

The Global Messenger Hoax & the Misinformation Economy

Professor Sir John Scott

At last year's conference, John Scott spoke on the problems of mixing misinformation and medicine.

Early in my medical career I became aware of the enormous distorting forces which operate upon science in the real world. In my field the forces were those of Quaker Oats, Kellogg, Sanitarium, the diary industry, the AMA, elements within the cardiology camp, and the tobacco giants. I became an interested observer of some enormous investments in dubious research projects, many of which could only be termed con-jobs. More particularly, I realised that we scientists were very human creatures.

Together with many of my colleagues I plodded along trying to inculcate into oncoming generations of medical students a genuine understanding of scientific principles and methods. To be frank, my generation of

teachers has failed, certainly as far as the bulk of medical graduates is concerned. Events over the past year in England, Europe and New Zealand have rammed that point home, often in painful

ways, as far as I am concerned.

I do not wish to be seen to disparage many of the achievements of scientific and technological medicine over the past thirty to forty years. They have been massive. However, other huge investments in the healthdisease industry deserved to be challenged and remain in that situation.

The central message so far is not news to this society. Bill Morris gave a paper at the Palmerston North meeting challenging much of the classical diet-coronary heart disease hypothesis. $\Rightarrow p3$

His voice was about

CONTENTS

The Global Messnger Hoax		
and the Misinformation Economy	John Scott	1
Editorial		2
That Was the Decade That Wasn't		7
Psychic Training for US Welfare Recipients		8
Counselling may harm crash victims		9
Newsfront		10
Beer and Skittles	John Riddell	12
The Darwin (Which?) Project	Lloyd Fricker	14
Eileen Bone	Hugh Young	16
Reviews		17
Forum		18

Autumn 2000 Number 55 New Zealand Skeptic 1

Fear and Loathing in Tuatapere

THAT was never six months just then — it felt much longer. Banished to the depths of New Zealand, in Tuatapere (almost as far south west as you can get in the South Island), life took on a gentler pace. Momentous things did happen — the stoat population declined by 300 around where we were, and the vellowheads had a sucessful breeding season.

This, of course, was the reason for being in Tuatapere, town of instant coffee and swedes. David landed a contract with DoC monitoring and generally keeping an eye on the little native bush canary, which is highly vulnerable to predation. Rarer than 100 dollar notes they are, and as they prefer to hang out on the tops of mighty beech trees, they're tricky to keep an eye on.

While things were quiet in Tuataps (lulled to sleep by the roaring of stags in the paddock next door), events, of course, developed in the outside world.

The new millennium came and went without so much as a whimper. Our nine-year-old daughter Iris rather enjoyed the cockroach ads that were run well before the event, at a cost I hate to think about. Entertaining but on the redundant side perhaps.

After the non-event, folk from the Y2K Readiness Commission were heard to say there were no problems because of all the preparation work but what of all those countries where zilch was spent with the same result. The world was also gratifyingly free of doomsday cult hysteria over the period, although recent events in Uganda have somewhat blotted the global copybook.

Then came the release of Peter Ellis, the victim of the Christchurch Creche fiasco. The NZ Skeptic predicted a year or so before it all flared up that this country would experience a similar accusation to those plaguing the northern hemisphere — modern day witch hunts with all the fervour and hysteria of the Middle Ages. It is sad for Peter that we were right on this one; eight years gone out of his life.

Then there's Liam, where things have developed, tragically, as we all expected they would.

Basically, things stumble along much as they always have and always will.

After spending so much time involved in threatened species work, it was interesting to hear recently about work on immunocontraception, which has now reached the stage of field trials with genetically modifed carrots. These contain a protein which hopefully fools female possums into believing they're already pregnant.

It could be a very effective, environmentally safe means of pest control which would mean wonderful times for birds like the vellowhead and parakeets. However, the recent public reaction against genetic experiments bodes badly for the future, and at the very least guarantees the process will not be a straightforward one.

We will have to wait and see. It's ironic that the environmental movement may stand in the way of a technology which could be of huge benefit to the New Zealand environment.

Anyway, we're on our way home now and will probably be there by the time this hits letterboxes. Speaking of which, be sure to send those dynamic, pithy contributions to Gordonton, and not Tuatapere.

Annette Taylor, Editor

Contributions

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Deadline for next issue: 30 February 2000

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as lonely as mine at that time. Science ultimately makes advances by gaining improved understanding of mechanisms. There is nothing wrong in doing one's best with available knowledge until one obtains comprehensive understanding of a particular situation.

Coronary artery disease and arterial disease generally present very complicated problems. Fortunately and unfortunately, in an exquisite paradox, arterial disease is a very general phenomenon and becoming more so as countries become steadily more affluent.

There is enough knowledge to make a reasonably firm statement of dogma, that the causation is multifactorial and represents an interplay between environment and one's genetic endowment. This statement doesn't help a great deal about developing techniques for elucidating mechanisms. It does, however, provide

wonderful protection for less competent scientists and technologists, and certainly, for industry generally.

New Technology

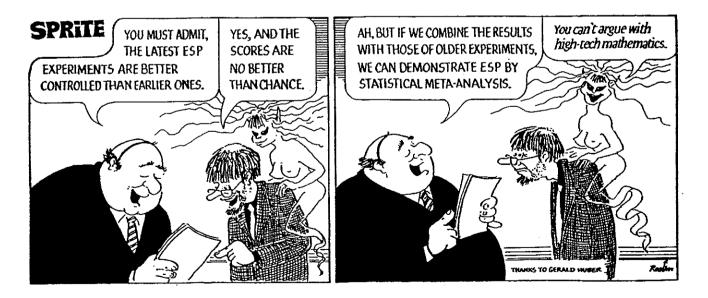
The cholesterol-saturated fat-diet-arterial disease hypothesis really took off when the 19th century concepts concerning the potential of computers were made possible through the development of transistors and printed circuits. In turn, epidemiology was provided with a tool it had needed. The autoanalyser had also been invented and thus mass biochemistry was now possible.

What amounts to an industry with a turnover through the decades of trillions of dollars was really set alight by a gentleman called Ancel Keys. He undertook studies in Europe linking what amounted to death certification and some relatively crude morbidity data with the local diet and estimates of cholesterol levels.

Here we get into what I term the "global messenger hoax". On a simple arithmetical biaxial plot, Ancel Keys' data, from his various countries, was the traditional dog's breakfast. Subsequently one of his senior technicians, who was extremely troubled by what happened, published the truth.

In turn the technician's article was immediately suppressed pretty effectively by the scientific juggernaut which had developed around this particular health-disease industry. Ancel Keys had selected a series of points which produced a straight line on a semilogarithmic plot or a gentle smooth curve on semilogarithmic axes.

I was aware of this at the time, but didn't get very far in quoting it, although, to his credit, the later Sir Edward Sayers accepted that Ancel Keys had at least been naughty. However, eventu-



ally a very prominent American nutritionist and professor of medicine, Dr Feinstein, published the original material plus Ancel Keys' simplified extrapolated data which had set the whole bandwagon rolling. Feinstein came into the scene too late. He was too big a Don Quixote to be rubbished, so he was therefore largely ignored.einstein came into the scene too late.

Now there is nothing particularly unusual about all that. As is eminently predictable, history is catching up with the epidemiologists who have continually reinvented the Ancel Keys wheel.

We live in an age of misinformation. Politicians seem oblivious to that as they play gleefully with the bubbly toy of the knowledge society concept.

