs are likely to be impaired in their ability to provide good teaching. Scientists propose theories that are the best explanations. Paranormal explanations are patently not the best explanations. Thus we need to be able to turn around teachers holding such views.

Ridiculing paranormal beliefs and, worse still, ridiculing the people who hold them is counter-productive in terms of modifying those beliefs. Subjected to such abuse, people tend to become entrenched in their views. The conciliatory approach of the wet skeptic is much more likely to effect a change in someone else's beliefs.⁴ At the very least we must get teachers to think

about their beliefs because of the influence they have on our children.

Which brings me to the reason I am not a super-skeptic. By the time students come to secondary school many are already dogmatic in their thinking. Couple this with the belief systems they already hold and there is cause for worry.

A Skeptical Survey

What beliefs do they have? I ran a preliminary survey across 100 secondary students, all boys, aged between 14 and 18, based on a Gallup national survey as described in *Skeptical Enquirer*.⁵

Perhaps no firm conclusions can be drawn from the results noted below — a

sample size of 100 is not very large. However, students' responses do suggest there is cause for concern. Many teachers feel that it is wrong to invade their pupils' areas of belief, but can we afford not to? If being wet facilitates good communication then I'm all for it. That way we might at least ensure there is a next generation of skeptics.

Russell Dear is a mathematics teacher in Invercargill.

1. Fisher, David. "The Case for Super-Skepticism", *The Skeptic*, V5.1. 2. Letter to the Editor, *Antitheists Newsletter*, V1.4. 3. Cooper, Roger et al. "Creationism in Wellington Schools", *New Zealand Skeptic*, No 18. 4. Woods, Ian. "Passing the Torch", *The Skeptic*, V5.3. 5. Gallup, George H. & Newport, Frank. "Belief in Paranormal Phenomena Among Adult Americans", *Skeptical Enquirer*, V15.2

Do You Believe In:	Yes (%)	Unsure (%)	No (%)
Telepathy	39	25	36
Spiritual Healing	27	12	61
The Devil	28	19	53
Buildings can be haunted	42	22	36
Extraterrestrials have visited Earth	40	21	39
The mind can precit the future	46	23	31
Astrology	14	27	59
Some form of life after death	42	21	37
Telekinesis	24	18	58
Witches	13	13	74
Poltergeists	34	24	42
Communication with spirits	27	25	48
Seeing the future in tea leaves, tarot cards, palms	10	11	79

Which of these do you consider brings bad luck?	Yes (%)
A black cat crossing your path	4
Walking under a ladder	13
Friday 13th	20
Breaking a mirror	18
Which of the following have you tried to either ward off bad luck or encourage good luck?	Yes (%)
Thrown salt over shoulder	11
Touched wood	10
Crossed fingers	62
Worn a charm	26
How often do you read your horoscope?	Yes (%)
At least once a week	20
Occasionally	60
Never	20
Do you think UFOs are real?	Yes (%)
Real	54
People's imagination	41

Absurdities of Creationism

Ruth Walker

Fundamentalists suffer contortions in trying to make their assumptions fit Biblical accounts.

One of the many reasons why I object to the proliferation of fundamentalist Christian schools is that they are committed to teaching creationism instead of science.

There are two sorts of mistakes involved in the general arguments put forward by creationists to support their alternative model of the world's origins.

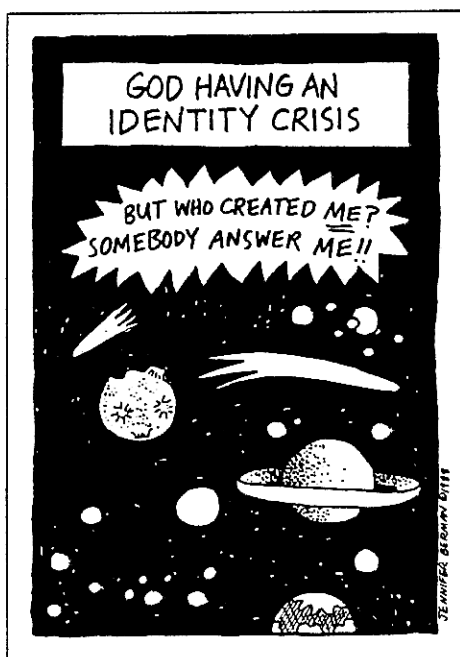
The first are errors of scholarship. Good Biblical scholarship actually dates documents and objectively works out who wrote what. The fundamentalists, however, see the Bible as literally true, a historic record from the time of creation. There is a tendency to prove that one part of the Bible must be true because another part says it is — an approach hardly consistent with sound historical research.

Lack of Scholarship

Their scholarship contains a credal bias where they say X must have written this in order for it to be true; it is true, so X must have written it. For example, did Moses write the five books of Moses? Most scholars point to the different documentary styles within the Pentateuch as suggesting they had different authors. According to Henry Morris, a leading creation scientist, it is not crucial that Bible-believing Christians accept that Moses wrote the five books attributed to him — all one has to accept is that he *edited* the five books.

