

Australian **Rationalist**
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TRANSHUMANISM

Where is homo sapiens headed?

The sickness in civilisation

School principals fight religious educators

Are rationalists atheists?

What the public thinks of science

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The Rationalist Society of Australia has published a journal almost continuously since the 1920s, interrupted only by war, internecine strife and lack of funds.

The ideas and opinions published in these pages do not necessarily represent the views of the RSA, its Committee or the Editor. Rather, we aim to publish material that furthers the RSA's mission to inform, to educate and generally to promote thoughtful and dispassionate analysis of issues of public contention.

We publish regular articles on Philosophy, Ethics & Religion, Science & Technology, and Law & Politics. We will also consider humour, poetry, short fiction and cartoons; excerpts from forthcoming or just released books; and previously published material if it has appeared recently in non-competing, low circulation periodicals.

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Kant get no satisfaction

A tale of violent passion.

by Kay Perry

In September of last year a disagreement over the theories of the 18th-century philosopher Immanuel Kant resulted in a man being shot in a grocery store in southern Russia:

RIA news agency quoted police in the city of Rostov-on-Don as saying a fight broke out between two men as they argued over Kant, the German author of *Critique of Pure Reason*, without giving details of their debate.

“In the course of the fight, the suspect took out a pistol firing rubber bullets and fired several shots at his opponent,” it said, adding that one man was detained and the victim was taken to hospital. His life was not in danger.

Can we – even at a stretch – imagine this happening in Australia? When I first heard of this incident, I was impressed – impressed that anyone, no matter how bizarre the scenario, would know or care enough about the theories of Kant to enter into some form of violent altercation over them. When do we ever see people battling it out over Pascal, or bruising knuckles on the niceties of Nietzsche?

To reach for bullets – albeit rubber bullets – in defence of a reading of Kant has, from a distance, a certain lovely flamboyance. It could even be said to bespeak an admirable degree of zeal. It’s a form of

be hyper-polite exchanges conducted by the unnaturally self-controlled, but philosophical disputation in the manner of Rostov-on-Don is not what we – as we focus on the Kantian cross hairs – should be aiming at.

Perhaps those of us who refrain from reaching for the rubber bullets are just more artful in concealing the rising heat of our tempers (or perhaps there are no good ammo shops nearby) but we could all benefit from considering our own tactics and what they suggest about what we are doing when we think we are exploring ideas with each other. If all we’re doing is guarding our mental turf, then we are not doing very much.

As an aid to mental flexibility, Professor R. A. Lytteleton – noted British mathematician and theoretical astronomer – once proposed a method he called The Bead. The Bead works by taking a proposition that is open to discussion and placing it – bead-like – on a spectrum running from, at one end, a hundred percent proved (absolutely certain belief) to a hundred percent disproved (complete and unqualified disbelief) at the other. The object of the exercise is to determine where – on the basis of available evidence – a particular proposition should be placed in relation to conditions of absolute certainty. A further refinement of the bead game is

“you may have grave doubts about the existence of the Yeti”

zeal, however, more suited to an anecdote or a nineteenth century novel than to daily life. I’m not sure that one has managed to learn much from Kant if one’s first reflex is to reach for a gun.

F. Scott Fitzgerald – possibly not a favourite of the Rostov-on-Don shooter – is on record as saying that, “The test of a first-rate intelligence is the ability to hold two opposing ideas in mind at the same time and still retain the ability to function”. I’m with Fitzgerald. After all, there is more mental exercise to be gained from shaking up our own preferred patterns of thought than from endlessly reiterating them. An interpretation or opinion is a provisional thing. Accordingly, it should be possible to acknowledge – at least prima facie – the internal coherence of views which do not coincide with our own. If we do not, we are condemning ourselves to perpetual monotony. Besides, it’s a bit oafish.

In the Kant shoot-out, a high degree of emotion obviously attached to the intellectual position held by the shooter – not, of course, that there’s anything wrong with emotion, as all manufacturers of greeting cards would undoubtedly attest. Still, it’s not at its most useful in civilised debate. Once argument turns from a shared investigation of ideas to a heated defence of fixed positions, the fun can only be had by the spectators. Not all disputes need to

that the two poles (one and zero) are to be regarded as asymptotes – lines which may be approached but never reached – and that, therefore, all propositions can be viewed as permanently in play between the two of them.

As a matter of private conviction, you may have grave doubts about the existence of the Yeti and a firm reliance on Newtonian dynamics, but The Bead works to remind you that the implausible is sometimes supported by late-arriving evidence and – equally – that cherished and widely sanctioned theories are sometimes overturned. Although your Yeti bead may approach the pole of complete and unqualified disbelief, it should never quite get there, any more than your Newtonian dynamics bead – however far it may be down the other end of the spectrum – should rest confidently on the line indicating absolute and unqualified certainty. The intent of keeping the bead continually in play is to minimise the extent to which personal prejudice and emotional attachment may cloud the reception of new information.

It can be endlessly instructive for two or more players equipped with some personal verities to play The Bead (you could try, “I have always shown every respect to your mother”). But you might just like to check if anyone’s armed.

Thoughts in courts

New insights into the brain are changing thinking about punishment.

by Colin Benjamin

Three events in December last year (2013) should give us cause for thought about our state of mind and the state of our thinking about reasonable behaviour in the future. Two out of three court cases found the defendant not guilty. The third defendant got a life sentence and spent 27 years in prison for his unreasonable behaviour.

In all three cases the state of mind of the defendants at the time of the original arraignments determined the court's decision about the appropriateness of the death penalty. In all three cases subsequent character evidence suggests that the nature of their state of mind should face scrutiny in the next few years.

Current developments in the sciences of the brain and mind raise real and significant questions concerning "the reasonable man" foundation for life and death decisions in these three cases. The state of mind of the parties killed in each case was never a factor but all three defendants escaped the death penalty on the basis of judgments about their character.

The first was the massive state funeral celebrating the life and death of Nelson Mandela that should encourage us to consider the place of the unreasonable man in promoting the cause of social inclusion, social justice and social development.

As George Bernard Shaw pointed out "The reasonable man adapts himself to the world; the unreasonable one persists in trying to adapt the world to himself. Therefore all progress depends on the unreasonable man."

The second was the appearance of Bernard Goetz on drug peddling charges. In 1987, he was found not guilty of murder of four black youths who had approached him for the time and a cigarette on an express train. Mr. Goetz, who had been mugged in the past and later instructed the law enforcement he feared currently being robbed again, pulled out an unregistered pistol and fired 5 rounds.

Readers will remember that this made Bernard a New York legend as a crime-preventing hero to some and an unsafe hothead to others. It also engendered a furious general public discourse over rampant crime, gun control, a citizen's appropriate right to self-defence, and race.

The third was the appearance of George Zimmerman in Florida for allegedly pointing and cocking a shotgun at his new girlfriend who he had choked a week earlier. He was required to agree to wear an electronic monitoring anklet and to give up his four guns.

Readers will remember George was found not guilty of the murder of a black, hoodie wearing young man, Trayvon Martin, on the basis of 'stand-your-ground' laws. George killed the soda can carrying black youth who he thought might be a potential burglar.

The extent that Nelson, Bernard and George believed that

they were acting responsibly and had no prior intention of killing anybody to protect their beliefs is taken as grounds for the courts to take their state of mind into account in determining not only guilt or innocence, but also the nature of any sentencing.

By the end of this decade every rationalist may be baying for a new standard in legal consideration of thoughts in courts. This will mark reconsideration of the reasonable person – not only the gender prone "reasonable man".

Until then, criminal law requires judges and juries to decide whether defendants acted "reasonably". This irrational standard is still used, without an effective evidence base, to identify the kinds of conduct, mental states, and emotions that wholly or partially exculpate actors from criminal responsibility.

Issues of reasonableness fall into two distinct categories:

- (1) where reasonableness concerns events and states, including risks of which an actor is conscious, that can be justly assessed without regard to the actor's individual traits, and
- (2) where reasonableness concerns culpable mental states and emotions that cannot justly be assessed without reference to the actor's capacities.

David Hodgson suggests that our system of criminal justice is based in various ways on common-sense ideas of free will and responsibility for conduct, according to which it is fair and therefore just that offenders should be punished to an extent that is in some ways proportionate to their guilt.

The assumption is that any action in breach of a law that is deemed both rational and reasonable should be conscious and voluntary. There should be evidence of considered responses to situations that enable the court to take into account measures of the intentions compared to "the average persons" reasonable actions.

As was argued in the Victorian anti-hanging case of Robert Peter Tait, the McNaughten Case indicated that 'every man is presumed to be sane, and to possess a sufficient degree of reason to be responsible for his crimes, until the contrary is proved'

In the case *Reg Vs Sullivan* (1984), Lord Diplock said'

"I agree ...that 'mind' in the McNaughten Rules is used in the ordinary sense of the mental faculties of reason and understanding. If the effect of a disease is to impair these faculties so severely as to have either of the consequences referred to in the latter part of the Rules, it matters not whether the aetiology of the impairment is organic, as in epilepsy, or functional, or whether the impairment is itself permanent or transient and intermittent, provided that it subsisted at the time of the commission of the act."

Hodgson says “these ideas are called into question by ongoing developments in neuroscience which in a general way tend to suggest that criminal conduct is a symptom of a brain disorder or illness that should be treated rather than wrongdoing that should be *punished*.”

Current neuroscience studies suggest that we are beginning to appreciate that unconscious thought processes, prior experiences that have shaped emotional and other thought processes and even genetic inheritance may raise legal concerns about presumptions of free will, management of constraints and the nature of thoughts in courts.

From the President

Rationalists support Freedom of Religion and Freedom of Belief. But freedom implies informed choice. If a person is not familiar with alternative belief systems, how can they freely choose which religion or belief system to follow?

This is one of the reasons we support the provision of General Religious Education in schools – so students have genuine freedom of choice. Further, religion has been a significant factor in the history of humankind, for good or for ill, and still motivates both the ‘better angels of our nature’ and its darker side.

ACCESS Ministries are responsible for 96% of Special Religious Instruction (SRI) in Victorian schools. As pointed out in our major story on SRI in this issue, the syllabus they use has been shown to fail both educationally and theologically; it certainly does not provide students with an understanding of a range of alternative belief systems. It is, rather, an overt attempt to ‘make disciples’ of children, particularly of primary age school children. For the most part, parents are blissfully unaware of this.

The debate over the place of religion in Australian schools has a long and rancorous history. In Victoria, the Education Act of 1872 enshrined three principles: that government education should be free, compulsory and secular. Churches have been fighting back ever since.

In the 1950s they had a major win. Following intense lobbying, SRI was allowed during school hours (previously it was only allowed outside school hours). This made it much easier for churches to administer SRI by staggering volunteer time over the school day.

In 2005, the Bracks Government sought to update the Education Act by, amongst other things, giving schools authority over whether or not to offer SRI. Once again, the churches fought back furiously, and they won. Until recently Victorian Education Department policy was that schools had no choice: if an SRI volunteer was available, they were obliged to provide a time slot

during the school day.

Over recent times however, Departmental policy has changed in two regards. Firstly, the previous ‘opt out’ system has been replaced with an ‘opt in’ system. Parents must positively state they want their child to attend SRI, whereas previously it was assumed the child would attend unless the parent specifically objected in writing. Secondly, it seems schools can now decide whether or not to offer SRI, even if a volunteer is available. While the first change was expressed in an updated departmental form, the second change is not widely known.

In 2004 the Lausanne Committee for World Evangelisation published a paper called “The Evangelisation of Children”. Authors of this paper included Wendy Strachan of Scripture Union (Australia), and Graham McDonald, founder of the Australian Christian Heritage Foundation. This paper calls for a world-wide effort to disciple children “no matter how diverse their family or faith background”, recognising that children are “a neglected mission field ... more open and receptive to the gospel than at any other time in their lives”. It urges overcoming ‘barriers’ like families.

In a series of recommendations that would make a corporate planner blush with envy, the paper goes on to recommend strategies for making disciples of children by:

- partnering with governments, businesses and NGOs
- creating a critical mass of organisations to influence mass media operators
- using curriculum as the “servant of evangelisation”
- using sport and music, branding and marketing, technology and social media to push the message (pp 15–21)

This is all based on a set of unwavering beliefs, including:

- children “belong to the creator God”
- God is able to sort out the messiness of children’s lives as they “confess their sins”
- God is an “unseen all-powerful friend who listens to their prayers and answers them”.

And on it goes. Now you might be thinking this is not actually happening in laid back, secular Australia, but not so. The syllabus used by ACCESS Ministries is the embodiment of these recommendations. Professor Marion Maddox, an expert in theology and education, says the ACCESS Ministries syllabus presents a literalist version of Christianity that is “unequivocally evangelical”, that “relentlessly pushes ... students towards cultivating an individual faith” and that urges the view that “being (or becoming) a Christian is the only acceptable life choice.”

Welcome to the Education Culture Wars.

Reason and extravagance

Dear Editor,

I would like to attempt an answer to Sherene Hassan's article Understanding Islam, an article whose claims for Islam are embarrassingly easy to refute. Nonetheless my intent in writing is not to offend, but to reason.

Why would one want to be an apologist for Islam, what is there to misunderstand? When Ms Hassan talks in terms of the word 'shariah' meaning 'path to god', herein is problem number one. There is no god. If religions were required to present a rational argument for the existence of this time-worn, traditional belief in an invisible celestial entity, they could not. No rational argument could prove this assertion.

It is because of the god fallacy that the exercise of shariah (divine will) is practiced. The Koran purports to be the word of god through the Prophet Mahomet – therefore god exists. What sort of argument/proof is that? Is the above perhaps a circular argument: no Koran, no god? No god, no Koran?