Basic scientists, particularly anatomists, pathologists and immunologists, with their analysers and biochemistry, have begun to get at the common pathways upon which genetics and a complex environment interact to produce arterial disease. The gross simplifications have been exposed. Interestingly, however, the process continues of twisting results of recent research to fit the theory at each stage of the wheel reincarnation.

Alternative Interpretation

Most of you will know about the statin drugs which are very powerful reducers of cholesterol levels. Probably a majority of my colleagues believe that the advent of these drugs and their testing on a massive scale by people, including me, has vindicated the cholesterol hypothesis.

However, it might interest you to know that Brown and Goldstein, now working in Southwestern University of Texas, have a huge group of scientists and technologists exploring alternative interpretations.

If it was possible for physicians and epidemiologists to remove their dogma-spattered spectacles, they would see what is obvious from most of the large statin trials, particularly the much hailed 4S or Simvastatin study. The

effects of morbidity and mortality were proportionally just as great for the group at the bottom end of the scale of cholesterol elevation as they were for the top end.

If one thinks that through carefully and reanalyses the evidence, something else is going on than mere lowering of cholesterol and low density lipoprotein. There is no real surprise in that, when one looks at the nature of the intervention in the cholesterol synthesis pathway, and links that to the ubiquity of cholesterol as an essential structure which holds many biologically important molecules in a particular spatial pattern.

Cholesterol is involved in many biochemical processes and synthetic pathways. The statin drugs do many more things than just lower elevated cholesterol. But the message proclaiming the dogma is out there, and the messengers are not going to change their message in a hurry without carefully considering the shareholders' interests. After all, the drugs do have a demonstrable effect and are eminently marketable even on the basis of partial evidence.

That brings us up against the real problem and my choice for the title of this talk. We live in an age of misinformation. Politicians seem oblivious to that as they play gleefully with the bubbly toy of the knowledge society concept.

Political games not withstanding, we are all in on this mass-deception exercise. When I thought about applying to the then Mr, now Sir Douglas Graham for legal aid to support the Skeptics in a crusade against the pervading partial truths and cunning deceptions, I realised that he probably would remove his pipe temporarily and mumble something about the stability of societal constructs and the impoverishment of lawyers generally.

When more recently I wondered about approaching the Hon Tony Ryall, I realised that I might receive a lecture on fundamentalist thinking. He might use the biblical quote, "You who are not for us are against us." Moreover, if I took my protests elsewhere I would be rapidly caught up with various religion-based aphorisms. You seek to be a prophet in your own country, haven't you read the bible?

Shooting the Messenger?

These musings sent me off on another trial as the green-lipped mussel saga developed. I happen to know a lot about these tasty beasties, because work on them was undertaken in the Department of Medicine in Auckland during the time that Derek North and I were HODs.

Once again, it's the messenger business that interests me. I happen to believe that Susan Wood is a more astute and intelligent anchor than Holmes, allowing for gender-bending bias. However, it rankled me that she and the editor of the New Zealand Herald both came out with the all-innocent line — "Why attack me, I'm only the messenger", to paraphrase things. A spokesperson for the Ministry of Health understood that he was being snowed by Susan Wood but didn't quite get his counter-attack launched correctly. The Herald seems to have got away with it more or less completely.

However, there is a huge message within that message. The media are not just the messengers. They are an integral part of the process of the misinformation economy. New Zealand is, for at least half its population, a comfortable consumer society, seemingly happy to buy more than it can afford. The United States is going the same way as evidenced by this month's trade deficit.

If we analyse that situation further, it becomes pretty obvious that what might be termed scientific truth, in itself certainly not an absolute or a constant quality, is now a debased commodity. The concept of quality of information which members of the Skeptics believe to be an essential prerequisite for intelligent human advancement, is held in contempt by key players in the global economy.

Evidence of Efficacy

It is all very well for the Medical Council of New Zealand to pronounce that there is no difference between orthodox and traditional or nonorthodox therapies, their common attribute being that any claims they make shall be based upon evidence of efficacy.

That sounds fine but it flies in the face of reality. Unfortunately, the failure of people like me as medical educators receives poignant testimony from the increasing use of acupuncture, homeopathy and so forth, by so many of our graduates.

Moreover, the status of a critic of these mixed practice habits is weakened by the continuing paucity of sound justification for many so-called orthodox practices. However, thanks to the financial seduction of the messengers, downgrading of science is now a fashionable global activity.

Occasionally I tune in before the 6pm TV1 news and there is the lady representing Blackmores coaxing me into upsetting my gastrointestinal system with slippery elm and to exposing my nervous and renal systems to potential chaos as I ingest mixtures of herbs, some of which contain quite toxic compounds.

I have carefully avoided quoting from the genetic engineering debate but you all know that I am heavily involved in that as president of the Royal Society and in defending science and technology. In particular that society is trying to ensure that information across the spectrum of opinion is made available to the New Zealand public.

We have done a bad job in this, because we failed to estimate the strength, political nouse, and financial capacity of the opposition, that is, of the anti-biotechnology antigenetic engineering lobbyists, particularly in Europe, England and now New Zealand.

Is this little diatribe of any relevance? I believe there are two important aspects to the great global messenger hoax and the misinformation economy. A lot of harm is being done to people who are not in a position to understand what is happening.

As soon as I make such a statement, I am immediately assailed by the various groups which benefit financially, or in terms of personal status and so forth, because I am becoming paternalistic in a traditional manner and seeking to impose my restrictions on their freedom of choice. However, let's take that a wee bit further.

To me it is heartening to see Sandra Coney and Robyn Stent opposing one another publicly over the issue of patients' rights in relation to Lyprinol. I further applaud Dr Pippa MacKay in joining the fray in the New Zealand Herald. I suspect that newspaper does feel guilty about its part in the \$2 million one-day killing, but that guilt won't last for long. Why then are these issues important?

Vaccination Alarms

In 1998 reports began to circulate that measles, mumps and rubella (MMR) vaccination might cause autism, possibly through a mechanisim involving changes in bowel function.

There were immediate notes of caution sounded but they were largely ignored. It was pointed out that the reported cases might have been due to what is termed coincidence. temporal There was certainly no convincing laboratory evidence for the contention. A specially convened United Kingdom Medical Research Council committee found the so-called clinical evidence unconvincing.

However, the media messengers got into gear and there was a definite drop in acceptance of MMR vaccination in the United Kingdom. That has spilled over into New Zealand and added fuel to the anti-vaccination campaign here.

This is what I mean by people being harmed by what I have termed the global hoax of purveying partial or pseudo scientific information, to gain readership or viewing numbers for the profit of the moment or for political advantage. Infants and children are in no position to give informed consent, their parents are well placed to be misled.

Information Ignored

I use this particular example because the press internationally ignored information available at the time of the initial sensational reports, which indicated that the measles virus was not the

mechanism for the observed cases of inflammatory bowel disease (IBD). There was thus selective reporting for purposes of gaining sensation.

I believe that in June 1999 The Lancet laid the matter to rest with the advent of further information. The Lancet also says in its edition of June 12, page 1988 that:

Will the scientifically sound and essentially 'negative' results published this week garner the same media and public attention as the initial report of the MMR-autism hypothesis? It is unlikely, as evidenced by the renewed media frenzy last week in response to another report by the group that proposed the hypothesis. This report was of an increased risk of inflammatory bowel disease among individuals who had naturally acquired measles and mumps within one year of each other. The study had no data on MMR vaccine and the investigators specifically stated that they did not find a significant relation between monovalent measles vaccination alone and later IBD. Yet the popular media trumpeted the study as providing evidence that MMR vaccination may cause IBD. In such an environment it is critical to strengthen vaccine safety monitoring systems and riskcommunication strategies to maintain public confidence in immunisation.