Fine. In the fifth book (Deuteronomy 34:4) we find the account of Moses' death. But that's all right — Moses didn't write the account of his own death, he only edited it!

There are many examples like this. Fundamentalists are constantly in the predicament of having to explain



anomalies, contradictions and inconsistencies. It is a particularly unpleasant situation for them, as the moment they have to explain, they have to interpret and draw on information from outside the Bible. This fatally undermines their claim to take the Bible literally. Given the diverse and contradictory material in it, it is impossible to take all of it as literal truth. They must therefore be selective, and this is forbidden.

The second type of mistake is possibly a category mistake. The fundamentalists treat myth as science. According to them,

Genesis 1 is the literal account of the world's origins. In his *Scientific Creationism* (1974), Morris urges us to believe that the so-called first creation account was written by God himself, with his own finger. He has the grace to put finger in inverted commas, so he must be aware of the difficulties with literalising this.

The second account (Genesis 2:3 to 5:1) was written by Adam. The first account with the six-day story in it apparently could not have been written by Adam because he was not there to observe it.

Current Biblical scholarship accepts that the first account is the later version. The fundamentalist assumption that the books occur in the same order as they were written is false. So is the assumption that once they

were written they were not tampered with. The Jewish Scriptures were revised, edited, blended and adapted for centuries according to need.

"Science" and Creation

Returning to Genesis 1, we find that the proper creationist account is that it took six literal days to create the world. Morris says that on the first day the physical elements of the cosmos were energised. However, in the Bible it merely says that God said "Let there be light."

Similarly, for day two we have from Morris the forma-

tion of the atmosphere and hydrosphere. In the Bible it says that God created a dome to separate the waters from the waters. The dome was the sky. And so it goes on.

Morris has to interpret scripture in the light of modern scientific concepts. One of the reasons why he has to do this is because as far as the writer of Genesis 1 was concerned the earth was flat. He didn't know about spheres — and certainly not about atmospheres, hydrospheres, lithospheres and biospheres. If we have to interpret the Genesis account in some way to make it scientific at all, why not interpret it in evolutionary terms?

The fundamentalists are not going to accept this. If creationism has difficulties — and what mortal can fathom the mysteries of God — then so, they say, does theistic evolution. Morris provides a number of reasons why it is impossible to believe that evolution was God's creative mechanism. However, *caveat Christianus*. Some of the arguments also show why *creation* is impossible as God's creative mechanism.

For instance, evolution is said to be inconsistent with God's omnipotence. God is capable of creating the universe in an instant, and didn't have to stretch it out over aeons of time. Why then did he take six days? And why did he need to rest on the seventh?

A Mean God?

Evolution is also inconsistent with God's omniscience and his love. I put these together because the same question applies to them

both. If God created us literally in his own image then we know he has lower back problems. The human spine is not well designed for creatures who walk upright. Now, he created us with these before the Fall. It can't be a punishment because at that time there was no sin. So either he is omniscient and mean, or he made a mistake and we don't know if he loves us or not.

If God created us literally in his own image, then we know he has lower back problems.

The creation account is inevitably flawed. It is not scientific, it never was intended to be and it is grossly distorted by those determined to enforce a literalist interpretation of the Bible where it is neither possible nor necessary.

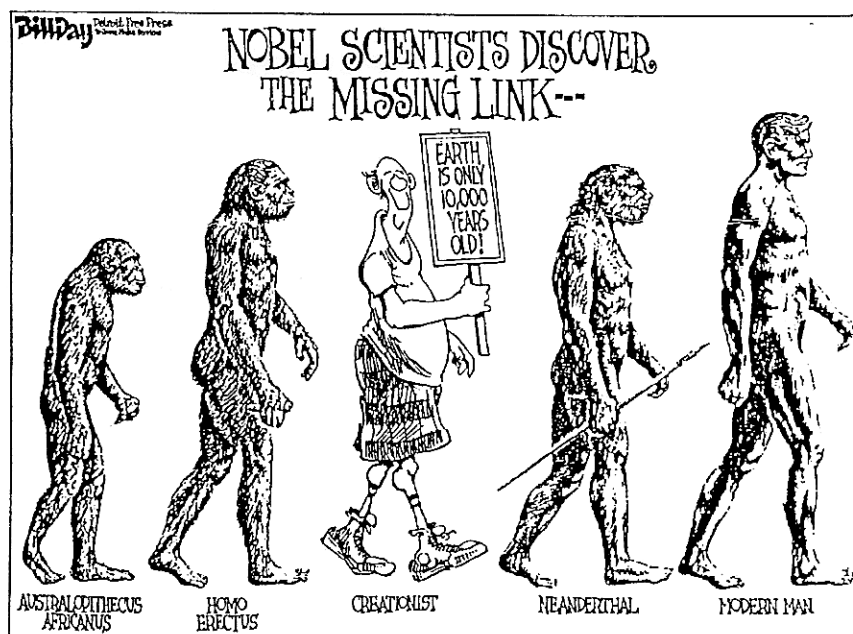
It could be argued that science can still proceed. All that happens is that evidence is interpreted differently depending on whether you are working in the evolutionary framework or the

creationist framework. The fundamentalists still do all the same things that secular scientists do.