Ms Hassan states that when conquered the '...Jews, Christians and Pagans were permitted to drink alcohol, maintain their own places of worship and retain their own dress code', it appears she has forgotten the requisite tax to stay in the area. Either pay the tax or leave or convert to Islam. A tax so exorbitant that many peoples, the Jews most famously, just up and left their Middle Eastern territories, lands occupied by the Jews since before Kings Saul and David, that is c. 2000BCE.

I can't see how Ms Hassan can consider Mahomet's great example of equality of the sexes a viable fact given that his supposed claim that '...all people are equal like the teeth of a comb...' is exemplified by his having 20 wives (not to mention one being a child)? There would be equality here (perhaps), if women could also have 20 husbands (or at least 4) if they so desired.

I'm wondering Ms Hassan, is your

phrase 'aping of western society...' on an animal par with the Koran's claim that some Jews are dogs? Ms Hassan talks about 'colonial imperialism' when referring to feminist discourse.

Would the 'colonial' aspect be in any way on a par with the Muslim take-over of the temple mount achieved on the spurious grounds that Mahomet flew from Saudi Arabia on Buraq in a dream, landing in Jerusalem, which entitled the Muslim take over of the Jewish homeland Palestine?

'Sanctity of life is paramount in Islam'. This claim does not appear to extend to the victims of Islamic suicide bombers – neither do the suicide bombers see any value/sanctity in their own lives, obviously.

A recent example of said 'sanctity' I suppose, is the abduction and murder of the Afghan/Indian woman writer, Sushmita Banerjee being for the horrendous, outrageous, refusal to wear the burqa (the wearing of which, by the way, by Muslim women is known in the west, as 'the female tent look'). And what of the recent burning by her father of a 15 year-old girl caught by her dad chatting on the phone to her fiancé? And again in Yemeni, last month an 8 year-old girl died from internal bleeding on her wedding night to a 30 plus man.

One thing I personally wonder about is what do the Muslim men do with/to the 20 virgins that await each individual male upon death, in heaven? That's a lot of burqas to grace the celestial regions considering, as Ms Hassan tells us, that one in five people on earth are Muslim. The burqa must be worn up there given the Taliban's declaration that 'the face of a woman is a source of corruption'.

I'm also wondering, while on the subject what's in it for the women given equality and all that. Do they have some fun in heaven too, or do they just make the tea all day? How to end my letter: beyond my irony is a sincere well wishing to all believers of religious extravagances and perhaps in time...

Raffaella Torresan

Better sums on the universe

Dear Editor,

It was perhaps an editing error, because I don't believe the author would have stated our sun was born 22 million years ago, or our solar system has just 17 million years to go. Perhaps these numbers should be billions.

Our solar system is 4.568 billion years old, the sun probably formed earlier in a stellar nursery and was sent hurling to its present location in our galaxy by a supernova of a newly forming very large "sun" (see: <http://www.enchantedlearning.com/subjects/astronomy/sun/sunbirth.shtml> and this for the age of our solar system: https://en.wikipedia.org/wiki/Solar_System) P.S. my numbers may be a bit off, I used memory then decided to give you a reference.

Ravi Samson

Is forgiveness a slippery slope?

Dear Editor,

I am wondering if president of the RSA, Meredith Doig really meant what she said on ABC TV News (11.1.14, 7 PM) when she said that teaching our children that there is a God, who loves them, who taught us to love one another, to forgive and to do good to those who hurt us, would "take us down a slippery slope?"

I put it that if we had taught these principles to the previous generation, there would be far fewer reports of drunken violence in our daily news.

Dieter Fischer

Being positive about negatives

There is growing controversy about the validity of scientific research. More than half of published research cannot be replicated. But there may be an even bigger problem, the failure to report negative results.

According to *The Economist* failures to prove a hypothesis are rarely offered for publication, let alone accepted. Negative results now account for only 14 per cent of published papers, down from 30 per cent in 1990. "Yet knowing what is false is as important to science as knowing what is true," comments *The Economist*. "The failure to report failures means that researchers waste money and effort exploring blind alleys already investigated by other scientists."

British science writer Simon Singh says the failure to report negatives is of concern. "I don't think there is anything wrong with half of the scientific results being wrong because of the great power of science."

"It may be poorly funded or it may be very limited statistics and (a case of) 'I am not sure about the result but it seems to imply that X is true. If I am wrong then someone else will do the experiment and say you are wrong Simon.' The first wave of science in any area is going to be pretty haphazard and it is going to get things wrong. But that is not a problem because science will correct itself."

"I am much more worried about science that is not published. I am worried about people who are under publishing. If you get a negative result the practice is to shelve it. There is a big campaign in the UK for all trials to be published. The idea is that if anybody does any medical research they must publish that research. If you don't publish it we are not getting the full picture."

Singh says academic careers are based on publishing good results, not bad results. That creates the impression that it is more effective than it really is. "That is dishonest to patients."

Fusion, not fission

Nuclear fusion, which holds out the prospect of producing low emissions and low levels of waste, has come one step closer. Using laser technology scientists in California have for the first time managed to release more energy from their nuclear fusion experiment than they put into it. It is a critical threshold, which may eventually lead to a self-sustaining nuclear-fusion reactor.

The advantage of nuclear fusion over the much more dangerous nuclear fission is that it uses a fuel source derived from water. It

has none of the more dangerous and long-lasting isotopes, such as enriched uranium and plutonium. That makes it far less risky than conventional nuclear power plants, which rely on the splitting of atoms rather than their fusion.

The researchers, who are based at the Nuclear Ignition Facility (NIF) at the Lawrence Livermore National Laboratory claim they have used 192 laser beams to compress a tiny fuel pellet less than half the diameter of a human hair in such a way that it triggered the net release of energy by nuclear fusion.

The fuel, which was composed of the two hydrogen isotopes tritium and deuterium that were derived from water, was put under enormous pressures and temperatures. The compression occurred for less than a billionth of a second, but this was long enough to measure the fact that more energy came out of the experiment than had gone into it. The scientists claim it showed it was possible to fuse deuterium and tritium in a manner that gets them to run together at high enough speed to overcome their natural electrical repulsion to each other.

Getting older

Astronomers at the Australian National University are making strides in finding the oldest things in the universe. They have dated a star thought to be the oldest yet discovered. The star is named SMSS J031300.36-670839.3. It is estimated to be 13.6 billion years old. The star itself is not a new discovery -- it is faintly visible on existing photographic maps of the southern sky. But the recent dating places it as older than any other celestial body previously found.

Astronomers have also identified an old and distant galaxy that is believed to date back to a time when the universe was just 650 million years old, a fraction of its current age. The galaxy, known as Abell 2744_Y1, is about 30 times smaller than the Milky Way, but pumping out stars at a prodigious rate. If the find is confirmed, estimates of the universe's galaxy-formation would be pushed back by 100 million years to 650 million years after the Big Bang explosion, which is estimated to have happened 13.8 billion years ago.

Previously the oldest galaxy, Abell 2744_Y1, which was discovered in 2012, was thought to date back to just 500 million years after the birth of the universe. It was the first distant galaxy to be found during a new Hubble Space Telescope project that makes use of naturally occurring zoom lenses in space.

Ideology against human rights

The Australian government's disturbing attack on ethical and legal principles.

By Spencer Zifcak

Recently the attention of Australians has focused intensely on Edward Snowden's revelations of the government's snooping on the leadership of Indonesia and Timor-Leste. In Indonesia, a covert recording had been made of the phones of Cabinet Ministers. In Timor, it had been of Cabinet meetings at which the distribution of oil revenues in the Timor Gap had been discussed.

In the latter case the Attorney-General, George Brandis, went beyond surveillance by withdrawing the passport of a key witness who was set to give evidence to the International Court of Justice in Timor's case against Australia on the division of oil revenues between the two countries. He also authorized a raid on Timor's Australian lawyer's office, which, among other things, unearthed confidential legal advice to the Timorese in the case. It provided Australia with a major and unfair advantage in the ICJ proceedings.

To be fair, the original covert activity did not commence on the Abbott Government's watch. Nevertheless, the Government did little, if anything, to allay public concern about inter-country surveillance. The raid swept aside respect for fair trial and comity between nations. One consequence has been a sharp deterioration in diplomatic relations between Australia, Indonesia and Timor-Leste.

Were these isolated incidents of internationally recognized human rights infringements, one might easily enough pass them off as part of the normal cut and thrust of international affairs. What is remarkable, however, is that these instances can now be seen as but one strand in a regrettable pattern of retreat from Australia's international human rights obligations, a retreat that has intensified since the Abbott Government assumed office.

Take torture for example. Recently, the Prime Minister was in Sri Lanka for a Commonwealth Heads of Government (CHOGM) meeting. The gathering was highly contentious because it was well known that Sri Lankan authorities had engaged in widespread human rights abuse during the latter phases of its war against Tamil insurgents. For that reason, some countries stayed away.

Asked about allegations of torture during the war, Mr Abbott said this: "although the (Australian) government deplores the use of torture we accept that sometimes in difficult circumstances difficult things happen". This appeared to be a morally regrettable attempt by the Prime Minister to excuse torture by Sri Lankan government forces during the country's violent civil conflict. His knowledge of international law was clearly deficient.

Australia is a party to the UN Convention Against Torture. It states that no exceptional circumstances whatever, whether a state of war, internal political instability or any other public emergency may, be invoked as a justification for torture. If torture

is perpetrated in a time of armed conflict, and is connected to the conflict, it is a war crime. If it is engaged in systematically and extensively, it becomes a crime against humanity.

The United Nations Secretary-General recently convened an independent expert panel to examine allegations of war crimes and crimes against humanity committed by the Sri Lankan government and the insurgent opposition. The panel found credible evidence that government forces had killed thousands of civilians through indiscriminate shelling. It had deliberately hit hospitals and humanitarian agencies. It denied humanitarian assistance to victims of the conflict, depriving them of food and medical supplies. It engaged in extensive human rights abuse. The abuse included widespread torture, rape, forced disappearances and forced recruitment of children.

To his credit, the Prime Minister of Britain, David Cameron, spent his first day in Sri Lanka visiting the killing fields of northern Sri Lanka. He demanded that the Sri Lankan government establish an independent and impartial war crimes inquiry. Failing that, he said, an international investigative tribunal should be created. The Sri Lankan government immediately refused, describing the request as an improper and unjustified intervention in its internal affairs. Mr Abbott left the conference saying that Australia and Sri Lanka were 'good mates'.

There is no doubt that Sri Lankan authorities were faced with an intensely difficult and often deadly insurgency. The use of torture as a weapon of war, however, is a grave international crime. No amount of Prime Ministerial dissembling can possibly justify or excuse it. Sadly, Mr Abbott denied himself the statesmanship that Mr Cameron so clearly demonstrated.

In late November, Australia was isolated again, this time in the UN General Assembly. The Assembly was considering a resolution that called upon Israel to accept the applicability of the 1949 Fourth Geneva Convention related to the Protection of Civilians in Time of War. This Convention requires humane treatment for protected persons in occupied territory. Civilians must not be used for reprisals or as hostages. They cannot be subject to mass deportation. They are entitled to respect for their family, customs and religion. Women are guaranteed protection from rape and forced prostitution. The Convention also makes it clear that transfer by an occupying power of parts of its own civilian population into occupied territory constitutes a breach of international law. That puts the building of Israeli settlements on Palestinian land in considerable legal doubt.

One hundred and sixty nations voted in favour of the Geneva Convention's applicability. It had after all been accepted universally



since 1949. Australia, however, was one of 5 countries to abstain. A second resolution to end all Israeli settlement activity was supported by 158 nations. Eight, including Australia, abstained.

It is one thing to show one's support for Israel's territorial integrity. There is no difficulty with that. It is quite another to remain quiescent in the face of a resolution that does no more than require Israel to abide by its commitments under the international laws of war.

It is worth inquiring about which parts of the Fourth Geneva Convention the Australian government was concerned. Stopping sexual abuse and the trafficking of women? Preventing civilians from kidnapping and revenge attacks? Prohibiting the confiscation of occupied land for the benefit of an occupying power?

At a push, it was open to the Government to support the continuing application of the Geneva Convention's protective provisions to Israel but to vote against the resolution condemning settlement. That compromise too was declined. So, in the end, the Australian Government failed to uphold one of international humanitarian law's most crucial protections.

It has long been recognized that Australian Governments of both political persuasions have abandoned their commitment to the UN International Refugee Convention in dealing with people fleeing persecution elsewhere and seeking asylum here. The repudiation of the Convention's humanitarian requirements consists in essence of the contemporary refusal by Australian authorities to consider and process the asylum claims of people arriving by sea when they make landfall in this country. Instead, they are shipped off to languish indefinitely in client states such as Papua New Guinea and Nauru.

them to find a home in a safe third country.

The Immigration Minister, Scott Morrison, has rapidly dismantled many measures designed to meet these internationally mandated requirements. He has set aside appeal rights from the initial asylum decisions of immigration department officers. He has denied asylum seekers an entitlement to free legal representation. He has introduced an asylum seeker code of conduct prohibiting behaviour that would not attract a penalty were it engaged in by Australian citizens. He has affirmed that no person who has arrived by sea, including people awaiting the determination of their asylum claims in Australia, will be permitted to resettle here. He has started towing back boats of hope and desperation.

As a result, the Australian Government has been subject to forceful and continuing criticism from the United Nations High Commissioner for Refugees (UNHCR) and has attracted a great deal of adverse international legal and media commentary. In recent weeks, the UNHCR has waded in again, this time in relation to the conditions under which asylum seekers are detained on Manus Island. In an extensive report it found that:

"The current PNG policy and practice of detaining asylum seekers at the closed Centre, on a mandatory and indefinite basis without an assessment as to the necessity and proportionality of such detention in the individual case, and without being brought promptly before a judicial or other independent authority amounts to arbitrary detention that is inconsistent with international human rights law".