Lancet Editorial Comment, by F De Stefano and RT Chen, 1999, Vol 353, pp 1987-1988987-1988

Thus I believe the first important aspect of all this is that the misinformation dis-

tribution process can be harmful.

The second important aspect relates to what the whole process tells us about ourselves as a collective society. In a New Zealand which is seemingly increasingly non-numerate to an effective degree, and increasingly less literate in the classical sense, we do face a problem and may need more than legal aid to save our society from contemporary ridicule emanating from better educated international competitors, or worst fate of all, transformation into a nation dominated by a media-worshipping cult.

I don't blame the media for what is happening — I blame ourselves for our failure to anticipate the consequences which automatically ensue when the information technology explosion hits an unprepared, untutored, non-critical society.

We skeptics do have a role — we need to decide how to change the pattern of which I am, I believe, justifiably critical, such that New Zealand can reach democratic decisions on a basis of roundly presented, soundly analysed, best available information.

Can we, the Skeptics, help disprove the hypothesis of HG Wells who wrote in 1920:

Human history becomes more and more a race between education and catastrophe.

That Was the Decade That Wasn't

Remember the '90s? It was the decade when:

- scientists discovered an anti-aging drug that stretched the normal lifespan to 150 years
- Madonna gave birth to quintuplets
- earthquakes transformed both San Diego and Los Angeles into islands
- a Super Bowl had to be canceled because so many players were suspended for drug use, that both coaches couldn't field a team

At least that's what should have occurred if the world's top psychics had been correct. People may be celebrating the new millennium, but the world's top psychics shouldn't be raising a glass of champagne to celebrate their successes for the 1990s, according to Gene Emery, a contributor to the magazine *The Skeptical Inquirer*, who has been tracking the hits and misses of the tabloid psychics for two decades.

And, Emery says, the folks who claim to be able to see the future also didn't do very well in their forecasts for 1999. The psychics said 1999 would be the year that:

- a pollution cloud forced New York City to be quarantined
- Wynonna Judd quit country music to become a women's wrestler
- marijuana replaced petroleum as the nation's chief source of energy
- * the cast of 60 Minutes II was replaced by Candice Bergen, Mary Tyler

- Moore and Margot Kidder
- the Statue of Liberty lost both arms in a terrorist blast
- Monica Lewinsky became a millionaire after opening a New York boutique for the full-figured women called Monica's Closet
- O. J. Simpson confessed to Howard Stern on the air that he killed his exwife
- Roseanne shed her clothes to do a week's worth of talk shows from a nudist colony

"It's always hard to find evidence that a psychic predicted an unexpected event before the fact," said Emery, a science writer. For example, the forecasts published with great fanfare in the supermarket tabloids failed to mention such surprising events as the massive earthquakes in Turkey and Taiwan, the nuclear accident in Japan, or the death of John F. Kennedy Jr., his wife and sister-in-law.

Instead, said Emery, Anthony Carr, billed as "the world's most documented psychic" by the National Examiner, is documented as predicting that Carolyn Bessette-Kennedy would give birth to healthy twins. And Sanjiv Mishra of India, described by the tabloid Sun as one of the ten "greatest psychics on Earth, " made the not-so-great forecast that JFK Jr. would fly "on a space shuttle mission in August," with John Glenn as his co-piTracking the psychics is fun, but it has a serious side, said Emery.

"Every time the media hypes psychics, it encourages consumers to waste large amounts of money calling psychic hotlines. Most can ill afford it. It also encourages some police departments to listen to psychics who claim to be able to solve crimes. Not only do 'psychic detectives' waste valuable police resources, the psychics sometimes implicate people who later turn out to be innocent."

Emery said psychics give the illusion of being accurate when people forget the bad predictions or don't realize how equivocal the forecasts are. Psychic Sylvia Browne, for example, predicted that in 1999 "the Pope will become ill and could die." Said Emery: "That means she can claim success if the Pope suffers anything from a head cold to a fatal heart attack." (Browne's notable predictions for 1999 included forecasts of cures for breast cancer and sudden infant death syndrome [SIDS]. She also said that "The world will not end anytime soon.") Some of the unambiguous forecasts the psychics were making for the 1990s:

- Soviet cosmonauts will be shocked to discover an abandoned alien space station with the bodies of several extraterrestrials aboard
- Fidel Castro will be jailed after his government is overthrown "in a massive revolt"

Autumn 2000 Number 55 New Zealand Skeptic 7

- * cancer will be cured
- Oprah Winfrey will marry the next mayor of Washington, D.C.
- the first successful human brain transplant will be performed
- public water supplies will be treated with chemicals that will prevent AIDS
- American voters will be able to cast their ballots using touch tone telephones
- deep-sea vacation dives to the Titanic will become commonplace.

On a local note, NZCSICOP continues to have a good batting average with predictions. In 1998, we got 80% of our predictions correct versus 0% for the psychics. At the beginning of 1999, Denis Dutton and Vicki Hyde fronted up against the psychics again for a Holmes piece; however, the yearend review did not take place this year but we are pleased to note that we got three out of five right (possibly four — we can't remember the final prediction!).

The statistically likely airplane crash we predicted came true (pick a crash in the busy months and bad weather of August or April with airline livery of blue or red and you've got a good chance of being right)

There was death as a result of a volcanic eruption in Central America (we'd been betting privately on Popocatapetl in Mexico, which was bubbling away the week before we made the prediction, but a volcano in Ecuador proved more "obliging" later in the year; fortunately only one death)

Most signficantly, for some, the much-scoffed at prediction that "despite being odds-on favourites the All Blacks would not make the finals of the World Cup" did come true. We'd been looking forward to saying that we were delighted to be wrong and acclaim their victory; fate provided otherwise.

Psychic Training for US Welfare Recipients

Here's an idea that WINZ have yet to suggest
— but it may not be far off!

According to a recent report in the New York Times, the Big Apple's city welfare department has been recruiting welfare recipients to work from home as telephone psychics. The city's Human Resources Administration has placed 15 people with a company called Psychic Network in the last year of operation.

Like here, late-night television in the US is packed with advertisements for "incredible psychics", who are guaranteed to solve your problems at \$4.99-a-minute. For welfare recipients, the lure of \$10 an hour plus bonuses has brought budding psychics out of the woodwork.

The city doesn't require applicants to demonstrate clair-voyance, but their intending psychics do have to have a high school equivalency degree, "a caring and compassionate personality" and the ability "to read, write and speak English". Anyone interested in the programme is directed to Business Link, a division of the Human Resources Administration which finds and trains workers from the welfare rolls.

Group screening is arranged and tarot card reading training sessions are provided at Business Link.

The New York Times was keen to find out more about the operation, but city representatives cited confidentiality issues. Over 150 companies are involved with the Business Link plan, qualifying for wage subsidies and federal and state tax credits of up to \$10,000 for each worker.

The New York Times reported a city administrator as saying that "the city does not investigate the businesses that participate to determine if they are in trouble with the Better Business Bureau, the Labor Department, the bankruptcy courts or the Internal Revenue Service".

The reporter was unsuccessful in her attempts to reach the only Psychic Network listed in the Manhattan telephone directory. The local number had been disconnected in July, and the only street address given was one in West Palm Beach, Florida, where a variety of records show it to be the residence of a man, William B. Tide, who uses several names and has an unlisted telephone number. A Florida owner of a Psychic Network bookstore had been bombarded with complaints meant for the other Psychic Network since Tide failed in several efforts to acquire her trademarked name and toll-free number. The story noted that they were unsure of any connection between Tide and the New York operation, and the city would not provide any contact details for the company they were dealing with.