There is one crucial difference though. When scientists find evidence that conflicts with their theories, the theories are modified to take account of it. This is, however, impossible in principle for the creationists. Science consists solely in discovering facts about God's creation. When evidence conflicts with the Biblical account of that creation it is the evidence that has to be discredited, not the theory.

This creationism is, however, the foundation of a Christian schooling. The most tolerant a fundamentalist can be is to teach evolution alongside creationism. Since much of what is imputed by the fundamentalists to evolution is allegedly anti-Christian, this is unlikely to be a balanced treatment. Even to raise the absurdity that is creationism to an equal footing with real science education is to cause a serious distortion.

Ruth Walker is a graduate student in philosophy at the University of Waikato.



Quackpots and Science

Bill Morris

A medical degree is not a shield against quackery, but better understanding of the scientific process may help doctors and their patients to better evaluate treatments.

I once had an old uncle who never referred to his doctor except as "The Quack." He was a thoughtful man, though much given to irony, and he explained to me that he did not mean by this that the doctor was fraudulent, but that he was an ignorant pretender to the possession of medical skills. He felt that most doctors he had met practised their art in profound ignorance about how provisional their knowledge was, accepting what they were taught without questioning it because they had not been provided with the intellectual apparatus to do otherwise.

In this sense we are most of us quacks, but we usually use the term with contempt rather than irony, to describe the particularly short-sighted or the true charlatan who has an eye more on the bank balance than on patients' wellbeing. Then there is the whole host of people without medical diplomas who for the most part believe in good faith that they benefit their fellows when the apparatus of conventional medicine has failed them.

We do not have to go all the way with Petr Skrabanek and agree that "the difference between a doctor and a quack lies not in the nature of their practice but in the possession of a diploma."¹ We should all feel however that there is an

uncomfortably large grain of truth in what he says.

A Christchurch practitioner once sent me some notes on EAV Homeopathic Treatment, with a request that I continue a patient's treatment while she was away from home. She had, I was told, "shown a generalised energetic disturbance...to 245-T preparation."

I was invited to give weekly intramuscular injections into acupuncture point Large Intestine 4 "using no smaller than 25 G needle (any smaller depotentises the remedy)." She was not to have any x-ray examinations as this precluded treatment, as did

any x-rays in the preceding six months. Some technical details were given of how the diagnosis was reached using a Dermatron machine.

I attempted to reproduce his measurements on my own skin using instruments of appropriate sensitivity and voltages of the order quoted and was unable to reproduce them.

"If the acupuncture point (and hence, by inference, the organ it represents) is healthy, and is displaying its normal electromotive force...approximately one volt, then it will withstand the applied power from the measurement stylus."²



"May I ask you, Miss Howre, what made you select a homeopathic attorney?"

Needless to say, I was not able to find an EMF of 1 volt anywhere on my skin, perhaps because my profound skepticism was affecting the instruments or because I was using the incorrect reference point for the voltage. This particular practitioner has many diplomas such as B. Med. Sci., MSc, as well as his medical qualifications.

An Auckland doctor uses a Vegatest machine to help her find possible allergies, toxic reactions, vitamin and mineral deficiencies and other disorders in her patients.³ The patient holds an electrode in one hand while the doctor completes the circuit by pressing a probe to an acupuncture point on the patient's toe. Glass vials are "individually placed in the metal honeycomb in the machine by *bringing them into the circuit*" (my emphasis). The doctor is apparently ready to believe that a drop in skin resistance shows possible patient sensitivity related to the substance in the vial.

It is quite easy to find similar instances of incredible, incomprehensible and incorrect statements or muddled understanding of what is rather elementary physics. They are generally made by doctors of undoubted sincerity and learning, but of almost incredible intellectual blindness.

Muddled Understanding

How can it be that obviously clever people can make absurd pronouncements? They may well say that I should try to keep an open mind and I reply that it is already so open that my brains are in danger of dropping out. They may say that anything is possible

and I will echo Milton Rothman and agree *provided that the physical world permits it.*

We tend to forget that most patients get better without treatment, and we are not good at predicting which ones. If a patient comes to me when others have failed to help, I experience a sense of foreboding but accept that others may regard it as a challenge. What a sense of achievement when you succeed!

Not many people who had just coughed up a few tablespoonsful of blood would make a beeline for a naturopath

Maybe this sense of achievement reinforces the belief that the patient has necessarily got better because of the treatment. It may be that doctors who are poor at tolerating uncertainty and who have difficulty in accepting the limitations of science-based medicine are particularly prone to this fallacy.

Drug firms know our weaknesses and for many decades have sent us cards with a box to tick opposite "Yes, I would like to evaluate Vitalcillin for myself. Please supply me with some samples." They know that most of us are prepared to believe that we actually can evaluate a drug when used in an uncontrolled way on a few patients.