It also attacked the conditions under which people seeking asylum were detained. At the time of the UNHCR inspection, single men were being housed in canvas tents which leaked in

"Mr Abbott said this: "although the (Australian) government deplores the use of torture we accept that sometimes in difficult circumstances difficult things happen."

The Convention is clear on how a country should treat a person claiming asylum on these grounds. It must not impose a penalty on a person because she entered its territory unlawfully from a country where her life or liberty was threatened. That is so long as she surrenders to authorities and shows cause why her illegal presence is justified. To make the opportunity for justification real, people seeking asylum should be provided with a fair opportunity to submit relevant evidence, to be represented and to appeal to a properly constituted tribunal in pursuit of a claim for refugee status. If a claim for refugee status is successful, a Convention country is obliged either to resettle the person here or to assist

heavy rain. The tents were close together meaning that people of different ethnic origins lived beside one another, provoking tension between them. The temperature in the tents was very high. Hygiene and cleanliness in ablution blocks was far below any reasonable standard. The conditions in which women and children lived were little better. Women were concerned that their physical security was at risk given the proximity of large numbers of aimless single men. To its credit the Government transferred children and families away from Manus Island in the wake of the UNHCR's concerns.

Most troublingly, the agency reported that the mental

health of many asylum seekers had been adversely affected. The combination of the harsh and penal conditions in which they had been placed, the extended and continuing delay in processing their applications for refugee status, and the indefinite and arbitrary nature of their detention combined to drive asylum seekers into deep anxiety, depression and self harm. Despite this, the Department of Immigration decided recently to abolish its expert advisory panel on the mental health of people in immigration detention.

In a similar vein, Australia's indefinite detention of about 50 refugees who are the subject of adverse ASIO assessments has now been deemed unlawful by the United Nations Human Rights Committee. The Committee is the expert legal body that determines cases brought to it by individuals alleging breaches of their human rights pursuant to the International Covenant on Civil and Political Rights. As to the indefinite detention of these people, most of whom were escapees from the Sri Lankan regime, the Committee concluded that:

"(Australia) has not demonstrated that on an individual basis that their continuous indefinite detention is justified. (It) has not demonstrated that other, less intrusive measures could not have achieved the same end of compliance with (its) need to respond to the security risk that the (individuals) are said to represent... They are also deprived of legal safeguards allowing them to challenge their indefinite detention."

In total, Australia was found to have violated its Convention obligations more than 150 times. The Government does not seem to mind. Mr Morrison has announced his intention to abandon any avenue of appeal to the courts for people who have been determined to be genuine refugees but who have nevertheless been declared by ASIO to represent a security risk.

It may seem to the reader self evident that actions taken by the Abbott Government, and to a lesser extent by its predecessors, are contrary to international law and ethically remiss. But such arguments presently carry little weight in the corridors of power. It is difficult to know exactly why, but one can attempt some educated guesses.

In part the problem may lie with ideology. To a radically conservative government such as the present one, it can seem as if human rights have become a plaything of the Left. The Attorney-General, George Brandis, has often been quoted as saying that the national human rights debate has been captured by leftist ideologues. On this view, it is better for Australia to return to a reliance on traditional common law rights and freedoms rather than comply with an international human rights system that is perceived as too liberal and overly preoccupied with the claims of minorities.

The answer may in part lie in the Government's zealous commitment to national sovereignty. Criticism by international organizations such as UN human rights treaty bodies, therefore,

may be seen as an undue and unwarranted interference in the nation's domestic affairs.

It may in part have to do with the assertive exercise of mandated authority. With the backing of its decisive electoral victory, the Government appears to believe that it is entitled to execute its policies even if they do infringe incidentally on people's human rights. From that perspective, it is not for the legal profession and human rights advocacy organizations to attempt to dictate different terms.

And perhaps it is also to do with individual personalities. Several influential members of Cabinet seem to relish their moniker as hard men or women. Partly as a consequence, they tend to be attracted to military analogies such as an 'arsenal of measures' or the 'war on people smugglers' and to the appointment of military men to provide cover for controversial courses of action.

These stances are not without merit in limited circumstances. Applied rigidly or zealously, however, they can and do clash directly with values and commitments regarded as of fundamental value by the international community and, therefore, incorporated in international law. Ever since the unanimous adoption of the *Universal Declaration of Human Rights* in 1948, in the wake of Nazi atrocities in the Second World War, the rights set down in the Declaration have been regarded by most countries of the world as universal. The right to life, liberty and security is the most obvious example. Freedom from torture and cruel, inhuman and degrading treatment is another. Freedoms of speech, assembly, association, and movement are similarly recognized. These human rights inhere in everyone and provide the essential building blocks for a dignified human life.

That is why more than 160 countries including Australia have become parties to the International Covenant on Civil and Political Rights. It is why the UN has developed and adopted additional human rights instruments to outlaw torture globally and protect against discrimination on the grounds of race, sex, gender and disability. It is why every Western democracy, except Australia, has enacted a constitutional or statutory charter of rights in domestic law. Human rights are not trifles. They inhere in everyone. International human rights law exists to ensure that they are not trampled upon by governments and parliaments in pursuit of power or partisan advantage.

The moral framework that the recognition and protection of fundamental human rights embodies remains active, relevant and enduring. Its practical and ethical content and intention reaches far beyond mere ideological skirmishing or war talk. This is because the basic object of human rights is to place a floor under people's existence as decent, reasoned and purposeful human beings.

If that is so, one hopes that in time the Government may prove itself more perceptive and humane, in thought and action, than its present ideological blinkers would appear to allow.

The time is now

A study of long term social cycles uncovers some disturbing problems.

by Peter Aughton

Last year I was invited by an associate, Professor Merrelyn Emery to review her forthcoming book: *From Tunisia to Occupy and beyond: the new wave of social change, past, present and future*. (Nova Publications). The message is so compelling that it needs to be widely communicated.

Merrelyn's book is based on extensive global social science research conducted over several years. It shows that the current groundswell of protests and unrest gripping the world heralds a new wave of social change that has crucial implications for the future of humanity.

A key finding is the changing nature of the external social environment and the implications it has for individuals, communities, businesses and nation states. The wider community started to transform from a relatively stable field in the early 1900s to one that was quite unstable during the last social wave of change, which occurred in the 1960–70s. Today, it has become increasingly turbulent and uncertain.

The prime driver of this uncertainty is the increasing rate of change in people's values, ideals and expectations. Today, they are changing rapidly and discontinuously, a process accelerated by globalisation, deregulation, and technological change. As all these factors combine they affect the health and wellbeing of individuals, and the viability of organizations and communities.

The implications of this type of change are profound and far reaching. If citizens do not fully understand what is causing the unpredictable social environment, and if they don't have the knowledge and skill to reduce its turbulence and unpredictability, then there will be ominous consequences not only for our businesses and communities, but for all of us.

There is an increase in maladaptive behaviour. The most serious consequence of rapidly changing community values and expectations centres on attitudes and behaviours that are changing across the whole spectrum of society. In particular, both passive and active maladaptive behaviours have strengthened and become more pervasive, affecting different sections of society in areas such as: societal prejudices, responsibility for the common good, people's sense of control and meaning, law and order, emotional support and community stability

This increase in maladaptive behaviours is occurring because many people are trying to reduce the uncertainty and anxiety in their lives even as they live in a complex and unpredictable social environment. For many, this environment is unpleasant and unhealthy.

There are two types of maladaptive behaviours – passive and active. They are maladaptive because, as mentioned earlier, they reduce the probability of changing the source of environmental

uncertainties. Passive maladaptive behaviours are directed at reducing pressing uncertainties. They are most usually seen as the behaviours of the populations at large, the masses. Emery describes it in this way:

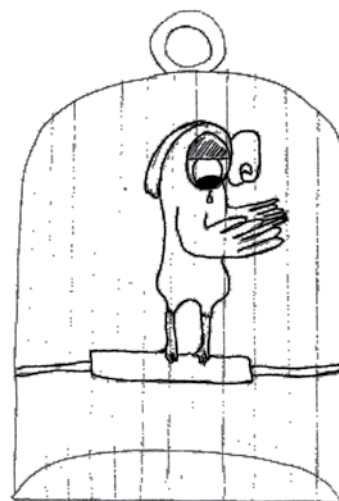
"The first passive maladaptation is Segmentation: in and out-group prejudices are amplified as people attempt to simplify their choices and reduce their relevant uncertainty. Coproduction is restricted to those who are known and trusted so the whole social environment is degraded into a set of fields.

Dissociation is denial that coproduction with others could be more effective in reaching desired goals than acting alone or selfishly. It is to keep oneself to oneself and not get involved with others: the classic leisure pursuit is watching television which is the ultimate in dissociative media. It is essentially a denial of responsibility for the public space and the common good.

The Doomsday response expresses hopelessness that action can be effective or that active adaptive behaviours are even conscionable. Doomsday scenarios see our future as shaped by biological, technological and economic processes that have gotten out of hand and which we can no longer control. It is this quality of lost control that produces the hopelessness that leads to quietly awaiting 'the end' or 'heading for the hills' or the psychological equivalents of these, depression and suicide.

In Superficiality, the relevant uncertainty is reduced by lowering the emotional investment in the ends being pursued whether they be individual or shared. It is a loss of meaning in life and can frequently be seen as permissiveness accompanied by a superficial conformity."

Emery's research shows that in recent years there has been growth in Dissociation and a huge rise in Superficiality. The latter,



Life's Birden

“many people are trying to reduce the uncertainty and anxiety in their lives even as they live in a complex and unpredictable social environment”

she argues, “must obviously be of great concern to governments as it has detrimental effects on health costs, absenteeism and a breakdown in social cohesion as people retreat into fantasy worlds fuelled by alcohol and drugs, and put hedonism, treating oneself and living for the moment, above a regard for healthy living and a purposeful future.”

Together the growth in the maladaptions of Dissociation and Superficiality illustrate the reluctance of many people to engage at a meaningful level. Unless addressed, this behaviour has serious consequences for citizens wanting to generate widespread collective action on sustainable future issues, such as climate change.

Emery’s research also shows that for each passive strategy it is possible to discern an active counterpart. “The active maladaptive strategies are those open to people who can influence or order changes in social arrangements, the elites, while the passive maladaptive strategies are what people can try to do to adjust to situations that are not of their own making. The second set is called active because when the elites perceive a social breakdown or a way to effect an improvement, they seek to initiate strategies to achieve those ends.”

She defines active maladaptive behaviour as follows:

“The active counterpart to segmentation is Law and Order, the effort by the elites to reduce or remove the divisions and restore the whole by the application of strict rules that must be obeyed and if not obeyed, must be enforced. As communities and societies fracture threatening the order and good function of the whole, the elites respond to ‘keep the peace’.”

The response to dissociation is more complex. According to Merrelyn’s late partner, Professor Fred Emery, “dissociation induces, almost creates, its own active maladaptive response; it does not just stimulate others to act against it”. Using the analyses of Eric Neumann, Eric Fromm and Norman Cohn, Fred Emery identified “the evangelical response, the revolutionary millenarianism and mystical anarchism that have surfaced regularly throughout human history, as the alternative dynamic of dissociation.”

Therefore the focus of Evangelicism according to Merrelyn “may be a person or an idea, a focus for concerted action or emotional support that replaces the psychic pain of isolation endured in dissociation. Such a recent example was the extreme display of global identification and grief following the death of Diana, ‘the people’s Princess’.”

Merrelyn argues that the Doomsday response expresses the belief of the people that any further action is hopeless and an adaptive outcome cannot be achieved, so the elites move to manufacture or engineer an outcome. These efforts at social engineering are designed to reassert the possibility, if not

probability, of an outcome. If the people are not psychologically prepared to work for an adaptive outcome, one must be provided for them. It is in the interests of the continued existence and stability of the whole. “Never mind that the outcomes so engineered may be rejected by the population; it is simply inconceivable that the pursuit of outcomes could be abandoned. If the people refuse to be their normal purposeful selves, so they must accept the purposes of the elites.”

One of biggest increases in active maladaptions uncovered by Merrelyn, emerging in the first decade of the century, is social engineering at the global level. “This covers such phenomena as deliberate moves towards economic globalization, the attempts to elevate the corporation over the nation state and the push by business to reduce their regulation.” Ross Gittins of the *The Age* wrote an article entitled *The four business gangs that run the US* (31 December, 2012). It supports this finding.

Finally, Merrelyn observed that the active response to the passive maladaptive behaviours of superficiality is to bring meaning into being by the exercise of far reaching policies and plans that encompass the whole, and govern the behaviour of all those touched by those policies and plans. These plans for comprehensive, long term social change are of course based on the planner’s dreams of the ideal society.

This is active maladaptation and it is called Synoptic Idealism. It expresses the reality that the dreams of these centralized and specialized planners, who believe they exist at the higher reaches of our hierarchical societies, are unlikely to have perspectives that coincide with the dreams and realities of the population at large.

The planners are unlikely to enjoy the commitment of those for whom they plan. After all, the planners are substituting their activity for the perceived inability of the people to plan for themselves. The other major problem is that as social change proceeds rapidly, and in unpredictable ways, the plan will always be subject to the vagaries of rapid change. It will rapidly find itself out of kilter with new realities, generating unintended and often, unfortunate consequences.