The New York Times noted that federal, state and local agencies have struggled to curb abuses in the boom-and-bust

psychic hot line industry. The story quoted investigators as saying that market leaders with a changing array of names and affiliations have been accused of defrauding customers, creditors, employees and stockholders around the country.

"Investigators typically reacted with disbelief to New York City's welfare-to-work psychic venture, but an enforcement official with the Federal Communications Commission, where 40% of all complaints concern psychic pay-per-call operations, laughed uncontrollably, then begged for anonymity."

The New York Times contacted some "genuine" psychics who were reportedly not amused. One said that it was a scam, as genuine psychics study for years, adding that "the city should not be doing this — it's shameful".

The city defended its support for the programme, saying that the pay was good and the work suitable for mothers with young children. However, actual experience suggests otherwise. Despite promises of \$10-12 an hour, actual pay at these networks is often far less, because it is usually based on a per-minute rate paid only for time spent on the telephone with callers. A bonus — typically 25 cents — is paid for every name and address that can be extracted from a caller; information which is then resold to direct marketers.

As has been the case in New Zealand, telepsychics are encouraged to keep the punters on the phones for as long as possible. In one case in Northland, telepsychics were instructed to feign the need to disconnect after the maximum billing period had been reached so that the punter had to call back and initiate a new set of charges. In the US, it is common practice to route calls to those workers who achieve the longest billing periods. There are also deliberate ploys to extend the time, such telling the caller you are seeing — veeeeerrrrryy sloooowwwly - their winning Lotto numbers.

Investigators also are familiar with the practice of "cramming and slamming",

which involve padding a customer's telephone bill with charges which they never knowingly incurred, and switching their long-distance service to another carrier without permission.

Despite attempts both here and in the US to crack down on the worst scams, it is the callers and the teleworkers who end up out of pocket and out of a job. Little has been done to those operating the pyschic phone hot lines.

Counselling may harm crash victims

People involved in incidents such as rail crashes, bombings or armed robberies may suffer more in the long run if they undergo intensive counselling, some psychologists believe.

"Debriefing" — in which victims or emergency services personnel are encouraged to talk about their experience — may not help people suffering from post-traumatic stress disorder. In certain circumstances it may even make their symptoms worse, the British Psychological Association conference in Brighton was told last week.

Debriefing involves a one-off session held between 24 and 72 hours after the event. Counsellors take an individual or a group through the incident, encouraging them to talk through their emotions. In a study commissioned by the Health and Safety Executive, researchers from Birkbeck College, London, and the University of Sussex analysed the results of seven trials. They found no evidence that debriefing helped victims in the long term, but there was evidence that it harmed them.

"At best its efficacy is neutral, and at worst it can be damaging," said Dr Jo Ricks, principal research fellow at the Institute of Employment Studies at the University of Sussex.

"In one study of victims of road traffic accidents, those suffering from severe post-traumatic stress had worse symptoms a year after the accident if they underwent debriefing than those who did not."

Symptoms included flashbacks, emotional numbness and a heightened sense of fear. Dr Ricks said 75% of victims overcame their post-traumatic stress disorder without debriefing.

Sarah Hall, writing in the Guardian Weekly (13-1-2000, pg 8)

Newsfront

Group awaits doomsday

MOUNT GERIZIM (West Bank), Nov 30. – In their linen robes, sandals and cloth head-dresses, the White family look like extras on the set of a film about the Bible.

But the family of seven from Detroit, Michigan, are living the Bible days for real in the Promised Land getting ready for what they pray will be the end of the world.

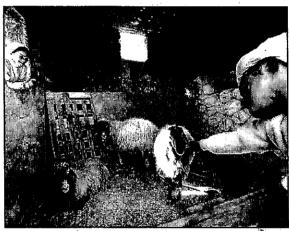
"We're on a pilgrimage out of Babylon," said the mother of the family, Ader, 39. "I believe the millennium is Judgment Day and we are going to be judged."

The approach of 2000 has proved a magnetic draw to the Holy Land for religious cultists from the United States and Europe, who interpret the start of a new millennium on January 1 as the sign of the Second Coming.

That's not what the Whites think.

By their estimate the year is now 6000 and the end will come when the lost biblical Ark of the Covenant reappears at the dawn of 6001 sometime next spring.

"The millennium of Yehoah [God] starts this March or April. It depends on the first new moon after the vernal equinox," said Ader of the Ark. Ader's 42-year-old husband Shomer got a new US passport in Jerusalem



THE END IS NIGH - Summer White and her brother Matthew with their livestock. Picture: REUTERS

ISRAEL

recently so he could fly back to the US to visit his mother.

He is stuck in Germany trying to return to the Promised Land because the Israeli authorities, waging a pre-millennium crackdown on fringe cultists, refuse to allow him back in.

"My husband is in the Valley of Decision," she said. "Yehoah is saying to him: 'If you want to stand before my throne you can't do it with a picture'." – Reuters

FIT FOR AN ALIEN: UFO believer Dave Cole is on a mission that is out of this world.

He has been asked by Wellington City Council to build a spaceship for the new millennium. And he is building it to specifications he says are fit for an alien.

Mr Cole, pictured hanging out of his spaceship, is a member of the Unarius Academy of Science, an international group devoted to

building bridges with alien civil- . isations.

He said the group believed Earth had been visited by alien life forms — from 32 planets. His spaceship was designed to match photographic images from close encounters this century.

Wellington millennium organisers have given him \$10,000 for materials, but he is providing his ship-building services for free.

MARK ROUND

Official membership in New Zealand numbered "about 20 or 30", but he believed the academy had sympathisers in high places. "Not all of them are lunatics, some of them are in the city council. We're getting a lot of support for this."

Mr Cole planned to promote the Unarius cause by making more spaceships and selling them over the Internet.

The craft will fly over Wellington Harbour suspended by a helicopter before landing at the city's millennium party.

Mr Cole said Unarius members believed real aliens would land in 2001, the actual year of the new millennium.

He agreed that many people thought they were nutters, but believed the group would be proved right.

Maori 'superstition' sparks

By PHIL HAMILTON

Some Victoria University staff are boycotting the Maori blessing of a new faculty building, saying superstition has no place in a university.

The Commerce and Administration Faculty begins the first stage of its move to Rutherford House in downtown Wellington this weekend. A Maori blessing is to take place tomorrow morning before the School of Business and Public Management begins moving into the 11th floor.

Accounting and Commercial Law Associate Professor Paul Dunmore sparked off the debate, sending an email to all faculty staff saying he would not be attending.

"I find it culturally offensive that, in this institution dedicated to the advancement of knowledge, we propose to inaugurate our new premises with

an act of animist superstition," he said.

Prof Dunmore inquired whether there would be space above his office door to mount his lucky horseshoe.

Yesterday, speaking to The Post, he emphasised that he wasn't opposed to the ceremony because it was Maori but because of the superstitious nature of it.

He would, on the same grounds, decline to attend a Red Mass [a Roman

Catholic ceremony new academic year]

Prof Dunmore sa ive of the powhiri, a uation but thought ate to make superst remony.

Maori studies se Adds said the bles ceremony to lift the tus). It was carried building.

Moa hunt on again

Rex Gilroy is convinced the South Island

could provide cover for species

presumed extinct.