When the patient has come to you as a last resort and is so grateful when they respond to your remedy/charisma/black box and when the experience is repeated a few times, is it not natural to believe that you have special powers and skills in diagnosis or treatment? It

is then very easy to reply to an enquirer, as I have heard myself, that you have no idea what goes on inside your Dermatron machine, but that the important thing is that it "works."

Homeopathy, naturopathy, iridology, colour therapy, Bach flower therapy and similar systems like acupuncture and cheiropraxis which are not quite so obviously on the fringe, appear to survive and even thrive as luxuries that have been permitted by the advances of modern scientific medicine.

Not many people who had just coughed up a few tablespoonsful of blood would make a beeline for a naturopath, but when there is little serious illness to fear, the fringe practitioner can be approached with relative safety. Few of us habitually think in a logical way and for the average patient, cure of the condition is sufficient proof that the treatment offered brought about the cure.

Demand for Nonscience

It is clear that there is a demand for nonscience medicine in New Zealand, as a glance at the yellow pages under "Acupuncturists" and "Natural Therapists" will show. There are five of each in the Palmerston North area alone and this does not include the medically qualified who practise nonscience medicine from time to time. Thirty percent in a recent study of Auckland doctors admitted to doing so, mainly acupuncture (71%) and manipulative therapies (24%), but with a substantial minority practising homeopathy (12%) and hypnotherapy (9%).⁴ A few had

even more bizarre practices such as moxibustion, vegatesting and metaphysical healing.

The West Auckland Health District entertained proposals to employ a "Complementary Health Practitioner to service the needs of a population who want the use of natural medicines recognised as a viable form of treatment." There is said to be "a growing recognition of the healing capacity and lack of side effects [sic] of traditional remedies," and a need to "integrate the use of natural medicines and therapies with modern medicine."⁵

A "fully qualified" naturopath will work one morning a week at Waitakere Hospital.⁶

In November 1987, an Access Training Scheme provided a four-week health skills course embracing homeopathy, reflexology, massage, herbal knowledge and stress management, run by a naturopath couple who operate a health clinic in New Plymouth.⁷ A spokeswoman, defending the worth of the course, said that New Plymouth had a wide range of alternative health services and job opportunities could open up. Criticism would come only "from a few rationalists doing their bun."

One such was Dr Peter Dady, an oncologist from Wellington, who saw it as encouraging people to feel legitimate about services they were offering in areas which depended on faith rather than evaluation.

During the 1987 NZ Skeptics Annual Conference he reported his personal knowledge of harm suffered

by patients seeking "alternative" care and was able to cite instances of patients delaying potentially curative treatment until too late. Others had their last days made miserable by being denied simple pleasures such as alcohol, while at least one unfortunate patient was administered enemata of freshly ground coffee.

How to Test

How can you test your favourite system of alternative medicine to see whether it is based in science? There are a number of points which distinguish science from non-science or parascience. Mario Bunge provides a formal and generally useful approach which at first appears formidable but is in fact a model of clarity.⁸ F. J. Gruenberger's paper⁹ is perhaps more light-hearted and should be easier to find in any good science library.

What a scientist does is

"They laughed at Galileo. You're laughing at me. I must be like Galileo."

publicly verifiable. "I did this and observed its effects. You are free to repeat my steps," as opposed to "Sorry, but I and my followers are the only ones who can obtain these results."

Science makes testable predictions which are non-trivial and which flow logically from a hypothesis while non-science fails utterly to do so. The scientist performs experiments which seek to confirm predictions.

If the predictions are confirmed, the hypothesis is

strengthened and may receive preference which is provisional. Non-science seeks to avoid experiment or invents ad hoc excuses as to why they fail to confirm theory. Occam's razor is wielded freely in science. The simplest explanation requiring the fewest hypotheses is given provisional preference over the more complex when investigating phenomena.

Fruitfulness is an important attribute of science, and means the ability to suggest new approaches and new tests of hypothesis. Authority does count in science. There are some pretty clever people around, and if they thoughtfully reject your hypothesis you had better think again. Authorities, though, can be wrong.

Scientists communicate with their peers in the same and related disciplines, both through journals of repute and what Ziman has called "invisible colleges"¹⁰ that provide criticism and stimulus. Try showing a copy of Ludwig's paper on Color Acupuncture Therapy¹¹ to a physicist and watch him fall off his chair with laughter.

Humility a Sign

Humility is an after-the-fact test which few parascientists meet, while the very fact that we forgive arrogant scientists shows that the test exists. The scientist is supposed to be open minded as opposed to dogmatic and arbitrary. The language of science tends to use phrases such as "It appears that..." or "It may be that..." whereas non-science has no such doubts.

Nonscience often has a compulsion with statistics in their rawest form, as countless anecdotes. It does not

Bill Morris is a Palmerston North medical practitioner and Skeptic.

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New Zealand Skeptic 13

Hokum Locum

Dr John Welch

Myocardial infarction (heart attack, coronary thrombosis) is commonly caused by a blood clot blocking one of the three coronary arteries supplying blood to the heart muscle. It is the commonest cause of death (4,000 p.a.) in New Zealand and other Western countries. Specialists have long wondered whether early administration of a fibrinolytic (blood clot dissolving drug) would reduce mortality.