Humanity now faces a defining moment in the face of this new social wave of change. If we do not learn from earlier mistakes, and maladaptive behaviours continue to strengthen, then people will be driven even further apart psychologically. In this type of social environment, citizens will find it much more difficult to work together and take collective responsibility to tackle the big picture issues such as climate change, population change, social infrastructure, economic crises, productivity and employment, the growing divide between the ‘haves’ and the ‘have-nots’, a deterioration of wellbeing and mental health, domestic violence, sexual abuse and the many other challenging issues putting at risk our sustainable future.

The Grey Havens

By Matthew Louttit

Pride bound Elrond's mouth, but others gagged
Charily in grey cloaks;
Damp wind called through bent and gaping boards
A bleak *namárië*.

He sent the little wayfarers below.
Barreled sick in oak,
The halflings sought a glimpse of pitching sky
And felt the running waves;

Poor Bilbo's tattered soul was blown to bits
And Frodo found his rest.
The King of Men sat heavily beneath
The hardness of his crown;

Samwise rubbed a bitten arm and, though
The Mallorn tree grew best
Of all, few thought it magic – when they thought
Of anything in Hobbiton.

Whither humanity?

Rapid technological change may soon be changing what it means to be a person

The boundary between science fiction and reality is difficult to maintain when it comes to considering the effects of technology on humanity. It is especially problematic in the area of thinking known as “transhumanism”, a consideration of the ways in which the human species may fundamentally alter, becoming more “virtual”, or like a machine. “We are already transhumanists,” says British philosopher David Pearce, speaking at the Science, Technology, Future conference at RMIT University in November. “We are living longer, we have higher intelligence and we are more concentrated on our well being.”

In this transhumanist world, the imagination knows few limits. Indeed, it is easy to dismiss proponents of transhumanism as prone to exaggeration and, sometimes, outright contradiction. When futurist Ray Kurzweil predicts that humans will be “uploading their minds to computers by 2045” and that “bodies will be replaced by machines before the end of the century,” the flaws in the claims are not hard to find.

Such comments sound intelligible, but closer examination suggests there are problems. We can understand what uploading data might mean, but what does it mean to “upload a mind”? Not much. Minds, at the very least, are aware of themselves. That awareness is not something that can be shoved around like a lump of coal.

Similarly, Kurzweil’s comment about bodies replacing machines is either a statement of the obvious – machines have replaced humans in a myriad of industrial activities – or plain wrong. Humans feel pain. Will that ever be possible for a machine given that no machine is aware of itself?

Such objections to not stop transhumanists, of course. Kurzweil recently commented that humans are going to become increasingly non-biological to the point where the non-biological part dominates and the biological part is not important any more. “The non-biological part – the machine part – will be so powerful it can completely model and understand the biological part,” he claimed. “So even if that biological part went away it wouldn’t make any difference.”

This is the world of transhumanism. It is important, not necessarily for the extreme claims that are being made, but for what is being addressed. The artificial will increasingly be blurred with the natural, and it will become progressively harder to tell the two apart.

A common approach of transhumanists is to create metaphors about how human beings and life on earth will be transformed. One of the better proponents of this is Marcus Hutter, professor in the Research School of Computer Science at the Australian National

University. He describes a situation that he calls the “singularity” a hypothetical scenario in which technological advances “virtually explode”. It is a situation where machines’ capacity to generate new ideas becomes self reinforcing.

Thus Hutter speculates about the possibility of universal artificial intelligence, immortalism, and transhumanism and envisions what he calls the “Omega Point” a time when the universe evolves towards a maximum level of complexity and consciousness. This would lead to “self evolving genetic algorithms” that could evolve its own artificial life, although he acknowledges it would require “a lot of computer power”.

At the centre of Hutter’s argument is his reference to “laws”, which lend his claims an air of inevitability: Moore’s exponential law, Solomonoff’s hyperbolic law, Hanson’s acceleration of economic doubling patterns, and Kurzweil’s epochs of evolution. “You either embrace (the singularity) or you reject it, there is very little middle ground.”

For many, the choice will be the latter. The argument seems to falter at a number of points. There is a difference between imitation and creation. Hutter comments that “all processes are computational and can be simulated, virtualised, with a sufficiently powerful computer.” But for this statement to have any meaning, there has to be a difference between the imitation and the “real”. To then say that the imitation will become the primary reality (which is in one sense a statement of the obvious because everything that happens is real) is to defeat the original distinction.

Still there will be an extraordinarily rapid rate of change. Hutter notes that the computational power of the human brain is 10 to the power 15. “That processing power will be reached in 20–30 years,” he says, citing Solomonoff’s law that computer power doubles every two years. In the Industrial Revolution the economy doubled every 15 years. As computers become more powerful he sees a situation when the economy doubles on a “monthly basis.”

In Hutter’s scenarios there will create great disruptions. “It would be a vastly different world which could be a reasonable approximation of a true singularity. Do we have a choice? I am somewhat pessimistic about that as long as there are market forces.

“Insiders, transhumans or Artificial General Intelligences that participate in the singularity will experience steady progress at “normal” subjective pace. Outsiders will get marginalised, or overwhelmed, or sucked in, or go extinct. (The winners will say) ‘in any case, no-one cares.’

“The end result will be a society of virtuals competing over

resources. Alternative one will be a global government, with the ants doing their tasks. Alternative two will be a monistic world of one super intelligence. Life may become disposable. A belief in immortality would change values. Who is “we”? What is “choice”? Are there universal values?”

It is a dark and often disturbing view, but Hutter’s contentions, as with many materialist arguments, struggles to deal with self consciousness. If something looks to be behaving intelligently is it aware of itself in the way that an intelligent person is self aware? At the very least, it is a hard case to prove. Hutter “solves” the problem by simply asserting it does not exist. “(Can we say that) something that behaves intelligently is intelligent? I believe yes. If a machine behaves in a certain way then it is reasonable to assume that it is intelligent.”

At another end of the futurist spectrum is Peter Ellerton, director of the University of Queensland’s Critical Thinking Project. Unlike Hutter, he emphasises the importance of self awareness in education and thinking, offering a more human-centric view of the transformed world of the future. Thinking skills, he claims,

ecosystems, freshwater exhaustion, soil loss, over population, climate change and weather volatility. There is also the risk of financial or economic collapse.

To van Gelder, this makes speculation about transhumanism redundant. “Obviously they (the risks) are all interdependent. If one happens we can perhaps handle it, but there is a high probability that some combination will happen. These are collective problems that require collective action.

“If we make it through the next 100 years then we can worry about superintelligence. But I am more worried about the next few decades. We don’t have the collective capacity to deal with these problems. How can we identify public wisdom as opposed to public opinion to make governments accountable? An electorate is a certain type of supermind.”

Another area of vulnerability that may prevent us entering a transhumanist era is pandemics. Globalisation has made it more likely that viruses can be transported around the world, decimating populations. While epidemics are common in history, in a more artificial world they spread wider and more easily.

“bodies will be replaced by machines before the end of the century” – Ray Kurzweil

need to be learned and developed (with the implication that there is a little more involved than just developing algorithms or feeding data into a computer).

Ellerton argues that the frames that we use to think are often created by others, sometimes accidentally. They end up limiting the range of possible solutions and inhibiting our effectiveness. A value shift from knowledge to inquiry is needed to anticipate the future, about which we only know that we do not yet know what we need to know.

The human race may create catastrophe, according to Ellerton. Thinking well is our best defence. “I think our basic danger is not to recognise who we are and how we operate. I don’t think technology will get there in time. Our political systems, our power systems and our economic systems are in control of us. We have to do more in terms of basic education.”

Tim van Gelder, founder of Austhink Software, a polling firm believes many of the choices are bleak. “We may not have time, I am very pessimistic.”

Van Gelder offers a more collective view of human thinking (inter-subjective rather than objective or subjective). He compares human thinking with a bee colony. “A bee colony is a supermind. It doesn’t have qualia (subjective life) – I am not sure I have. It doesn’t have artificial intelligence. But it does have a mind. No individual bee has anything like the knowledge of the swarm. I think it is a real scientific example of a supermind.”

There is a collective human mind, according to van Gelder. But he holds out little hope that it will be able to stave off catastrophe. “We are facing the horsemen of the apocalypse.” He lists collapsing

Nobel prize laureate Peter Doherty, who specialises in how the immune system recognizes virus-infected cells, says that the term “pandemic” refers not to a disease’s severity but to its ability to spread rapidly over a wide geographical area. Extremely lethal pathogens can be usually quickly identified and confined but the rise of high-speed transportation networks and the globalization of trade and travel have radically accelerated the spread of diseases. Doherty cites the case of a traveller from Africa who arrived in New York in 1999 carrying the West Nile virus. One mosquito bite later, it was loose in the ecosystem.

The main threat of a pandemic comes from respiratory viruses, such as influenza and SARS, which disseminate with incredible speed through air travel. “To be a pandemic it has to spread in the respiratory route: sneezing and coughing. With gastro-intestinal (transmission) you can wash your hands. But you can’t decide where to breathe and you can’t stop breathing.”

Influenza is especially infectious and there is a high concentration in the respiratory tract. “People can breathe out the virus when they still feel OK. They go around the world on jumbo jets incredibly quickly.” The screening, which used to take three months, can now be done very quickly. But screening cannot stop the spread.

If humans survive van Gelder’s horses of the apocalypse and Doherty’s pandemics, they will certainly be changed creatures. The transhumanist claims may seem implausible when applied to the mind. But there is little doubt that there will be great changes to the physical make up of humans.

Scott Watkins, head of CSIRO’s research stream on Organic

Photovoltaics Technologies says nanotech advances, such as scanning tunnelling microscopes, peptide fibres, zinc oxide nanorods and magnesium sulphate crystals will lead to advances in medicine. In time, he claims, nanomedicine may help alleviate the effects of, and lead to cures for major diseases such as cancer, diabetes, cardiovascular diseases, multiple sclerosis, Alzheimer's and Parkinson's disease.

The societal and economic impact, says Watkins, will be "immense" requiring constant review, examination and assessment. There are also issues of unexpected toxicity and potentially dangerous environmental impacts.

Even greater changes to matter are suggested by the work that is being undertaken in quantum mechanics, a foundational theory based on the ideas of Max Planck over a century ago. Professor Lloyd Hollenberg, deputy director of the Australian Research Council Centre of Excellence for Quantum Computation and Communication Technology at the University of Melbourne, says Australia is taking the lead in the field.

Because of rapidly improving abilities to control single atoms and photons, it is becoming possible to glimpse the true nature of quantum reality. Quantum computing may be possible, creating hitherto unimagined computing power. "A completely new class

One trend that does seem inevitable is that the pace of change in computer power will be intense. Indeed, it is the extreme speed of computing innovation that is the main reason for the transhumanist speculations. If a man made machine, the computer, can be improved so fast, then how will it come to affect its creator? It is the Frankenstein problem on an entirely new level.

Tim Josling, who worked on internet banking applications in Australia and is now a full time researcher into artificial intelligence, technological singularity and transhumanism, believes the world is at the beginning of an "explosion" in the everyday use of artificial intelligence. After decades of disappointment and frustration, artificial intelligence and machine learning applications are appearing everywhere. They are about to change our world in ways that are full of both promise and risks.

Josling airily dismisses questions about free will, the problem of consciousness and other philosophical questions as false questions, citing his studies of the Austrian philosopher of language, Ludwig Wittgenstein. To him, artificial intelligence is simply an exercise in matching the computational power of the brain.

An example is the Google self driving car, which will have a large impact over the next ten years. "You could put me in taxis and I would no longer be in fear of my life," says Josling. "With AI

"How do computers explore their own consciousness? Can a zombie understand what it is to be a zombie?" – David Pearce

of technology based on these strange rules is being developed, with possibly far reaching implications."

Hollenberg's observations are full of Zen like paradoxes. "Things can be in multiple states at the same time." "By making the measurement, we will destroy the measurement." "We can never know where an object will be, only where it might be." "It's a non-objective reality".

He acknowledges that while we do not, and possibly cannot, fully comprehend the "sublime strangeness" of quantum mechanics, a growing movement around the world is seeking to harness the awesome processing power of microscopic systems obeying quantum laws. He describes it as an international race to design and build new technology based on aspects of quantum mechanics, with enormous potential for communication, computing and imaging applications.

"Already quantum sensing of biological processes is becoming a reality, and ultra-secure quantum communication systems are being rolled-out around the world. The far flung future of this new quantum technology is the construction of a full-scale quantum computer, potentially a leap forward in information processing far greater than the development of the modern computer. But we will have to have a massive amount of redundancy to develop a quantum computer."

we have had a lot of disappointment, but I think we are on the cusp of incremental improvement. In the past AI was code for "what computers can't do yet".

Josling says there is still a big gap between the computational power of the brain and computers. The human brain, he says, is 10 to the power 9 instructions per second "on only 40 watts". But computers' processing power, he says, increases by a factor of 10 every ten years.

Josling acknowledges there has been great over confidence about artificial intelligence in the past. The focus instead ended up being on working out how to operate within limited resources. Getting computers to "learn" has also proven problematic. But in areas of Japanese manufacturing and money and security systems, computers that can partially match the brain are being developed. There is also the prospect of a fully automated fast food outlet.

"We might start to get to the point where people are unemployable," says Josling. "We can throw people on to the scrap heap or we can look at other options."

The deep uncertainties about the future are highlighted by a question posed by the British philosopher David Pearce: "Will humanity's successors be our descendants?" It is a transhumanist question. Pearce acknowledges that altering human nature is thought by some to be "the most dangerous idea in human

history” but he believes that changes are required.

Pearce addresses an issue that arises in a more artificial world, our ability to create happiness. In a natural environment, the first emphasis is to adapt, and any happiness is a bonus. But in an artificial environment, the system itself can be crafted to make people happy. “The brain is not designed for happiness, it is designed for survival,” he says.