Australian moa hunter, naturalist and author Rex Gilroy says NZ history is due for a shakeup following new information on its first human inhabitants

Mr Gilroy, in the South Island this month to hunt for moas and other reputedly extinct species, claims evidence the ancient Phoenicians visited these shores.

"The Maori were by no means the first people," said Mr Gilroy, author of "Pyramids in the Pacific" which examines exploration of the south-east Asian islands by navigators from ancient civilisations such as the Chinese, Phoenicians, Arabs, Greeks and Egyptians.

Those new territories included Australia, the Torres Strait and NZ, he said.

Mr Gilroy, owner and keeper of the largest private natural

science collection in Australia, has just moved his museum from Katoomba to Tamworth, NSW.

He calculates that as long as 4000 years ago, when, he says, the Kaimanawa megalithic wall was built, up to 20,000 people lived in NZ. The wall which he believes is the remains of a step pyramid, would have reached a height of up to 70 metres.

He says pagan inscriptions in the language of Phoenicia (the ancient name for Lebanon) in stone he uncovered on a farm near Tauranga last year refers to the temple of Baal and the son of Canaan.

Mr Gilroy, who has made seven expeditions to unravel NZ's distant past, prevailed on translation books decoding ancient inscriptions such as Egyptian hieroglyphics and other written languages.

This trip, he searched for fossil evidence in remote areas of the North Island before heading By ANNA PRICE

to Arthurs Pass and the Haast to look for moas.

Rex Gilroy who describes himself as "an open-minded" Australian naturalist and cryptozoologist of 40 years experience, is convinced that the South Island, like many remote mountainous forest-covered regions of eastern Australia, could easily provide cover for any species as yet unknown or presumed extinct.

Rex Gilroy and his wife have made several field investigations to the remote wilderness

areas in the south collating reported sightings of what are believed to be scrub moas.

Several such claims were reported from the

Haast Pass in 1991 where fresh tracks reputedly left by a scrub moa were reported last year.

Mr Gilroy refers to a 1960 case, in which deer stalker Jack Matthews reported spotting a large "dumpy" bird moving among trees.

"Mr Matthews informed me years later that that he did not attempt to shoot the bird because they were thought to be extinct, and if there were others about, as this bird suggested, it was better to leave them alone to breed up," he said.

This trip, Rex Gilroy and his wife are taking a movie camera along with other cameras and plaster casting for any fresh tracks. He is equipped for a two month-long field investigation.

Many who had made unusual sightings were chary of reporting them for fear of scorn, he said.

He is appealing for any further information to be sent to him at PO Box 202, Katoomba 2780, NSW.

Leaders sign of devil: TV preacher

WELLINGTON — Television New Zealand has sold its Saturday morning 7 am to 7.30 am slot on TVOne to an Australasian evangelist who preaches that having female leaders is a sign of the devil. Evangelist Brian Tamaki sought a broadcast time later than 6 am on a Saturday when his message would be screened "among children and young people."

His mission begins on March 4,

with two programmes reserved for the topic of our "fatherless generation," a sad state of affairs "reflected in the fact that we have a female Prime Minister and a female Leader of the Opposition."

Vic staff blessing boycott

o inaugurate a it was proposed. he was supportvelcome, at gradwas inapproprion an official ce-

or lecturer Peter ng was a public apu (sacred staout on any new "It's just making it free for common use," he said.

Mr Adds said there had been a number of occasions in the past when university staff had refused to participate in ceremonies with perceived religious connotations, not just Maori ceremonies.

Mr Adds said he could see how it could be regarded as a pagan ritual but it did no harm and staff could choose not to attend. Senior economics and finance lecturer Martin Lally said Prof Dunmore had sparked a vigorous e-mail debate, with staff taking both sides. Dr Lally said from his pakeha point of view the ceremony seemed fairly weird, but harmless enough.

But business and public management lecturer Karen Baehler was supportive of the ceremony.

"Although I do not share Maori spiritual beliefs, I welcome the oppor-

tunity to participate in a ritual that brings people together and acknowledges our common longing for God, singular or plural," she wrote.

Commerce and Administration dean Neil Quigley said the Maori blessing was a way of showing respect for the traditions and beliefs of Maori. The university had been advised some Maori would feel uncomfortable working in a new building that had not been blessed, he said.

Beer and Skittles

Conservation of Energy by Remote Control

John Riddell has a few confessions to make.

I struggled out of bed this morning on the first day of the two thousandth year since nothing in particular happened. Rather than watch millennium celebrations a year early, I turned on the Discovery channel to watch one of those Mysterious World, Arthur C. Clarke type programmes. It was called *Equinox*. They run on water. Today's mystery was "Why do people still believe that cars can run on water?"

I was worried. This upset me because as a member of the Illuminati I thought I'd successfully suppressed all information about that years ago. The programme had a few different inventors who had machines that produced more energy than they used. Or so they said. One was a machine that split water into hydrogen and oxygen. Another was a machine that heated water rapidly using only a small amount of energy.

One of the things that keeps us rich is control of the world's oil and energy supplies. We really don't want someone coming up with a cheap and clean energy source. There is this law of conservation of energy which explains why you have to use a remote control to change channels. We have paid off, or threatened all science teachers to tell everybody that in fact the law says you always get as much energy out as you put in. But not more. Because of losses due to friction (heat and sound) you usually get less, but if you take these into account the numbers on both sides of the equation should be the same. The thing is, this isn't true. We just want people to believe it so we can sell petrol at inflated prices.

Unfortunately, not everyone takes science at school. So not everyone knows about the "new" law of conservation of energy. Every now and then, someone works out that water is made of hydrogen and oxygen. Hydrogen and oxygen burn well and make a good fuel. If this becomes public knowledge, energy will be almost free. The bottom will drop out of the oil market. To stop this, we have spies in all the patent offices. If anyone submits a patent that will allow a car to run on water, we whisk the inventor away and pay him off.

When I saw the programme I thought that maybe someone had got past us. Actually managed to get to the media. But after watching for a while I realised that it was one our propaganda pieces. We put them out to make people think it is only nutters that think perpetual motion machines work.

One of the best perpetual motion machines is based on the water splitter.

The water is split, using electrolysis, into hydrogen and oxygen. This is used to

power an internal combustion engine (or fuel cell if you want to be efficient), which, in turn, runs a generator. The electricity that is produced by the generator is used to power the water splitter. The exhaust from the engine (or fuel cell) is water, which is returned to the water splitter to be used again. Surplus energy is used to power any electrical appliance.

The water is reused. It never runs out. To be useful (and therefore a threat to the oil industry) the machine has to produce more energy than it uses. The easy way to show that it does this is to power a small light bulb or some sort of household appliance. If the machine keeps running day after day, and keeps a bulb alight, then it works. Anybody who does this will be quickly given \$100,000,000.00 and told not to say anything. Then we buy up the patent and put it in a file marked "Etruscan love poetry."

I could tell straight away that the machines on the Equinox programme didn't work, because they weren't continuously lighting up a light bulb.

If you have tried to make a perpetual motion machine, but you haven't been able to get more energy out than it takes to make it run, don't despair. So long as you can convince people that it might work one day, you can

fool investors into giving you money: "To develop it".

You do what they did on this Equinox programme. To measure the energy produced, you use "Very Sensitive Instruments". You add up all the energy going in and all the energy coming out. These will be the same, but errors in measurement will sometimes make it appear that there is more energy out than in. These are the results you keep and publish. If the results are the other way around, tell the investors you forgot to desquiggle the conbobulator, and repeat the "experiment" until you get the "right" re-

Scientists will, of course, say it contravenes the law of conservation of energy. Even the ones we haven't paid. Hire yourself a discredited scientist who says it doesn't. The general public, and more importantly, the investors will then think it is just an disagreement between scientists. To explain how it "works", think up some alternative source of energy that nobody understands.