At a recent conference in Atlanta, Georgia, Peter Sleight, professor of cardiovascular medicine at the University of Oxford, presented the results of the *ISIS-3*, the third international study of infarct survival. This study compared survival in 46,000 patients randomly assigned to one of three fibrinolytic agents: streptokinase, anistreplase, or tissue plasminogen activator (tPA).

The *ISIS-3* trial showed no difference in the survival rates between the three drugs. This caused a furore, as US cardiologists routinely use tPA despite it costing ten times as much as the 30-year-old streptokinase and the absence of any clinical trials demonstrating any lasting superiority over streptokinase.

One of the expected side effects of fibrinolytic drugs is bleeding, in particular cerebral bleeds (brain haemorrhage, stroke). tPA was found to cause sig-

nificantly more strokes than streptokinase.

Some of the audience perceived the results as being an attack on the American way of life, and one doctor questioned the relevance of the results to American practice. It later transpired that he held stock options in the company manufacturing tPA.

Professor Sleight responded by "appearing at the lectern without his shoes and socks and explained that he was a visiting European 'barefoot doctor'". This article ("The Battle Of The Clotbusters") is well worth reading and appeared in the *British Medical Journal* Vol 302:1259-61.

ME Homeopathy

In *Skeptic* #19, I briefly reviewed the subject of chronic fatigue syndrome (CFS) or ME (myalgic encephalomyelitis). I was therefore interested to read an article in the *Christchurch Press* 19/10/91 with the heading "Study: anti-virus drug relieves 'yuppie flu'". The experimental drug, Ampligen, was given by injection to 92 patients, half of whom were given placebo. "As a result of Ampligen therapy, the typical patient went from needing help most of the time to only needing help now and then for sustained tasks, such as cutting the grass," said a Dr Carter.

The findings were presented at a meeting of the American Society for Microbiology, a curious forum considering that CFS

has no proven link with any infection. What is more curious is that Dr Carter is from the **Hahnemann** University. Skeptical readers will connect the name Hahnemann with homeopathy and all instantly becomes clear. Odds on, Ampligen is a homeopathic remedy. The fact that patients showed a marked improvement with it when treated in a double blind trial only serves to prove that the trial was anything but double blind, since homeopathic remedies, containing nothing active, are physically incapable of producing any effect, apart from placebo.

This study was also referred to in the *NZ Doctor* 21 Oct 91 but, to the best of my knowledge, I am the first to make the connection with homeopathy. Watch this space for future developments with respect to "Ampligen", or as I call it, "Falsigen."

Reading Glasses

Denis Dutton has kindly sent copies of the US National Council Against Health Fraud (NCAHF), which contained an assessment of a new technique to overcome dyslexia. This was most helpful when I found an article in the *Christchurch Press* 30/8/91 extolling the virtues of "tinted lenses as a remedy for dyslexia and reading difficulties caused by visual problems." They were being promoted here by Dr Peter O'Connor, an educational psychologist.

O'Connor was quoted as saying "the method appeared to help about 50% of people with reading disorders." Fifty percent improvement is about what I would expect from the placebo effect, and do note the vague statement "appeared to help." A local optometrist and psychologist has been selected to establish a South Island clinic.

These tinted lenses were developed by a US marriage guidance counsellor called Helen Irlen. They are being promoted by "Screeners," charging up to US\$60 for their services. The total cost of diagnosis and treatment is approximately US\$600, with yearly follow-up. A computerized search of the scientific literature failed to find any references in support of this quack treatment which, like all quack remedies, depends on its promotion by unsupported testimonials and uncritical media reporting.

A professor of optometry concluded: "The use of coloured lenses is no more effective than a placebo and no beneficial effects persist over time."

World Weirdies

Those readers planning to visit the US state of Colorado should take care when passing derogatory remarks about fruit and vegetables in that state. The Disparagement of Perishable Food Products Bill gives producers the legal right to sue anybody making un-

founded remarks about food. As one senator said "It makes us look like a bunch of dorks." Reference: *Ariadne New Scientist* 18 May 1991

Readers will remember the woman who gave birth to a fish (*Skeptic* #19). From Bangladesh (*Dominion* 19/11/91) comes the story of a 13-year-old girl, Rahima, who had a spontaneous sex change during the evening of October 23rd. Doctors — obviously not skeptics — checked Rahima, now renamed Rahman, and told her parents that "he is a strong, healthy and normal boy." They could not give any reason for the transformation. My astrologer tells me that Taurus excreta was ascendant so that would explain everything.

Glasnost has lead to increased reporting from the USSR. The Russians have

found a new reason to continue their already heavy consumption of alcohol. Vodka exposed to "magnetic rays" will destroy cancer cells. Keen drinkers will be disappointed that only small doses are necessary but this will no doubt impress homeopaths.