Pearce believes the tempo of human evolution is about to accelerate because of a reproductive revolution in which parents start making “designer babies” in anticipation of their behavioural effects. The “blind” genetic roulette will be replaced with self conscious evolution.

In consequence, he says, life on Earth will also become progressively happier. “Future parents can enjoy raising a normal transhuman supergenius who grows up to be faster than Usain Bolt, more beautiful than Marilyn Monroe, more saintly than Nelson Mandela, more creative than Shakespeare – and smarter than Einstein.

“Greater-than-human biological intelligence will transform itself into posthuman superintelligence. Cumulative gains in intellectual capacity and subjective well-being across the generations will play out over hundreds, and perhaps thousands, of years.”

Pearce looks forward to a time when humans get off what he calls the “hedonic treadmill”, the endless round of unhappiness and suffering.

He argues that happiness, or at least a reduction in unhappiness, is frequently sought. But for sentient creatures, both personally and collectively, Darwinian life is not very smart or successful in its efforts to achieve long lasting well-being. The harshness of nature militates against it. “Humans are not getting any happier despite technological advances. In absolute terms, the amount of suffering in the world increases each year in humans and non-humans alike. Evolution sabotages human efforts to their subjective well being.”

Pearce points to discontent, jealousy, anxiety, and perpetual striving for “more”, as instances of evolutionary adaptation. But they impede the pursuit of lifelong bliss. Only now, he claims, can

biotechnology remedy organic life’s innate design flaw.

In other words, there is still that troubling problem of self awareness, which will not go away. Pearce acknowledges that he still has to deal with the problem– the fact that humans are aware of themselves in a way that machines are not. He asks the question: “Why does consciousness exist at all, why aren’t we zombies?” No obvious answer appears.

One problem, Pearce admits, is that there is a unity to perception and a unity of self. This has implications for a purely physicalist reading of things. “How is (unity) possible when brain cells are discrete objects?”

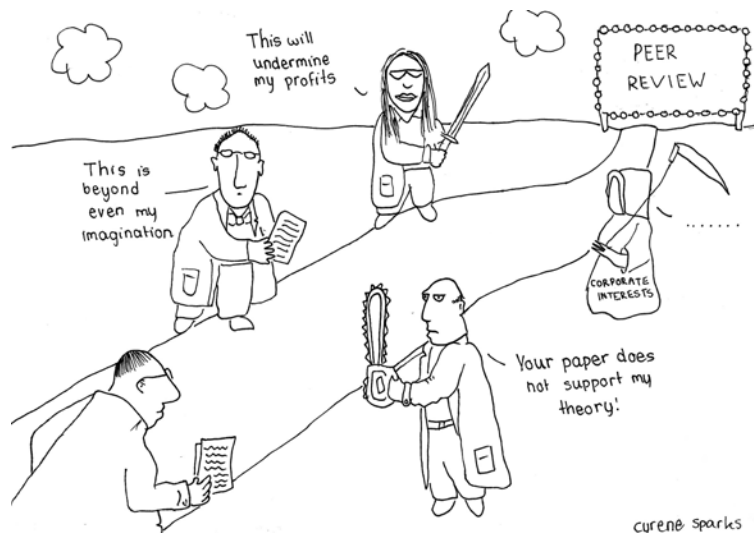
Pearce describes the mind–brain problem as “incredible” given that we “are our own aggregation of discrete atoms of mind dust.” He concludes that classical computers will not be able to explore consciousness, and he is “sceptical that we will be able to upload ourselves.”

“I do not know how to defend free will. How can we program our silicon robots to experience red? How do computers explore their own consciousness? Can a zombie understand what it is to be a zombie? According to orthodox materialism, consciousness should be impossible.”

The philosophical problems, in other words, are as intractable as ever. The era of transhumanism may be one of vast technological change, but when it comes to computers “replacing” human beings it is not merely a technological issue, a function of computational power.

Can computers “learn” for example? To learn something one has to be self aware. It is hard to see how an algorithm in a computer can be aware of its being an algorithm in a computer. It can appear to be aware of itself – exhibit behaviours that are consistent with how a human will act when self aware – but that will only be an appearance, an illusion. Even in an era of hyper-change, there are some things that will not alter.

The era of transhumanism may be one of vast technological change, but when it comes to computers “replacing” human beings it is not merely a technological issue, a function of computational power.



cyrene sparks

Question: Does rationalism imply atheism?

Ian Robinson is professor emeritus of the Rationalist Society of Australia.

Is there a necessary connection between being a rationalist and being an atheist? To answer this, we must tease out what we mean by 'rationalist', at least as the term applies to the Rationalist Society of Australia.

The word 'rationalist' came into currency as a characterisation of the theories of knowledge held by the so-called Rationalist Philosophers of the seventeenth century – notably René Descartes (1596 – 1650), Benedict Spinoza (1632 – 1677) and Gottfried Leibniz (1646 – 1716). These thinkers held that the general nature of the world could be established a priori by demonstrative reason. They believed that our central concepts are derived not from experience but from reasoning.

In this sense it is the opposite of empiricism, the theory principally associated with John Locke (1632 – 1704) and David Hume (1711 – 1776) which held that all our concepts derive from sensory experience and that knowledge is only verifiable by reference to sensory experience. This is the underlying epistemology of modern science and one might even claim, modern civilisation.

Perversely, the late nineteenth century movement of freethinkers and secularists in England who called themselves 'Rationalists' grew out of the second tradition, rather than the first. They embraced empiricism. For them reason and logic were opposed not to empirical evidence but to irrational beliefs, especially about the supernatural, and to the arbitrary authority of the Established Church and other conservative institutions. When in 1885 members of the movement set up in London what was to become the Rationalist Press Association and eventually the Rationalist Association, their target was clear. They defined rationalism as "the attitude of mind which unreservedly accepts the supremacy of reason, and aims at establishing a system of philosophy and ethics independent of all arbitrary assumptions or authority".

The RPA and its publications were highly influential in the formation in Melbourne in 1906 of the group that became the Rationalist Society of Australia.

Despite its name the rationalist movement was more than just a club to promote what used to be called "clear thinking". It embraced empiricism, materialism and naturalism, which held that the material world is the only world there is. And it also had roots in another radical movement of the time – humanism. Indeed, the RPA/RA journal is called the *New Humanist*.

So we might say the three pillars of rationalism, both in Great Britain and here in Australia, are naturalism, humanism and rationality.

First, rationalists accept the basic world view of naturalism which has been conveniently summarised by the American philosopher, John Searle

- There is a real world that exists independently of us, independently of our experiences, our thoughts, our language.
- We have direct perceptual access to that world through our senses, especially touch and vision.
- Words in our language, words like rabbit or tree, typically have reasonably clear meanings. Because of their meanings, they can be used to refer to and talk about real objects in the world.
- Our statements are typically true or false depending on whether they correspond to how things are, that is, to the facts in the world.
- Causation is a real relation among objects and events in the world, a relation whereby one phenomenon, the cause, causes another, the effect.

Rationalists are also humanists in the sense that they believe that human beings create their own meanings and their own purposes, rather than receiving them from the gods or God, and they evolve their own values and ethical principals from the necessity of human beings living together, principles without which society could not operate, and which it is therefore rational to adhere to. These principles get their warrant from what Raimond Gaita has called our 'common humanity'.

These basic human values have been conveniently summarised by the American rationalist and philosopher Paul Kurtz as what he calls the 'moral decencies':

First are the moral decencies that involve personal integrity, that is, telling the truth, not lying or being deceitful; being sincere, candid, frank, and free of hypocrisy; keeping one's promises, honoring pledges, living up to agreements; and being honest, avoiding fraud or skullduggery.

Second is trustworthiness. We manifest loyalty to our relatives, friends, and coworkers, and we should be dependable, someone they can count on, reliable, and responsible.

Third are the decencies of benevolence, which involve manifesting goodwill and noble intentions toward other human beings and having a positive concern for them. It means the lack of malice (nonmalfeasance), avoiding doing harm to other persons or their property: We should not kill or rob; inflict physical violence or injury; or be cruel, abusive, or vengeful. In the sexual domain it means that we should not force our sexual passions on others and should seek mutual consent between adults. It means that we have an obligation to be beneficent; that is, kind, sympathetic,

compassionate. We should lend a helping hand to those in distress and try to decrease their pain and suffering and contribute positively to their welfare.

Fourth is the principle of fairness. We should show gratitude and appreciation for those who are deserving of it. A civilized community will hold people accountable for their deeds, insisting that those who wrong others do not go completely unpunished and perhaps must make reparations to the aggrieved. This also involves the principle of justice and equality in society. Tolerance is also a basic moral decency. We should allow other individuals the right to their beliefs, values, and styles of life, even though they may differ from our own. We may not agree with them, but each individual is entitled to his convictions as long as he does not harm others or prevent them from exercising their rights. We should try to cooperate with others, seeking to negotiate differences peacefully without resorting to hatred or violence.

Anyone who approaches life from a humanist point of view will strive to put these principles or principles like them into action in their own lives, and to work towards social, political and economic structures that facilitate and embody them.

Last, but not least, rationalists are committed to rationality, both in their beliefs and in their behaviour.

In forming their beliefs, a rational person relies on empirical evidence, logic and thoughtful reflection, not on unthinking obedience to authority, blind faith or mere guesswork.

Thinking rationally involves a number of key aspects:

- thinking that is consistent with the laws of deductive logic, and accepting such inferences as are involved in chains of deductive reasoning, such as “all humans are mortal / Socrates is a human / therefore Socrates is mortal”, and that from “everything has a cause”, it does not follow that “there is a (single) cause of everything”
- understanding the logical implications of the meanings of words, for example, if Jacob is a bachelor it implies that Jacob is not married
- understanding the principles of inductive logic, that is being able to reach factual generalisations from observational and experimental data, and being alert to both the possible sources of error, including sample size and bias, observer bias, confirmation bias, etc, and to ways to guard against error, such as testing beliefs, multiple trials and double-blind experiment protocols
- understanding how the laws of probability and statistics govern the drawing of conclusions from empirical data, for example, if, as is the case, a large number of people every night have dreams involving a threat to or the death of a loved one, then rationally no significance can be attached to the fact that every now and again one of the people dreamed about actually does die; indeed it would be anomalous and in need of explanation

if this did not happen – if not one of the many people who were dreamed about ever died

- being aware of and taking steps to minimise common sources of human error in reasoning, such as social and cultural biases, self-interest, limitations of memory and unconscious urges and desires

Behaving rationally involves

- deciding on goals and needs that the evidence and logic suggest are likely to enhance one’s well-being and survival
- acting in a way that the evidence and logic suggest is likely to achieve one’s goals and needs
- acting so as to treat other human beings as ends in themselves rather than as means to your own ends
- acting in such a way as to improve and enhance the environment in which you live that supports and sustains you.

This is not to say that being a rationalist guarantees that you will so believe and so behave. This ought to be the aim of a rational person, but rationalists are as subject to the frailties of human nature as the next person.

Given rationalism’s foundation on the three pillars of naturalism, humanism and rationality, is there any room for a rationalist to be an atheist?

Humanism does not by definition rule out theism. Some humanists are agnostics and there have even been people who call themselves “Christian humanists”.

Some believe that rationality rules out theism, and while I tend to agree with them, it is a highly contested area and thinkers like Richard Swinburne in England and William Lane Craig in the US have argued vehemently that their belief in God is rational.

However, the part of the rationalist edifice on which theism indubitably founders is naturalism, according to which nothing exists except the natural world, so there is no room for god, or the supernatural in any form.

Because being rational and being swayed by the evidence are generally thought to be good things, believers in the supernatural have frequently attempted to pry rationalism away from naturalism and into their own camp in a number of ways.

Up until the time of Darwin, the apparent well-designed character of the natural world could persuade some believers in naturalism that a higher power might to that extent be involved. But Darwin showed the apparent orderliness of nature could be explained by natural causes, in particular, natural selection. So despite some recent attempts to revive it, this has been an unacceptable line of argument for the past 150 years.

Contemporary transcendentalists attempt to find a crack in naturalism at either the macro or the micro levels. Ultimately they fail for one or both of two reasons, (1) they misunderstand the science or (2) they beg the question – the argument can only be stated by assuming that a transcendental entity called ‘God’ is a

meaningful concept, and this is what the atheist denies.

At the macro level, transcendentalists point to the uncertainties in science's account of the origin of the universe, particularly around the so-called Big Bang, and suggest that this leaves the door open for God. But this assumes what it is trying to prove – that a supernatural God is a logical possibility, which is what naturalism rules out. The arguments that assume what they are trying to prove commit the logical fallacy of *petitio principii*.

At the micro level, the level of subatomic particles and quantum theory, there is so much that is still contested or simply not known, that it is a prolific hunting ground for those who wish to salvage some vestiges of the supernatural from the uncompromisingly materialistic universe of science. The post-modernists seized on Heisenberg's "Uncertainty Principle" to argue that because Heisenberg says nothing is certain, then truth is relative. But if they'd bothered to try to understand the science they would have realized that the "Uncertainty Principle" could have just as easily been called the "Certainty Principle", because basically what it says is that if you are certain of one aspect then at that moment you can't be certain about the other, and vice versa. You can't accurately measure mass and velocity at the same time. But you can be certain of one of them.

Other aspects of quantum theory are also misunderstood by transcendentalists. For example, they make a big fuss about so-called 'wave-particle' duality of light. But this is not an ontological paradox but merely a function of how one tries to measure the light. Measured in a crude way, light may seem to behave like a wave, but modern measurement techniques have established that there is no doubt that light is made up of particles called photons. In the authoritative words of Richard Feynman:

"I want to emphasize that light comes in this form – particles. It is very important to know that light behaves like particles, especially for those of you who have gone to school, where you were probably told something about light behaving like waves. I'm

telling you the way it does behave – like particles."