The people on the Equinox programme had a guy called Dr. H.E. Puthoff from the "Institute for Advanced Studies". Puthoff calls his energy source "zero point energy". Physicists say it exists but it can't be used. What would they know?

Point out that some of the greatest discoveries in science were ridiculed when first proposed. Don't mention that for every great idea that was rubbished, there were ten thousand stupid ones. They might work out which yours is.

Actually, I have a confession to make. The Illuminati have this really good plan to suppress any plans for perpetual motion machines. The procedures are all in place. The money for bribes has been put aside. But so far, we haven't had to use the plan. So far nobody has managed to get out more energy than

they put in. So we haven't had to suppress anything. Ever. No, really. Not ever. You do believe me don't you?

John Riddell Illuminatus

Astrologer tips tough year for Helen Clark

Evening Post 2612/00

Prime Minister Helen Clark may be celebrating the big 50 today, but it's going to be a tough year for her, according to a Newlands astrologer.

Alison Maciver said Ms Clark might regret some of the alliances she has made and would become frustrated with her lack of personal freedom in the year ahead.

"There are some agreements which she may regret making, especially alliances with other leaders."

Public tears were also likely to flow again this year and could involve another confrontation with activist Titewhai Harawira.

"Her loss of personal space, the freedom to walk to work is very frustrating for her and may see her risking security just to have time by herself. By April, her present spending is likely to have some consequences, especially when it comes to loans and savings."

Overseas trips might look like a breeze to the general public, but would be fraught with difficulties.

"The success of her power will depend on her ability to share her work, delegate and transform her workplace. Secrets fall into her lap at an amazing rate this year. It will be imperative she keeps some of these secrets to herself," Ms Maciver said.

Risk of kidney trouble was also possible and a woman friend Ms Clark could usually rely on might be less than honest.

Perpetual Motion

Here is one to join the applications for patents on perpetual motion machines. It is said that the British Patent Office received so many such applications that it eventually refused to consider any more that were not accompanied by a working model. Could we hope that this application will be similarly met with a demand for evidence of efficacy?

This item also has a dire warning for expectant fathers — be careful not to tread on your partner's toes, or she might present you with a child who grows up to be a reflexologist:

It takes skill and experience to practise reflexology, the art of therapeutic foot massage, says Barbara Hobbs in British patent application 2 323 464. She hopes to patent a pair of socks printed with codes which tell novice reflexologists where to press, and which areas to leave alone if, say, the patient is pregnant. The socks are mapped with coloured islands, each representing one of the 11 shiatsu points which practitioners say match 11 key body areas. Novices simply put the socks on a patient, and press where indicated to address specific ailments.

Barry Fox, New Scientist. 16 January, 1999

Bernard Howard

The Darwin (Which?) Project

A screenplay by Lloyd Fricker

The recent decision by the Kansas (US) Board of Education to discourage the teaching of evolution in public schools raised the question "what would Darwin think"? In search of an answer, I asked three amateur psychics to contact Darwin and to film the encounter. Well, these three psychics took my large cash advance and disappeared, never to be heard from again. Their videotapes were found several days later. Here, for the first time, are the transcripts of their tapes, which are soon to be released in a major motion picture coming to a theater near you.

SCENE 1- A psychic is seated amidst burning candles and incense.

Psychic #1: Oh Saint Peter, in heaven, guardian of the Pearly Gates.

Voice: Is this another 1-800-COLLECT call? I can't stand these petty interruptions.

Psychic #1: No. I dialled 10-10-HEAVEN. Is Charles Darwin there?

Voice: Let me see (pause — the psychic is put on hold. The recorded music is the Rolling Stones "You Can't Always Get What You Want".) Yes — I think so. I'll connect you.

Second Voice: Yo man -what's going down?

Psychic #1: Is this Charles Darwin?

Second Voice: In the flesh, or rather, in the spirit, bro. What you be calling me for, earth boy?

Psychic #1: We want to know your view on this Kansas Board of Education thing?

Second Voice: Kansas, I ain't never been there — what the *@#&\$! you talking 'bout?

Psychic #1: Yes, but the Kansas Board of Education recently decided that your theory on evolution shouldn't be taught in schools.

Second Voice: My theory 'bout what?

Psychic #1: Evolution. Or, "natural selection" as you called it in your book entitled "On the Origin of Species".

Second Voice: I ain't even read no book, I sure as #\$^& ain't write no book!

Psychic #1: Isn't this Charles Darwin?

Second Voice: Yeah, or Chuckie D. as the homeboys knew me — biggest rap star in the hood.

Psychic #1: Are you the only Charles Darwin there?

Second Voice: Ain't no others. Maybe the book-writin' cat you're lookin' for is in heaven.

Psychic #1: You mean in hell — YOU are in heaven.

Second Voice: You call this heaven! This ain't no #*&% heaven! Everyone's got to dress in white — I don't look cool in white — and they're all singing this gospel crap all day and night — can't git no sleep, and there ain't no homeboys here. Heaven, my ass. No way! I'm in hell sure as can be... Only good thing, I can zap people I don't dig — people who ask dumb-ass questions — people like you — like this...

(There's a bright flash of light and clouds of smoke fill the screen. The tape goes blank.)

SCENE 2 — A second psychic is seated amidst even more burning candles and incense, and a tape of Marilyn Manson is playing at high volume in the background.

Psychic #2: Oh great Satan, the giver of dark, the supreme party animal, the...

Voice: Hello — hello — is someone there?

Psychic #2: Oh great Satan, we ask you a small favor...

Voice: Hold on — I can't hear a thing. (shouting in background) Keep it down girls (pause) I don't care what YOU want, Monica! You and Ms. Tripp are room-mates for all eternity. (speaking again to psychic) OK — that will keep em quiet for a few minutes. Now, what were you saying?

Psychic #2: Oh great Satan, the creator of plagues, valley girls, and telephone solicitors

Voice (interrupting): Cut the flattery. What do you want?

Psychic #2: Sorry, your great unholiness, but we desperately want to speak to Charles Darwin.

Voice: He's not here.

Psychic #2: What do you mean? Charles Darwin did more to undo the stranglehold that religion had on free thought than any person since Galileo, who wimped out at the prospect of death by torture and recanted. Surely Darwin didn't make it into heaven, so he must be there with you!

Voice: Well, I don't quite know how to explain this... but Darwin, right before he died, he converted to Hinduism.

Psychic #2: What? Really? Was that because he felt that the Hindu concept of the constant recycling of souls until they achieved perfection was most like his theory on natural selection?

Voice: Hell no — he got scared! He realized he'd blown his chance at getting past the Pearly Gates, and not wanting to spend his eternity down here, he saw that Hinduism gave him an out — an alternative.

Psychic #2: So where is he now? Has he been reincarnated somewhere on earth?

Voice: Well I et me check (pause — the psychic is put on hold. The recorded music is the Rolling Stones "Sympathy for the Devil". After 10 seconds, the voice returns). Let's see — I'm trying to get his file up on the screen now — damn this Windows program — can't wait until Bill gets down here — OK — here it is — let's see — first he was a grasshopper, then a fish...

Psychic #2 (interrupting): I don't need the details. Where is he now?

Voice: You're in luck. He's a human again — took a while, but he's back!