In the diagnostic area, a Moscow woman developed x-ray vision after an electric shock. I am unsure as to whether it is an advantage to "detect what people had for lunch" but doctors — obviously not skeptics — had tested her ability and pronounced it genuine. Experiments are progressing involving the administration of electric shocks to felines in an attempt to develop a true CAT scanner.

Dr John Welch is a medical officer with the RNZAF.



Court hears saga of baby's death, homeopathy belief

9/11/91 CUCK STAR

WELLINGTON (PA) — The death of a 5-month-old baby had uncovered an appalling picture of a parent's belief in homeopathic medicine, a coroner said.

Coroner Erica Kremic said the girl's death was caused by brain swelling secondary to meningitis and associated with a spinal haemorrhage in Wellington Public Hospital on May 8, 1990.

The names of the parents and the baby were suppressed.

Police inquiries found that on April 10 last year, the child's mother, a registered nurse, took her to a general practitioner as a casual patient. She told the doctor the baby had developed a cough a week earlier and had a discharge from both ears. She said she believed in homeopathic medicine.

The doctor prescribed antibiotic medicine and ear-drops for the child's ear infection and swabs were taken for analysis. The doctor asked for the mother's permission to contact her usual general practitioner, but she insisted against it.

Police found that the mother apparently did not administer the prescription to the baby but, instead, consulted an amateur homeopath in Lower Hutt on either April 15 or 16, telling him the child had an infection in both ears.

Dangerous

The homeopath told police he did not examine or treat the child because the mother indicated she was treating the infection herself. He considered the treatment she gave to be rather dangerous given that the baby was being fully breast-fed.

He told police the mother brought the baby to him again on April 25 and he was very concerned about the child's health, particularly its arched back and general listlessness.

The mother commented to him that the symptoms looked like those of meningitis, he said. He did not offer any advice about seeking conventional medical assistance.

On April 27, about 5pm, the mother took the baby to her regular general practitioner, who saw immediately that the baby was gravely ill and insisted she be taken to hospital.

The doctor told police it took some time to convince the mother of the need for hospitalisation

and she turned down the use of an ambulance to transport her daughter, saying she had her own car.

At 8pm, the mother arrived at the accident and emergency department of Wellington Hospital and the consultant paediatrician, Thorston Stanley, was contacted immediately.

Mrs Kremic said Dr Stanley's statement to the court conveyed a great sense of frustration in dealing with the mother, who opposed him every step of the way.

The mother told Dr Stanley she was the opposition and she did not agree to the treatment he proposed till she was threatened with restraining action, Mrs Kremic said.

When first examined, the baby's condition caused Dr Stanley to fear the baby would be permanently disabled mentally and physically, she said.

Dr Stanley said the child's condition continued to deteriorate despite intensive treatment, and she died on May 8.

A post-mortem of the child found her death was caused by severe anoxic brain damage after bacterial meningitis caused by haemophilus influenza. A terminal haemorrhage over the child's spinal cord and brain stem, apparently the result of a lumbar puncture made shortly before death, was also found.

Because the pathologist could not state with certainty that the death was directly attributable to the parents' neglect in providing the necessities of life (antibiotic treatment), police did not lay any charges in connection with the death.

9/11/91 CUCK STAR

Girl died after insulin stopped

WELLINGTON (PA) — Kremic said in the coroner's court here.

A diabetic girl died in Wellington Hospital after Mrs Kremic said the seven-year-old girl died in the intensive care unit of Wellington Hospital on June 28 last year of brain swelling secondary to diabetic ketoacidosis.

The girl's family belonged to the Petone Christian Fellowship. Fellowship leader Brenton Williams prayed over the girl on Sunday June 10, saying God told him the girl would be healed if he prayed over her.

healer, coroner Erica

Lee backs Bible prophecy

The Minister of Civil Defence, Mr Lee, believes that the Bible, written almost 2000 years ago, predicted the increasing prevalence of earthquakes today.

His comments came as he commended the Elim Church's leadership in civil defence preparations.

"I am well aware that some of the original motivation of the Elim Church came from prophecies by visiting preachers. One leader from the United Kingdom, the Rev Gerald Coates,

prophesied an earthquake within two years, centred on Taupo."

Irrespective of people's attitudes towards prophecies, "the Bible certainly speaks very clearly about the increasing prevalence of earthquakes," Mr Lee said.

"There is certainly no argument that this is happening around the world."

New Zealand experienced 10,000 small earthquakes each year, indicating that a large quake could happen at any time.

THE PRESS 28/11/91

Auckland doctor struck off

PA Wellington
An Auckland doctor has been struck off the medical register for "disgraceful conduct", the Medical Council said yesterday.

Dr Matthew Holder Tizard, a registered medical practitioner who also practised alternative medical theories, allowed "grave and at times life-threatening deterioration" in the health of seven patients, the council said.

Five charges were laid against Dr Tizard by a council committee after the patients had complained of deficient diagnosis and treatment. On four charges, Dr Tizard was found guilty of professional misconduct.

"He did not attempt to use orthodox methods of differential diagnosis, although he knew that at least six of the complainants had had a previous diagnosis of a significant medical condition, and he had discontinued their orthodox medication," the council said.