So no mysterious contradictions are involved and no transcendental conclusions can be drawn.

This not the place to go into a more detailed discussion of the distortions of, omissions from and unjustified extensions to quantum theory perpetrated by the many deluded New Age gurus such as Depak Chopra and Amit Goswami. Mathematical physicist Prof John Polkinghorne calls such caricatures of science 'quantum hype'. For more information, I refer the interested reader to the excellent book by Victor Stenger: *Quantum Gods: Creation, Chaos, and the Search for Cosmic Consciousness*. For now it suffices to affirm that there is no comfort for transcendentalism or theism in quantum mechanics.

Between these two extremes, the macro and the micro, some transcendentalists have opened up a third front around the contested notion of consciousness. This is another area in which science does not have all the answers. But again, without going into detail, the fact that science cannot yet explain something does not imply that the explanation must lie outside science. Over the centuries science has a very good record of finding naturalistic explanations for a wide variety of phenomenon that seemed at an earlier time intractable. There is no reason to suppose it will not continue to do so.

So there are no transcendental fissures in the edifice of naturalism and because rationalists are ipso facto naturalists they can never be theists and by definition must be atheists (or at the very least agnostics).

We accept that in an infinite universe, there will always be things we naturalists don't know yet. We should never expect to have all the answers. Each new solution opens up new horizons of uncertainty. This is one of the things that makes science, and being human, and being alive today, so exciting, and one of the joys of being a rationalist.

Jacob Jonker is author of MYSTORIUM, a New Paradigm quantum philosophy guide for Sole survival.

Is a rationalist necessarily an atheist? To a casual observer such as myself, who has had the *Australian Rationalist* journal to read in recent years, this may well seem so at first blush. Amongst rationalists, a bias against religious belief and in favour of atheism has been apparent. This, given the stated aims of rationalists, is a curious state of affairs. Rationalism, in my understanding, is a broad church. To deny the spiritual life and dismiss the religious element in psycho-social, sociopolitical, cultural and macro-economic affairs as mere superstition is an odd position to take for people who consider themselves rational.

Free-thought, the basic tenet of the *Australian Rationalist* Society, is also the seminal *raison d'être* of freethinking atheists.

Rationalists and atheist freethinkers are seen as brothers-in-arms. Yet they are not one and the same. How is it, I wonder, that so many proponents and proselytisers of free thought are atheists, which in my view is a faith-based creed? It is an important issue to examine.

To be fair, there are rationalists who do profess religious belief, are consciously spiritual by nature, or who choose to be agnostic. Still, would it not be useful to pry apart the atheist (pseudo) rationalist from the true rationalist, to designate the atheist rationalist as a fundamentalist rationalist and the religious, spiritual or agnostic rationalist as a latter-day or true rationalist?

Atheism is a belief, or rather disbelief, which, rationally

speaking, is quite at odds with the acknowledged principles of rationalism. Whereas religious belief does not automatically signify lack of reason and rationality, the atheist rationalist must be reckoned a contradiction in terms.

There can be reasonable grounds for disbelief in a Creator, but the universe, as far as we can see, is a fact. Even if one posits that the universe created itself, that still leaves the possibility that there is a Creator of all that is. Lao Tzu, a Chinese sage who lived about 2500 years ago, called it the Tao, albeit with the rider, “The Tao that can be spoken of is not the eternal Tao”.

Equally, it is possible to support the position that religious belief need not be irrational, that it may at times be very rational, and that the spiritual life is real. Such an argument could satisfy the most diehard rationalist. It will only be those faith-based atheists who believe the universe appeared from nowhere, out of nothing, with a bang or otherwise, who will continue to believe that it was not created, who disbelieve what they see, touch, feel, eat, drink and experience.

Religions reflect the inner world of people as expressed in a psycho-social and sociopolitical context. The religious theories are taken as fact by most of the adherents and internalised, used to build an inner world. That inner world is surely “real”, even if it is dismissed by atheists. These inner worlds give people personality and character and are used as a template to help navigate and deal with the outside world. To use a computer analogy, they are like the brain’s “hardware” and the mind’s “software”. Religious belief can be likened to early basic computer programming. People need an inner picture or inner world and the programming to go with it to be able to connect and communicate with the outside world in order to function.

As we grow, our brains are being formed and connections made. Post-partum, an inner picture emerges in the mind as we become conscious. Without that inner picture, there will be no outer picture, no conscious mind, and no world to observe for the body in question.

Science is based on arguments about evidence. Even when there is agreement amongst scientists and the claims made seem plausible, there is often evidence to the contrary. This process works well with materially verifiable facts, but not with belief systems. To round out one’s inner picture it is necessary to be rational about what to accept as fitting into one’s world view, what to reject, and what method to adopt to deal with the daily avalanche of information.

Even if we accept that religious belief is an outdated, even ancient, kind of human software to many people in the West, secular ideologies are hardly an improvement. My impression is that the followers of secular ideologues have an impoverished inner life.

The deeper inner life is real, even if some are more aware of

it than others. Each person’s inner life is unique and there are often enormous differences between individuals, cultures and societies. Some are very aware of their inner life and identify as being religious or spiritual. Some are not so aware.

The means to prove that the inner life of people does exist as a fact must rely on the individual delving into her or his inner being. The inner life is one part of our existence which we cannot show as “evidence” to others, except indirectly through the life we fashions for ourselves. This is the problem for “fundamentalist” rationalism. There are vast areas of human experience beyond our capacity for direct fact finding and understanding.

Atheists argue that they have seen no evidence of any God. They oppose such belief being proselytised by others. It is my contention that to deny a concept believed in by someone who wishes to be rational it is necessary to have proof that the person’s belief is false. Belief in a personal God cannot be proven or falsified. It is experienced as inner reality. It would not even help if God or one of the many gods were to appear in the flesh on earth. No matter what kind of tricks or miracles this materialised God, or god, were to come up with, some people would believe, others would be quite unconvinced.

Rationally speaking, to deny the existence of an experienced inner reality in another person is unhelpful. Equally, I do not deny the atheists’ lack of inner experience in relation to a universal creator or spiritual being. Atheism is a belief to which the atheist is perfectly entitled.

Nevertheless, I believe rationalists should re-visit the imagined rationale for atheist belief. The only good atheism has done in the world, that I can see, is to attack corrupt and corruptive institutionalised religion and its rotten hierarchies. But this needs to be tackled with more acumen and finesse. Atheists are by their very nature bereft of spiritual ‘antennae’, which limits what they are able to bring to bear upon these institutions.

It is a task best suited to rationalists who are able to sympathise, at the very least, with the spiritual life of religious believers. Although there is also a good case for criticising blind faith, atheist or otherwise one has to be circumspect, non-discriminatory and self-critical. We are of necessity embedded in a matrix of relationships; the basic psycho-social and material/economic requirements to enable our functioning. Attacking individuals about their “hardwiring” and the accompanying “software” that they need to function in daily life is not rational.

It is not too farfetched to look upon religious belief and the various secular ideologies as being in competition with each other. There is a struggle for survival within the different arenas, fields of contest, which help develop the evolving software/mindset of individuals. They also are the basis on which supporting societies and institutions compete and evolve, or die out.



The accidental secularist

An intriguing account of life as a wandering Kurd

By Arash Rashidian

Looking back, I could have been so many things. Odds were against being a secularist. In August 1968, the first piece of bad news my Dad got when I was born was that I was not allowed to have a Kurdish name. Presumably because the Shah of Iran thought that a distinct Kurdish identity was an impediment to progress, so ‘let’s start with some proper upstanding Persian names for everyone’. There are over 30 million Kurds in the Middle East, and as refugees, throughout the world. One of the world’s largest minorities, we also probably hold the record for persecution by the most UN recognised countries.

My Dad, being the rebellious type, of course named me after the Iranian equivalent of Robin Hood. And so the seeds of non-conformity were sown.

I was born into a large extended family with contrasting views of religion, justice, right and wrong -- and even happiness. My grandfather on my mother’s side was a tiny wiry man. Blue eyed and light haired with a gentleness about him, which belied his command of the family’s affairs, he was an educator in the now notorious religious Madrassa system that extended into Iran at the time. He was well respected and, dare I say, there was a bit of adulation. As far as I could see at that age, god was incidental to his desire to teach. I never saw any evidence of extremism or dogma from him.

My other grandfather was a giant blue eyed gruff butcher with a taste for the good life. Kurds apparently descend from European migrants going back several thousand years. Blue eyes and fair hair are not uncommon among Kurds. He loved horses and apparently threw lavish parties that my dad had to pay for many years after his passing. My father had a taste for Soviet style socialism and my mother was not devout, but had faith. Dad has long since seen the error of his ways and Mum ever so quietly retains her own version of belief, though in a very personal sense.

During the primary school years I was taught to keep my mouth shut at school. It did not pay to tell people you were a Kurd. Through 1978 and early 1979 things got really tense in Tehran. The stern briefings about saying nothing in school created fear and anxiety about what I might unknowingly let slip that might land my Dad in gaol or worse. Through the northern winter of 1978 things worsened. Sitting at home playing cards with my aunt and younger brother on a snow covered Tehran afternoon, suddenly automatic fire started outside. We froze and looked at each other waiting for the echoing of gunfire to stop. It didn’t for what seemed like an eternity. We lived just behind Tehran University, the hub of the 1979 revolution. Later, we learned the firing didn’t stop because it

came from one of the large calibre belt fed machine guns they had in the back of the trucks. We walked past it every day to school for some time. Fear started to take hold.

I realise now I may have been destined to die a slow death in one of Iran’s notorious torture houses because I could not keep my mouth shut. Or perhaps a fast one on a battle field in the long and pointless war with Iraq. Or I might have become a rebel traipsing across the Zagross mountains as a freedom fighter deluding myself that I was free and fighting for a worthy cause. Or I might radicalise and side with the repressive government as a Muslim fanatic -- as many members of the distant family chose -- and die for my place in heaven.

As luck would have it, neither happened. My Dad got a bursary to go to the UK to study. The idea was that he would return to Tehran University with better options. And so began a miserable experience of adjusting to a northern English life. There were days when taking my chances in the trenches on the Iraq border seemed preferable to another miserable Sunday afternoon in Newcastle. At least there I would have had familiar people around me in the same bind.

I learned what it felt like to be second class citizen in England – same, but different, to the experience as a Kurd in Iran. Life as a refugee for those first seven years was forgettable. After my Dad completed his PhD we were all ready to go home, albeit reluctantly. Rumour had it that he was on some execution list at Mehrabad airport in Tehran. Iranians were efficient that way; they took you round the back and shot you even before you could collect your luggage from the carousel.

Fascination with faith, with a basic command of English, led me to pay attention in Religious Education classes at school in England. Before long, the joke in the staff room at school was that I came top in the RE exam, and was the only non-Christian in the school.

By contrast, the misery of English life made me resent the religious zealots in Iran who stranded us in England. I wished most nights I had a god like power that I could use to make them disappear. Rage seemed like a powerful driving force towards my own brand of faith.

At about that time we were befriended by an English family who were devout Church of England. Religion seen their way did not seem so bad after all. They took me and my brother on sailing holidays in the Lake District, which were idyllic moments in an otherwise miserable schooling experience. So here was a choice; faith, practiced with kindness and generosity could be a perfectly

acceptable way of life. Set aside some basic problems with the premise that a god exists and the rest seemed easy.

In my early twenties, all thoughts of having a faith lifted from my mind, but a vacuum remained. I knew by then I could not lead a life based on established religion, an off the shelf 'cook book' guide to life if you will. I recoiled from the actions of those who committed the horrors in the name of khoda (god) in Iran and also resented my own yearning for god like power to 'smite' them. I eventually gave up having open conversations with those with established faiths for fear of losing teeth. Conflicting, confusing signposts everywhere.

In 1998 I went backpacking around Asia. A mesmerising three months touring Borneo, New Zealand and Australia. Suddenly in Australia, I was in an English speaking country where I did not feel like a second class citizen. How pleasantly odd.

Secularism came to mean no one could see my foreignness, and I saw no one else's. They might dig at my accent from time to time

explains the multiple waves of young Iranians willing to risk their lives on the way to Christmas Island.

On 26 January 2005 I became an Australian Citizen by choice, because I felt among equals. I never really knew what a Kurd was, I was certainly never an Iranian even though I am told strictly speaking I can't relinquish being one, and I resented being a refugee in England, a second class human. Being a secularist for me today also means a real freedom from patriotism.

I've grown more and more conscious of what leads to being a secularist, or living in a secularist way. I am not sure it's a destination anyone aims for, it emerges from a rejection of everything else. Secularists I've met do exhibit some common characteristics, though:

- They have acquired a tolerance of uncertainty. This means they are not under constant internal pressure to fill the vacuum of uncertainty about the future that religions use deities to fill. With increasing age this seems to be easier to do.

"I never really knew what a Kurd was, I was certainly never an Iranian"

but there was never that condescending tenor permeating every interaction that I had experienced whilst working in England. The easiest way to be at peace as a foreigner is to seem to be amongst other foreigners.

One of the things that growing up in Iran did to me was anchoring some biases. The burning of Israeli, American and British flags and effigies did wonders to demonise 'the enemy' especially in the eyes of an impressionable seven year old. The construct was pervasive, blunt and subtle, reassuring and fear-inducing, all at the same time. The bluntness came from all the exuberant shouting, flagellation and marching in the streets that was shown on TV. The subtleness came from my dad talking in hushed tones about how bad America was.