Psychic #2: And where can I find him?

Voice: Des Moines, Iowa.

Psychic #2: What's he doing there? Science? Art?

Voice: Looks like his name's "Pierre", and he's working as a pet hair stylist at the "House of Beagles".

Psychic #2: Thanks for the info. You've been great.

Voice: No problem. You ready? Psychic #2: Ready for what?

Voice: You didn't think that this was a toll-free call, did you?

Psychic #2: But the psychic manual said...

Voice: That's what they all say! Don't they? (laughter, then applause from a studio audience) Psychic number 2, come on down... This is YOUR afterlife (more applause, smoke, a brilliant flash, and the camera goes dead).

SCENE 3 — Psychic number 3 enters pet boutique. Behind the counter is Pierre, wearing a leather jacket without any shirt, and with a large earring in his left ear and numerous body piercings and tattoos.

Pierre: May I help you?

Psychic #3: I'm looking for Charles Darwin, who is currently residing in the body of someone named Pierre.

Pierre: I'm Pierre, but who's this Darwin character "residing" in my body?

Psychic #3: Ever heard of Charles Darwin?

Pierre: No — but then I grew up in Kansas — there's many things I didn't hear about (he winks at the psychic).

Psychic #3: Well, I've reason to believe that you're a reincarnation of a famous scientist from the last century.

(Andre, the assistant who is dressed just like Pierre, enters the shop carrying a large Beagle)

Andre: Oh sorry — I didn't know you had a man in here with you...

Pierre: It's a customer. What's up, Andre?

Andre: I simply can't decide whether Butch here would look better with the purple accent or the more natural hair dye.

Pierre: You know, I always prefer the natural selection.

Andre: I know, but you've also said that you're gradually adapting to a greater variation. Just thought I'd ask... (he leaves)

Pierre: So what were you saying?

Psychic #3: We want to know your thoughts on the recent decision by the Kansas Board of Education to ban the teaching of evolution and the big bang.

Pierre: I can understand why they would ban the "Big Bang".

Psychic #3: Why is that?

Pierre: It's quite obscene. Especially that scene with the Jell-O...

Psychic #3: What are you talking about?

Pierre: The movie! What are you talking about?

Psychic #3: There was a movie called the "Big Bang"?

Pierre: Yeah — starred that woman who played the lead role in "Snow White and the Seven Vertically Challenged but Otherwise Well Endowed Forest Dwellers".

Psychic #3: I didn't see either movie, I was talking about...

Pierre (interrupting): Oh, it was great — especially "Happy", although "Sleazy" and "Disheveled" were also very good.

Psychic #3: Never mind the movie. I'm talking evolution — natural selection — the descent of man — the theory about sexual divergence...

Pierre: Sexual diversions? The scent of man? Sounds like fun. You know, you're kind of cute...

Psychic #3: I'm being serious.

Pierre: So am I...come here big boy (he grabs the psychic). Say, you are big...

Psychic #3 (shouting): HELP!

Pierre: Now tell me more about "sexual diversions"...

Andre (entering room): Say Pierre, about this Beagle... (sees Pierre and the psychic together) Hey — what's going on? (grabs a gun from under the counter) That's the last time you're cheating on me. Let's see you adapt to this! (he sprays bullets around room, tape ends abruptly).

there you have it — the Darwin project. Apparently Darwin doesn't seem to care what the Kansas Board of Education thinks — he's too busy dodging real bullets, not the metaphorical ones he dodged last century. Unfortunately, we'll have to wait a while before we can ask Darwin any more questions. According to our sources, it looks like Darwin will be coming back as a human again. Later in life he'll become a film star, and achieve fame for his role in the Jell-O scene in the remake of "The Big Bang".

Lloyd Fricker is professor of molecular pharmacology at the Albert Einstein College of Medicine, New York.

Eileen Bone

It's a great privilege to have known Eileen, her warmth, her wit, and her sharp mind undimmed by her failing health. In the last few years, when she might forget the word for something, she knew what she wanted to say about it.

Eileen was interested in everything and had an opinion on almost everything, but unlike many such people, her opinion was always worth hearing, and if you disagreed, you'd better be pretty sharp about explaining why. While she could be impatient with ignorance or stupidity or superstition, she kept her forgiveness of human frailty.

Eileen was a jackdaw for facts and information, and she left a mountain of books and papers — that should be properly archived. She was a devoted skeptic if that's not a contradiction — going to every meeting and conference she could, though someone had to drive her: it wasn't a burden to be her driver, it was a pleasure to share her company and conversation. Eileen embodied the skeptical ideal, not condemning extraordinary claims in advance, just demanding evidence before she accepted them. She was equally committed to justice and human rights. The New Zealand Skeptics and the Council for Civil Liberties can be proud to have had her as a member.

Eileen, I'm sorry I didn't visit you more. The last time I rang, you were too busy. That was you. And then I kept putting it off. that was me. I'm glad you died in your sleep and didn't need to actually arrange euthanasia for yourself. I'm sure you would have been more angry about the subtefuges that would've been needed, than about any of the messy details.

Eileen, you loved life, and you had a good life, but we know you weren't afraid of death. Euthanasia means "good death", and yours was and remains a good death. And for that reason, in words accidentally topical, we all can, and should, have -Good...Grief.

It ain't necessarily so, it ain't necessarily so; Our wisdom, though tribal, may not be reli'ble, It ain't necessarily so.

Hugh Young was kind enough to provide this eulogy for Eileen on behalf of the Skeptics at her funeral.

Reviews

Numerology, or What Pythagoras Wrought, by Underwood Dudley, Mathematical Association of America, Washington DC, 1997 Reviewed by Hugh Young.

Here's a book that might go on the New Age shelves by mistake.

Who'd have thought that a book about numerology could be such fun? Woody Dudley makes it so. He looks at Pythagoras' original speculations about the mystical powers of numbers, gematria (giving letters numerical values), the number of the Beast, triangular and pyramidal numbers and Pyramid Power, biorhythms, and how modern numerology (properly numeromancy) was virtually invented by Mrs L. Dow Balliett (Josephine, later Sarah Joanna, probably changed to improve its number power) of Atlantic City, New Jersey, about a hundred years ago.

Among the diversions are Shakespeare's numbers, biblical numbers and rithmomachy, a once-popular boardgame, like chess but with numbered pieces whose moves and power depend on not only their own numbers but those of the pieces they are attacking and the distance between them. (He gives enough information that you could make a set and play the game, which looks much more difficult than chess, but would be ideal for senior maths students.)

Another is "number forms" the patterns that perhaps one in 30 males and one in 15 females carry in their heads, on which numbers are consistently arranged, throughout their lives. Such people may think nothing of them and assume that everyone has one.

Two of the book's useful contributions are the Law of Small Numbers and the Law of Round Numbers: there aren't enough small numbers or round numbers to meet the many demands made of them. So if you go data-mining for small numbers or rounded-off large numbers and then look for correspondences between them, you'll find some.

I'm sorry to learn that everybody's favourite number,

= 1.618... or phi,

wasn't used to design the Parthenon or the Great Pyramid, isn't generally chosen as the most pleasing proportion for rectangles (1.83) is), doesn't divide our bodies at the navel (men's are higher), and apparently wasn't even called the Golden Section until 1835. It's still a lovely number to play with, but Dudley shows that many of its mysterious properties also derive from the Law of Small Numbers.