It said the hearing had not been an inquiry into the use of alternative methods such as homoeopathy, acupuncture, nor treatments for pesticide toxicity.

"However, we do not believe that a registered medical practitioner can rely solely on these methods in the face of life-threatening deterioration in a complainant's condition," the council said.

PA Tauranga
Many Bay of Plenty people owed their lives to an Auckland doctor who was struck off the medical register last week, a Tauranga Toxins Action Group spokesman said yesterday.

A Medical Council tribunal hearing on Friday found Matt Tizard, a doctor who uses alternative treatments such as homeopathy, guilty of endangering the lives of several patients by failing to use conventional methods.

However, Mr Gary Barham said chemical sensitivity sufferers would be disappointed.

"It will certainly be a blow to those suffering from chemical sensitivity," he said. "There is really no-one to turn to now."

Mr Barham said the medical council was against people seeking alternative treatments, but Dr Tizard offered those as well as orthodox methods.

Most practitioners of alternative medicine had no formal medical qualifications, he said.

"From our experience his treatment is the only way for people to get on top of chemical sensitivity," he said. "For hundreds of Bay of Plenty patients it took Matt Tizard's particular form of treatment to overcome their main illness and get most of the toxins out of their systems."

Book Review

Nostradamus: The End of the Millennium, 1992-2000, by V. J. Hewitt & P. Lorie; Bloomsbury Press, 1991; \$49.95

Reviewed by Bernard Howard

The arcane writings of Nostradamus have been a happy hunting ground for crackpots for many years. This is the latest, but not the last book on the meaning of it all.

These authors have applied numerology to uncover the "true" meaning of the mysterious verses, and, if their claims are true, we see that the "powers" of this great seer were even greater than had been thought. He could foresee events not only four centuries ahead in time, but on the other side of the world from his native France, in lands unknown to his contemporaries.

According to the Hewitt & Lorie interpretation, Australian Aborigines and New Zealand Maori will have their land rights disputes settled during this decade. The writings also indicate just where the Maori will be granted a tract of land of their own (a tribal reservation?) on about 7 August, 1996. The numbers suggest that this land lies around 45°S latitude, 170°E longitude. Do the present inhabitants of Ranfurly, Wedderburn and Naseby know about this?

Furthermore, Nostradamus is said by his "translators" to describe the Maori as "pacifiques," not only because of their home in the Pacific Ocean, but because also they have a peaceable nature, by contrast with the warlike Australian Aborigines....

Typist's note: The spell checker in Word Perfect doesn't do a double-take on "Nostradamus" — things are getting ridiculous when his name starts counting as a common word!



Nostradamus foresees Diet Coke

Forum

James Randi is being pursued by Uri Geller in the US courts, to gag his outspoken comments on the "paranormal" performer. The cost of Randi's defence is frightening, and NZ Skeptics were quick to contribute to his defence fund.

Our gift came from individual members, an AGM-approved grant from NZCSICOP's general funds, and the proceeds of a firewalk in Christchurch, organised by John Campbell and Denis Dutton. We sent NZ\$830 to James Randi in Florida.

Bernard Howard

Randi's Thanks

Please express my deep gratitude to the New Zealand Skeptics, to the individual members of NZCSICOP, and to those who trod the embers to raise contributions to my legal fund. In particular, my thanks to Drs. Campbell and Dutton.

I must tell you that the James Randi Fund has received contributions from every corner of the globe, not only from skeptical groups but from major individuals in the academic world and from various scientific groups as well. I believe the recognised fact is that if Geller and his ilk are able to silence one high-profile individual by bringing legal action that may be designed to financially cripple, they can similarly affect other persons and organisations.

Rest assured that we are now in a position to win this case definitively. The judge has ruled that Mr. Geller must prove his divine powers under deposition, and you may share my belief that he

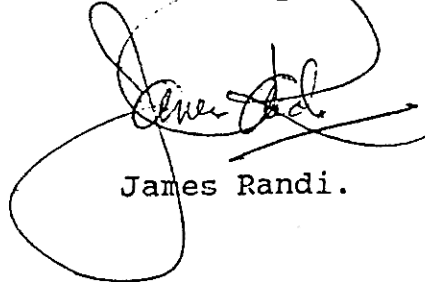
will find that somewhat difficult.

At one time, this was my battle. At this point in time, it is our battle. We will win, not only this battle, but the war. Count on it.

Look for reports on the matter and editorials in scientific journals. There is much concern for the "freedom of speech" issue at stake here, another reason why it seems evident that Geller and his sycophants have bitten off much more of this tough old curmudgeon than they can ever hope to swallow. Their efforts to cuddle up to my allies and persuade them of my contemptible character and background have been summarily rejected and reported to me immediately. No doubt to his great surprise, Mr. Geller has discovered that there is a strong and united front in the academic/skeptical community that will no longer ignore him and his pretensions.

Again, my thanks to you all. Your support is encouraging indeed.

Sincerely,



James Randi.