He had some justification. He had lived through the now infamous Iranian coupe of 1953 that deposed the democratically elected presidency of Mohammad Mosaddeq and supplanted him with the Shah. Most Iranians of that age know in minute detail the events and participants in the coup. It's only recently that CIA, MI5 and others including British Petroleum have fessed up to their role. "All the Shah's Men" by Stephen Kinzer is a great account of the events. This event has traumatised three generations of Iranians and is one of the most powerful tools available to the current leadership in Iran in keeping any Iranian uprising at bay and frightening a largely young and impressionable populous from striving harder for openness. "You don't want a re-enactment of 1953 do you?" Yes, better the devil you know. This also partly

- They show a willingness to accept complexity, particularly in a social arena. They resist the simplifying dictates of religious dogma.
- They are aware of their own bias. This makes it easier to see things through someone else's eyes too, which then goes a large way towards acceptance that there may be multiple versions of a truth, as a perception of reality.
- They can afford not to be religious. In Iran, it's a dangerous choice that requires courage to declare oneself as a secularist, some would say foolhardy. In Australia, I sense the tensions just don't exist in the same way that would push one away from secularism.
- They are pragmatists. Ideology as a driver for purpose, no longer has traction here. On this, I would observe, women seem to find it so much easier to sidestep the ideology trapdoor.

My 5 month old daughter Millie was christened at Christmas but I take no slight. I thanked the monsignor but told him I was not a man of god. I did it because it made my wife happy and it makes a good excuse for a barbecue and a laugh with the in-laws in Adelaide. Millie will make her own choices in time, but I will take care to shed light on the good things to be had in staying clear of blind faith.



The battle over religious education

A principal's stand over special religious education has paved the way for primary schools to make decisions for themselves.

A furore has broken out over the teaching of Special Religious Education (SRI) in Victoria's primary schools. SRI, as it turns out, has few supporters, although those who are behind it conduct their activities with great passion. For different reasons secular parents, educational experts, principals and some religious denominations are rejecting it. It has been the practice of the Department of Education to imply that SRI is compulsory, but even that is beginning to loosen. An era of religious instruction in primary schools may be coming to an end.

The practice of having non-teachers teach religion in Victorian public schools arose because of then bitter sectarian divides. Throughout the nineteenth century, and much of the twentieth century, governments wished to avoid exciting animosities between Catholics and Protestants. The Education Act of 1928 thus sat on the fence. It said that: "religious instruction may be given in any State school" but that "otherwise secular instruction alone shall be given in State schools". Teachers employed by the Department were not to be involved.

In 2006, a new Act was implemented. It re-stated clearly that public education should be secular. But it also said that religious instruction "may" be given in government schools. But now, teachers could teach "General Religious Education" though not "Special Religious Instruction". SRI would be handled by an outside body: ACCESS Ministries. It is a body made up of 12 churches, although they hardly speak with a unanimous voice.

Since the renaming, ACCESS Ministries has tended to become more evangelical, disturbing a number of the denominations putatively involved in the organisation. It has also aligned itself with volunteers from Outreach and Church Ministries (OAC), which is openly evangelical. ACCESS does about 95 per cent of the religious instruction in Victoria.

Much has revolved around the meaning of the word "may" in the 2006 Act. In normal English – bearing in mind that legal language is anything but normal and certainly not English – the word "may" would suggest there is a choice. Principals may decide to have SRI, they may not. Parents may decide to have their children instructed in this way, they may not.

In practice, the Education Department turned "may" into "shall" (must), claiming this was their legal advice. Although "must" was not what the law, *prima facie*, suggested, that is how they enforced SRI.

Michael Bachelard, writing in *The Age* in 2011, asserted that the "Victorian Education Department is forcing primary schools to

run Christian Education classes." He wrote that an email exchange he had obtained showed a department official saying the school "must" keep its religious instructor whether it wanted to or not.

Bachelard claimed that the Education Department was telling schools they had no choice, they must keep their religious instruction. Further, an email from the Department said that "secular instruction may not be timetabled while students from the class are attending SRI."

Some offended parents took the issue to the Victorian Civil and Administrative Tribunal but lost. They claimed that their children were being treated less favourably because they had opted out of SRI. But because they could not prove their children had suffered significant detrimental effects, the case failed. However, the judge did say "for the provisions of the Act to operate according to their intent, the parents must be told that they have a choice and be given a means of exercising that choice." "May" it seems, was once again "may" and not must (shall). Liberty Victoria became aware of the case and challenged the Education Department, saying its position was incorrect in law. They cited the Interpretation of Legislation Act of 1984, which says "Where in this Act or any Act passed or subordinate instrument made on this Act, the word "may" is used in conferring a power, that word shall be construed as meaning that the power so conferred may be exercised, or not, at discretion."

The loosening of SRI had begun. In 2011, Departmental policy was changed from "opt out" – parents saying they did not want their children involved – to "opt in" parents saying they desired their children to be taught SRI. A form (GC 566) was given to parents to elicit their consent.

In theory this was a shift to a more reasonable position, but in practice there was little change. Lara Wood, a parent active in criticising ACCESS Ministries, says parents were under impression that SRI was approved by the school and part of its normal curriculum. "When they enrol their children it is one of the forms they fill out. They think it is just being done by the school. So it is misleading on a number of factors."

A more potent step came from the principal of Cranbourne South Primary School, Joe Kelly. In 2013 he told ACCESS Ministries' volunteers that they were not wanted at the school. The representatives of ACCESS Ministries protested that the legislation mandates that if an accredited SRI instructor is available, the school must provide for SRI (as per the Departmental interpretation of the Act).



But Kelly stood his ground. Although ACCESS Ministries protested to the Department, the decision stood. Kelly had won the day, and in so doing set a clear precedent. Principals could exercise the discretion that is implicit in the use of the word “may”. It was a move that was also in line with a push to devolve authority to individual schools.

Kelly outlined his reason in a letter to ACCESS. “My decision is based principally on my assessment of the instructional material you provided me with, and my observations last year of several SRI sessions conducted by your fellow SRI volunteers in various classrooms. In my educational judgment, this material and associated teachers and teaching methods do not reach the standard of quality educational practice that this school requires.”

Kelly then cited the work of other experts to assess the pedagogical suitability of the SRI syllabus Religion in Life. One analyst, Professor Marion Maddox, director of research at the Centre for Social Inclusion at Macquarie University, concluded that the Religion in Life material is “significantly at odds with public schools’ important values such as welcoming and valuing people regardless of their religious or other identity”. She added that ACCESS Ministries material may “lead to significant conflicts and confusion for children” and that “valuable class time can be consumed as professional teachers try to untangle the educational amateurs’ effects and restore students’ regard for the mandated curriculum”.

The other expert Kelly consulted was Dr David Zyngier, senior lecturer in curriculum and pedagogy at the Faculty of Education at Monash University. Zyngier describes the five Religion in Life booklets as “appalling”. “The program is full of what we call busy work, which is filling in blanks, word finds... (that is designed) to teach views when children are exhausted to fill in time. There is no educational foundation for the work that is done.

He states: “I wasn’t looking at it from a proselytising view, that wasn’t my brief. I was asking ‘Is this educationally sound pedagogy?’ They (ACCESS Ministries) make a claim that it is based on the up to date educational principles. I compared it with the Education Department’s Principles of Learning and Teaching, and found that it was failing on all six principles. Then I compared it to international research and also found it failing. It is all pitched at the very lowest level of intellectual ability.

“It is a deliberate strategy, because if you allow the children to question what you are teaching them, you can’t proselytise. It is called propaganda. ‘You listen to me and repeat it when you need to.’ That is how armies operate and authoritarian governments operate. It is straight out of (George Orwell’s novel) *1984*.”

Many are calling for SRI to be substituted by teaching about religion. Dr Anna Halafoff, lecturer in Sociology and project leader

of the Education about Religions and Beliefs in Australia project at Deakin University, argues for a more general religious and ethics education (GRE), which is part of the curriculum and taught by qualified teachers. Students should learn about diverse religions and about ethics. She believes it could be taught as a separate subject or it could be woven through subjects such as History, Geography, Civics and Citizenship and Intercultural Education. Indeed, Australia’s new National Curriculum already allows for studies of religions across these learning areas.

“There is broad-based community support for including general religious education (GRE) in Australian government schools – indeed Victorian legislation has allowed for both SRI and GRE to be delivered since 2006, although there is yet to be a significant commitment to the development of a GRE program and/or resources,” she wrote.

“In a deliberative democracy such as Australia, governments must reach these decisions in consultation with a broad array of community groups. That is why a new review is necessary – not only in Victoria, but nationally – in order to decide on the most appropriate model of religious education for all Australian government schools.

“Australia witnessed a rise of political influence from the Christian Right under the former Howard Government. However, the current federal and state governments are failing to recognise that the world and their political constituencies are changing. There has been a widespread backlash against conservative religions in recent years as people realise that they don’t want to live in a world full of prejudice and fear. Australians treasure their freedom, and the more progressive groups – be they religious or not religious – are stepping forward to fight for their rights and for the rights of others. This has created new holy-unholy cosmopolitan alliances among progressive actors to call for much needed changes.”

To Halafoff, it is not a battle between the religious and the non-religious, it is rather a clash between cosmopolitan and anti-cosmopolitan actors, between those who seek equal rights for all and those who seek to preserve their positions of power. “We live in a globalised world and religion is playing an increasingly public role in the twenty-first century, witnessed in the rise of conservative, progressive and anti-religious movements. Young Australians, therefore, need to develop religious literacy, and a critical view of diverse religions, examining the role they have played in advancing cultures of peace and cultures of violence. It’s time that State and Federal governments demonstrated some leadership on these issues, in consultation with religious and non-religious individuals and community groups, for the greater good of all Australians, and not just a privileged few.”

Education Department bureaucrats are slowly changing their



emphasis towards SRI, although they are not keen to go on the record. Zyngier says they are now privately saying that principals can choose not to have SRI. The Department would prefer to be notified, but it will not object. Principals are considered to have autonomy.

The Department is coming under pressure about its handling of religious education. ACCESS Ministries is legally required not to proselytise. But for a number of years it had been involving Outreach and Church Ministries (OAC) as volunteers. OAC is openly evangelical and, because it is not paid, not subject to governmental guidelines. It has been proselytising by the back door.

The department, which was unaware this was happening, issued a hasty memo when it found out:

“The Department has recently become aware that a number of religious organisations are providing programs or events to schools potentially outside departmental policy.

These events can include a focus on music, food, gifts, creative displays (e.g. puppetry), youth groups, discussion groups. Sometimes other out of school hours activities are promoted to students within these events (e.g. camps).”

The memo advised that schools must ensure that any organisation providing programs or events to schools that contain religious messages, are offered by a religious organisation or are offered by an agency with links to a religious organisation are doing so in accordance with departmental policy.

It was a rushed attempt to correct the problem. Zyngier believes it was inadequate. “Under their watch these things are happening and they are liable. They are covering themselves by putting out the memo. What it means is that illegal activities have been going on in schools and they have done nothing about it. They should have known about it. In the same way that in South Australia the

State Minister of Education lost his job because there were a couple of cases of abuse in the schools that he didn’t act on. A little email mailed out to principals is not sufficient. They don’t even name OAC.”

“They only did it under duress,” says Lara Wood. “If we had tiptoed around them and been nice and polite that memo would never have been sent.”

The problems with SRI are not just legal and pedagogical, they are theological. Many of the churches listed as being participants in ACCESS Ministries are becoming disturbed about the courses. A report by the Uniting Church on Christian Religious Education (the course taught by ACCESS) noted the divisions it was creating amongst churches. “Not a week went by when there was not a complaint from members of one or more denominational partners who felt they were being offended, compromised or misrepresented by the content of the material.”

The report criticises the content, noting that it seems to have been prepared for volunteers who have little teaching experience. “While the production values of the material are of a high quality, they mostly presume a method of teaching and learning that has been generally supplanted in the classroom by newer methods that utilize exploration and the digital possibilities that new technology offers.

“One outcome of this may be that CRE appears anachronistic and therefore may not be relevant to, or even speak the same language as, the current primary school participant. The danger of this is an implied connection to a God that might also appear redundant and outdated. Much of the material is presented in question and answer format with answers either right or wrong and does not encourage students to have inquiring minds or wondering conversations.”

The Uniting Church report comments that there is a slant in the material towards biblical literalism. “The ACCESS Ministries curriculum has a limited focus. There is little, or no acknowledgement, or exploration of other world views, and world faiths. It does not reflect social and religious diversity, or address or recognise indigenous spirituality.

“It should be noted that in the short time, 30 minutes, available for CRE there is a limitation to what can be covered. The delivery of the curriculum relies on the volunteer teachers that have a wide diversity of theologies and biblical understandings. These teachers are expected to teach within the constraints of the material. Breaches of this expectation are unlikely to be detected.”

Other Christians have problems with the manner of teaching. Reverend Ronald Noone is senior chaplain at Melbourne Grammar and a former voluntary teacher in primary schools. He wrote on the ABC’s Religion and Ethics site that he does not “object to Christian stories and values being taught to state primary school children – quite the opposite.” But he argues that the approach is critical.

“In the early church “indoctrination” – as in learning the

beliefs or doctrines to become a Christian – was a good thing,” commented Noone. “So was “propaganda” – as in the propagation or spreading of the faith. Nowadays, the terms suffer from negative connotations and tend not to be used, in preference for terms like “instruction” or “education.” But these terms should not be used interchangeably as they are in the current debate. If the word “instruction” was replaced by “education” then there must also be a corresponding change in the philosophy and practice associated with the word.”

Noone believes instruction should be confined to settings like parish churches and confirmation classes, where the people are all willingly present and expect to be instructed. “The state school classroom is not the place for conversion or proselytizing. While ACCESS Ministries would claim that this not what they do, I’m afraid that is their default position and when challenged they will revert to type.”