He doesn't mention our own premier numbercruncher (and muncher, and mixer-upperer), Captain Bruce Cathie, and his invention of "Harmonics" (multiply by 10ⁿ, where n is any whole number he pleases) and the grid of great circles he devised/discovered by which UFOs are powered and navigated. Perhaps the puddle is bigger and/or the frog smaller than we imagine.

Dudley never mocks the numerologists, but debunks them with charm and grace and sympathy for their (our) human plight of looking for meaning where there may be none.

UFOs & Alien Contact: Two Centuries of Mystery, by Robert E. Bartholomew & George S. Howard; 1998. Prometheus Books, Amherst, NY, US. ISBN 1-57392-200-5

Reviewed by B.H. Howard.

Readers of NZ Skeptic will have seen R.E. Bartholomew's article "The Great Zeppelin Scare of 1909" in last autumn's issue, no 47. This covered the same event as one of the chapters in this book. Several other chapters describe similar episodes which occurred in other times and other places, and in a final section all these are woven into a coherent story. Each chapter is supported by a copious list of references, most of them newspaper reports published during the development and decay of the case concerned.

In addition to detailed factual accounts, each episode is placed in its social and historical setting, with an explanation of why the different

experiences took the form they did.

Previous psychological commentators have labelled the "experiencers" of the events described in this book, mostly on very little evidence, as in some way mentally sick. Bartholomew and Howard disagree; their careful psychological analysis of over one hundred such people found no evidence of psychopathology, but rather "Fantasy Prone Personality" (FPP).

"While functioning as normal, healthy adults, FPPs experience rich fantasy lives, dramatically scoring higher...on hypnotic susceptibility, psychic ability, healing, out-of-body experiences, religious visions, and apparitional experiences. In our study, "abductees" and "contactees" evidence a similar pattern of characteristics to FPPs."

The experiences of these individuals mirrored the concerns of the society in which they lived. Thus, in late 19th century, United States, the achievement of powered flight was thought to be imminent, and a host of "airship" sightings were reported

Just before World War I, when the British were very nervous of Germany's growing military strength especially its lead in airship development, zeppelins were seen by thousands all over England.

In Sweden in 1946, fear of the German V-rockets recently acquired by the USSR was widespread, and hundreds of reports of missile sightings were published. And so for other cases, including, of course, the 1947 sighting of "flying saucers" in the western US and all that flowed from it.

The objects in the latter case were described by aviator Kenneth Arnold as skipping along "like a saucer would...across the water", and this gave rise to a deluge of "flying saucer" sightings, although Arnold had said the objects he saw were cres*cent*- not saucer-shaped.

These objects were at first almost everywhere considered to be of terrestrial origin, as secret weapons or aircraft, either "ours" or "theirs" of the cold war. Only after a few years did belief suddenly switch to an extraterrestrial origin; the authors ascribe this to two best-selling books.

Wherever and whenever the events described in this book occurred, some common features are apparent. Firstly, the technology imputed to the "visitors" is just a little ahead of contemporary achievement. Thus:

- the US airship sightings of the 1890s preceded the Wright brothers' flight by almost a decade
- early reports of aeroplanes were all sightings at night, at a time when night flying had barely been attempted
- * the New Zealand Zeppelin scare of 1909 occurred many years before flights of such dirigibles in the Antipodes were possible

A second common theme is the way these stories wax and wane. Initial incidents were widely reported, and the numbers rose rapidly. After a while, as physical evidence obstinately refused to reveal itself, editors denounced the reports as hoaxes or the reporters as deluded (despite the prominence many of these same editors had given the initial reports).

Following these skeptical editorials, the number of incidents being claimed fell greatly - were they still being experienced, but by people now shunning ridicule, or did the editorial expressions of disbelief change the FPPs' inclination to fantasise?

The extent and depth of the newspaper reports on which much of this book is based are truly amazing. Think of the hundreds, perhaps thousands, of papers in UK and US of similar circulation to the Geraldine Guardian and Clutha Leader (both quoted largely in the chapter on the New Zealand Zeppelin Scare), think of over 100 years of publishing, and contemplate the enormous database which provides these stories.

The reliance on this local reporting has one disadvantage — the notoriously monoglot English-speaking world gets told in this book very little of UFOs and "aliens" as reported in foreign language newspapers.

The main impression left by this book is to confirm the conclusion that our minds and senses can easily deceive us. So often "seeing is believing" should be read "believing is seeing". The bizarre examples described here provide a wide background of rationality against which to view, and judge, the further phenomena which are sure to be presented to us.

Forum

Cathie Comments

I just wanted to make a comment on the clipping from the Christchurch Star concerning "nuclear extinction" which appeared on p.9 of the NZ Sheptic periodical. In the clipping, a refutation of this possibility was based on some writings of one Bruce Cathie who is claimed therein to be a mathematician among other things.

That Mr Cathie is read by many around the world cannot be in doubt. The claim that he is a mathematician is an insult to real mathematicians. Mr Cathie is best described in my opinion as a numerologist. I read his book *Harmonic 33* when I was a starry-eyed (but scientifically educated) teenager.

On the basis of what I read, I wrote to the author outlining the defects in his arguments in the early 70's. The claim concerning the timing of nuclear explosions was among them. I pointed out that nuclear reactors don't stop and start at particular times and that fission bombs which work on the same basic principles don't either. I got a reply from his secretary saying he was too busy to answer correspondence. I was disappointed to say the least.

All Mr Cathie's "predictions" about the French tests were retrospective. I have a firm principle of making those who claim to be able to predict things based on numbers or anything else to front up with a date in advance of a specific prediction. To date, not a single prediction made (and there

are precious few) has ever come true.

Other material in that book included photos of mysterious aerials, one of which was instantly recognizable as a quad antenna used by some amateur radio operators. It is too easy for scientifically illiterate people to swallow this stuff and there was quite enough of it to make me gag, even at my tender age back then.

I won't bore you with a list of examples but the doomsday predictions surrounding the recent appearance of a certain comet have disappeared into nothingness as have those surrounding the planetary conjunction of which Bernard Howard spoke in the same edition of NZ Skeptic. I have no hesitation in claiming that Bruce Cathie is a charlatan whose books should be left sitting on the shelf.

Malcolm Watts, Wellington

References

Bob Metcalfe (Forum, NZ Skeptic 54) seems to be calling for a change in editorial policy on footnotes and references. This has been consistent throughout the history of this society and any change would completely alter the character of this journal. What do members want? I thank him for his apology. Anything that increases feedback on articles in NZ Skeptic and the numbers of letters in Forum is to be welcomed.

Contrary to Metcalfe's assertions, my article (NZ Skep-

tic 50) did contain a number of references, though these were not footnoted. I agree that Trevor-Roper is hardly "at the cutting edge" but was surprised that Metcalfe failed to notice the reference to an Oxford historian who has done recent work on the 16th and 17th centuries. The two books I mentioned in my previous letter were not intended as a list of what I had read but merely suggestions for interested skeptics who might like to pursue the topic further.

However what I cannot understand is why he assumed without any evidence, that I had had no training in history. Metcalfe is still trying to resurrect the old "argument from authority", which I totally reject. It does not matter who you are; all that matters are the facts and rational arguments.

In 1905, a 26-year-old Swiss civil servant with minimal academic qualifications published a paper which won him a Nobel Prize in physics. In the same edition of *Annalen der Physik*, he published two more papers, one of which translated as On the Electrodynamics of Moving Bodies, produced a revolution in science. This latter paper carried no footnotes or references.

Any discipline that returns to "argument from authority" would move back several centuries to sterile scholasticism. I do not believe this is happening to History.

Jim Ring, Tahunanui

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