Skepticism On IQs

Shame on you, Denis Dutton. Here you are, the editor of New Zealand's leading skeptic magazine, indulging in as good a piece of pseudoscience as I've ever seen — and going national too. Tut! Tut!

I refer to "News Front" (*Skeptic* #20). In "Skeptics Rubbish Ghostbusting," you are quoted as saying "It's our understanding that the participants in this scheme would require IQs of at least 150". IQs? What are IQs? Current thinking places IQs alongside auras, surely.

The concept of IQ dates back to early this century, when the US Department of Education commissioned Alfred Binet to develop techniques to identify children in need of special education. Binet devised a series of tests based on a range of activities in the hope of being able to allocate a general measure of children's potential in the form of a single number or score. German psychologist W. Stern devised what is known today as the IQ, based on dividing Binet's score, which was assumed to be a measure of mental age, by chronological age.

Binet was always at great pains to declare that intelligence is too complex to describe by a single number. He stated that IQ is not a measure of intelligence because intellectual qualities are not superposable.

Unfortunately, the damage was done. A variety of institutions, such as the US Army and the Immigration Service, had found a tool, albeit a spurious one, for grading people into desirable and not so desirable groups. Most of us are aware of the injustices wrought by this allocation of a score to measure intellectual potential. The subject is covered in detail in Stephen

Jay Gould's book *The Mis-measure of Man*.

As an afterthought, my children at various times have been members of Mensa both here and overseas. I make no apologies for their adolescent explorations (Mensa is a club for those with high IQs). Rarely have I met such a weird selection of beliefs as manifested by articles in Mensa magazines. Mensa members believe in all sorts of paranormal phenomena, from ESP to dowsing. It is as I thought, IQ — whatever it is — and intelligence are unrelated.

Russell Dear

Ig Nobel Prizes

All know of Alfred Nobel, who left his fortune to endow the world's highest awards for scientific research.

Few, however, will have heard of Alfred's brother, Ignatius. To honour him, and to rescue his name from undeserved obscurity, a group of distinguished American scientists has selected 10 researchers for its first round of Ig Nobel Prize awards.

The complete list will be found in that leading scientific periodical, the *Journal of Irreproducible Results*. Here, we note only the chemistry prize, awarded to Jacques Benveniste, for "the persistent discovery that H₂O is an intelligent liquid."

Bernard Howard

Tasty Swastika

The person who used the term "bad taste" concerning the New Age symbol (*Skeptic* #20) is obviously offended by the association of the swastika with a certain popular movement initiated by a Mr Hitler back in '28. I suggest that that

person never takes a holiday in Bali, where the crooked cross is all too common.

The truth of the matter is, of course, that the swastika is a very ancient religious symbol, predating Hitler's brown-shirted fan club by millennia. It is not to the discredit of Hindus and Buddhists that the symbol was hijacked, and I would regard it as being in "bad taste" to refer to its continuing use as a religious symbol as "bad taste"!

Barend Vlaardingerbroek



The Sanskrit svastika means "conducive to well-being", and indeed the symbol is found not only in India (modern and ancient), but on Greek coins, Celtic monuments and Navajo rugs. In the Orient, it is the counterclockwise version that we see; the Nazis adopted the clockwise version as their emblem.

There is nothing in intrinsically bad taste about the symbol used in a Buddhist or Hindu temple. But for a European New Age guru to superimpose the Nazi version on a Star of David requires astonishing insensitivity. (DD)

Green Skepticism

The *Skeptic* is on target with its criticisms of the *Listener*. Its "terminal gullibility" though is by no means confined to alternative medicines. Articles in their pages dealing with the environment and, in particular, pertaining to nuclear energy and

global warming, often show the same anti-scientific bias.

The *Listener* is by no means alone. "We have to offer up scary scenarios," says Stephen Schneider, a prominent US environmentalist, "make simplified dramatic statements, and make little mention of any doubt we may have. We have to decide what the right balance is between being effective and being honest."

Thus science and logic seem to be the losers in the Green debate, with emotional and political argument taking precedence over scientific fact. I, for one, would be extremely interested to see contributors in the *Skeptic* regarding these vital issues.

Mike Houlding

Over the Edge

When Mr Justice Mahon was conducting his enquiry into the Mount Erebus disaster, in which an Air New Zealand sightseeing plane crashed into the Antarctic mountain, he received a letter telling him that the accident had happened because the maps used by the pilot were wrong.

The correspondent claimed that the world is flat and that the Antarctic lies around the edge — all that ice stops the water falling off. Mr Mahon's reply to the flat-earth believer is a gem of legal put-down:

I acknowledge receipt of your lengthy memorandum. Unfortunately, my terms of reference, as gazetted under the hand of the Governor General, are founded on the thesis that the world is round. I am therefore precluded from considering any other possibility.

Bernard Howard

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**New Year's resolution: to write an
article for the *Skeptic***

Changing Your Address?

We don't want to lose touch with members. Please tell us if you are going to move. It is depressing when our mail to you is returned marked "Gone away, no address."

New Zealand Committee for the Scientific Investigation of Claims of the Paranormal (Inc.)

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