Gary Bouma, UNESCO Chair in Interreligious and Intercultural Relations at Monash University makes a similar point about instruction not belonging in the class room. He draws a distinction between “teaching about” and “instructing in” comparing two statements. “To say ‘God loves you’ is to use the language of instruction, declaring a believed truth. To say ‘Some Christians believe that God loves you, and some Christians believe that God loves you as long as you do not do certain things’ is to describe beliefs of Christians, that is, to teach about Christianity.”

ACCESS’s theology is coming under fire. Noone is critical. “Just consider the statement made by ACCESS Ministries CEO Evonne Paddison, that ‘the children in our state schools would be lost without Jesus.’ This statement reveals her theology and educational philosophy, and I would imagine that of many of the teachers ACCESS Ministries train to take SRI in schools.”

Noone does not doubt the sincerity, but says the claim is untrue. “There is, of course, a certain kind of evangelical Christian who believes the message is the same regardless of the context in which it is expressed. They believe this task is carrying out the God-given role assigned to them – to preach the Gospel and make disciples of all.

“Given this is a primary text for many evangelicals, is it any wonder that conversion is an aim of their presence in school classrooms? In contrast to a parish setting, a classroom is where formal education takes place and the overall aim is to promote knowledge and understanding of the ways in which human beings have made sense of the spiritual dimension in all of human experience.”

The quality of ACCESS’s volunteer instructors is also questioned. Noone comments that the best curriculum materials in the world won’t do much good in the hands of a poor teacher.

The dispute over ACCESS Ministries is sometimes characterised as a debate between the religious and the non-religious, but it is much more about Australia’s educational traditions. Historian



Scott Hedges compares ACCESS Ministries with a “profiteering contractor” getting cash incentives.

“Just ask the teachers and principals, who have to look on while these dodgy religious contractors get about their work in the classrooms, effectively installing faulty religious products in our children’s minds,” he writes. “A friend recently told me that his 8 year old daughter’s Scripture teacher told her that Easter Eggs were hollow to symbolize that Jesus’ tomb was empty.”

Hedges believes the origin of the present system can be traced to a Cold War clerical-political alliance spurred by fear of communism and what was seen as declining public morality. There was no common statutory religious instruction before World War II. The current volunteer based system began in the 1950s. The teachers union would have nothing to do with teaching Bible lessons. Conservative politicians believed that the state should participate in promoting religion for certain social ends.

“Why should this history matter?” writes Hedges. “Australians, including Australian Christians, should care about the legacy of “secular” education and the importance of such education in a pluralist democratic society. But the current SRI system does not belong to this legacy. It is a Cold War aberration. By disregarding our past, we are threatening our future.”

Catherine Byrne, a researcher at the Centre for Research on Social Inclusion at Macquarie University, commented that the secular principle is not an atheistic idea. Rather, it is a way of ensuring that what children learn is not limited or controlled by any church or religious group, but by the people and the state.

“This is an idea that lies at the heart of Australian democracy. Critical, secular education about philosophy, religions and ethics enables children to examine their understanding of, and their relationships, with the cosmos, the planet, the nation, their cultures, their neighbours and their families. It is a subject area in which basic understanding of concepts, language and cultural perspective has implications for many other fields of human endeavor.

“For a child to navigate this plethora of diverse opinion, they must develop a critical approach to the subject area. They must learn the concepts and language of that area and engage in the ‘agreed’ and ‘disputed’ interpretations of those concepts and terms. In so doing, as they sift through the various arguments, they may come to a position themselves and be able to defend that position.”

Can you kill a goat by staring at it?

Technology is democratising teaching but not solving all the problems

by Michelle Sowe

In his renowned ‘Hole in the Wall’ experiments in developing countries, Dr Sugata Mitra gave children access to an internet-connected computer and left them to learn what they could, unsupervised, with apparently remarkable results.

At an internet kiosk in a New Delhi slum, local children figured out how to search the Web, learn English, glean information from a variety of websites and teach each other what they had learned. Similarly, with access to a streetside computer in a south Indian village, Tamil-speaking kids managed to figure out basic principles of DNA replication by playing around with English-language web material on their own. ‘Minimally invasive education’ is how Dr Mitra describes this method, alluding to the high-impact, low-disruption techniques of minimally invasive medicine.

This novel educational approach has garnered global attention since Dr Mitra was awarded the \$1 million TED Prize for 2013. The prize money funds his wish to change the future of learning worldwide by building what he calls the School in the Cloud, composed of decentralised ‘self-organised learning environments’ (SOEs) in schools and homes. In each SOE, small groups of children are encouraged to work together, using the internet to answer big questions that interest them, while adult mediators intervene as little as possible in the children’s learning.

Dr Mitra emphasises that adults need no specialist subject knowledge or teaching experience to mediate a SOE. All they need is a grandmotherly willingness to offer admiration and encouragement, thereby building the children’s confidence and resilience. “Whenever they do anything,” Dr Mitra advises his team of ‘grannies’, “you just say ‘well, wow! I mean, how did you do that? ... Gosh, when I was your age I could never have done that!’” Meanwhile, the children are given a question to investigate and left to their own devices. Dr Mitra speculates that “if you allow the educational process to self-organise, then learning emerges... The teacher sets the process in motion, and then she stands back in awe and watches as learning happens.”

This approach shares certain promising features with philosophical enquiry as it is widely practiced with primary school children. Both are curiosity-driven, collaborative enterprises that seek to engage children’s interest in big questions. Both support children in exploring ideas and sharing discoveries. And both offer the prospect of intellectual adventures that spring from children’s sense of wonder and their ability to work together. What’s more, Dr Mitra’s proposed curriculum of big questions includes many deeply philosophical ones, such as ‘Can anything be less than zero?’, ‘Will robots be conscious one day?’ and ‘What is altruism?’

In each of these respects, Dr Mitra’s vision closely parallels our ideals and methods of collaborative philosophical enquiry.

There are two major points of difference, though, and it’s here that I see cracks in the veneer of minimally invasive education. It differs from collaborative enquiry in that (1) it features the internet as a principal learning medium and (2) it renounces the guidance of qualified teachers or practitioners.

A hallmark of Dr Mitra’s approach is that children are encouraged to conduct unguided internet searches. There is no provision for children to develop the range of skills needed for such a pursuit, however. The risks here are well articulated by media critic Howard Rheingold:

Digital media and networks can only empower the people who learn how to use them — and pose dangers to those who don’t know what they are doing ... Those people who do not gain fundamental literacies of attention, crap detection, participation, collaboration, and network awareness are in danger of all the pitfalls critics point out — shallowness, credulity, distraction, alienation, addiction. I worry about the billions of people who are gaining access to the Net without the slightest clue about how to find knowledge and verify it for accuracy, how to advocate and participate rather than passively consume.

In particular, without some education about how to assess the credibility of internet sources, children can easily go astray. Inadvertently, Dr Mitra himself illustrates this danger — in his SOE Toolkit, where the showcase example of children’s work in a SOE betrays not only factual errors but also egregious failures of reasoning.

In the example, children investigated the question ‘Can you kill a goat by staring at it?’ — a question you might suppose has a clear-cut negative answer. The children responded by jotting down reasons for and against the possibility in ‘Yes?’ and ‘No?’ columns. Among their reasons in the ‘No?’ column we find ‘myth?’ and ‘seems impossible’, suggesting a degree of scepticism. However, in the ‘Yes?’ column — in support of the notion that you can kill a goat by staring at it — they cited a longer list of reasons including ‘psychic’, ‘magic’, and ‘George Clooney did’. (This last comment refers to the movie *The Men Who Stare At Goats*, based on Jon Ronson’s nonfiction book about an experimental unit of the US Army whose ‘warrior monks’ sought to harness paranormal phenomena for military purposes.)

Disturbingly, in their post-activity reflections, the children all drew highly credulous conclusions that supported paranormal claims — conclusions such as “mind over matter”, “if you believe

something, you can make it happen” and “the mind can fix problems without aid”. Another concluded that the facts are relative to one’s beliefs: “I have learned that there was no answer to the question, it was what people believed in.” Adult mediators shouldn’t simply stand back and admire these answers.

Dr Mitra maintains that “our biggest job in this information-saturated world is to give the child an armour against doctrine.” The children’s responses to the staring-at-goats question strongly suggests that unguided, peer-supported internet browsing fails to provide this armour. It’s easy to imagine children in similar circumstances floundering with any number of other (largely settled) questions, such as whether the theory of evolution is sound, whether human-induced climate change is demonstrable, and whether homeopathy is therapeutically effective.

If we want to equip children to challenge faulty arguments and to question claims that are dogmatic, propagandistic, biased, pseudoscientific or downright erroneous, then we need a different approach. We need to make sure that kids develop thinking and reasoning skills alongside skills in research and information awareness. For this, the support of a competent guide is indispensable, equipping children not only to assess the reliability of different sources but also to evaluate the many arguments they will encounter.

In his TED talk, Dr Mitra explains his scepticism towards formal schooling in the following way. Our present-day school system – with its emphasis on standardisation – was devised in the Victorian era, with the intent to produce identical graduates to serve the British Empire’s bureaucratic machine. The system was so robust that, to this day, it continues to produce identical people for a machine that no longer exists.

“Could it be that you don’t need to go to school at all?” Dr Mitra therefore ponders, before asking whether ‘knowing’ will eventually become obsolete. I’d reply that even with the internet at our fingertips (and perhaps soon on the bridge of our nose), there’s something we will always need to know: How can we become better thinkers?

To dismiss the infrastructure of schooling altogether because of traditional standardisation is to throw the baby out with the bathwater. Surely it makes more sense to repurpose that infrastructure in ways that better nourish children’s curiosity, critical thinking and creative exploration.

While I share Dr Mitra’s passion for the benefits of small-group enquiry-based learning, I think the idea of minimally invasive education fails for the following reason: it’s not plausible to suppose that children in SOLEs can self-organise their way to an expanded repertoire of thinking skills. Certainly Dr Mitra offers no systematic empirical evidence that they can. Good thinking doesn’t usually occur spontaneously, in schools or elsewhere. It has to be cultivated with the help of (sometimes counterintuitive) strategies

like being actively open minded, questioning assumptions, making sound inferences and entertaining contrary opinions. Facilitating collaborative dialogues is an obvious way to help children practise these strategies. The facilitator provides scaffolding while the children do the intellectual heavy lifting: examining conflicting opinions, evaluating arguments, generating alternatives, drawing logical connections and making reasoned judgements.

In this context, guided discovery learning activities (including internet research tasks) and dialogue-based collaborative enquiries could complement each other well. The big questions that Dr Mitra proposes in the SOLE Toolkit are splendid catalysts for research and discussion (although the theoretical questions aren’t distinguished from the empirical ones, and a philosophically astute facilitator would certainly want to highlight the epistemic differences between the two).

Whether or not they participate in SOLEs, children will increasingly rely on the internet for their learning, so it’s more important than ever that we help them skilfully deploy critical and creative thinking. In the era of ‘personalised search’, with Google and countless other websites constructing a filter bubble for each user, the answers that children are likely to find online are heavily skewed towards those that they’ve previously found. This tends to limit exploration and amplify confirmation bias, narrowing minds rather than broadening them.

What’s more, as we saw in the staring-at-goats example, the internet is an unpredictable clearing house of truths, partial-truths and falsehoods. When I was growing up, pre-internet, my father used to jokingly refer to an information hierarchy of ‘true facts, facts, factoids and true falsehoods’. All of these have since proliferated on the internet’s poorly-calibrated spectrum of knowledge. As Kevin Kelly, founding editor of “Wired” magazine, says of the internet age:

“my knowledge is now more fragile. For every accepted piece of knowledge I find, there is within easy reach someone who challenges the fact. Every fact has its anti-fact. The Internet’s extreme hyperlinking highlights those anti-facts as brightly as the facts. Some anti-facts are silly, some borderline, and some valid. You can’t rely on experts to sort them out because for every expert there is an equal and countervailing anti-expert.” We need the incisiveness and probing of critical and creative thinking to get deep into the viscera of the facts and anti-facts, the experts and anti-experts. And we need the incisiveness and probing of good teachers to go deep into children’s thought-space: to discover what they’re understanding and what they’re not, yet.

Minimally invasive education skates the surface of understanding – it doesn’t plumb the depths. It’s limited, just as minimally invasive medicine is: X-rays don’t pass through dense tissue; ultrasounds can’t view past bone; keyhole surgery isn’t always possible.

Let's all be wrong together

Disagreement on contentious subjects implies fallibility

By James Fodor

Is abortion morally wrong? Is fiscal stimulus effective at reviving an economy? Is there a God? What is the best type of diet to lose weight? Is the brain a computer? Are men and women hardwired to be different? Is it wrong to eat meat? Is intelligent life common in the universe? Is gun control effective at reducing violence? Will mankind will face extinction in the near future?

These questions span many different topics. Some are scientific, some are political, and others are philosophical. Nonetheless, they do have one important property in common: many (perhaps most) of those who have a strong opinions about these questions are wrong. Regardless of what the actual answer is, there is so much disagreement about these sorts of questions and so many mutually-incompatible views that, whichever position is actually the correct one, most people's views are false. This means that right now, many ethicists are wrong about abortion. Many economists are wrong about fiscal stimuluses. Many philosophers are wrong about whether there is a God.

Everything I have said thus far is really quite obvious and (aside from minor quibbles about specific choice of examples, etc), fairly

Perhaps you might imagine that you could not possibly be one such person, because the answer seems to clear and logical in your head. After all, you have looked at the arguments and evidence on both sides, and come to a reasoned, rational conclusion. What, then, is the problem with feeling confident in your opinion, when clearly the facts and evidence support it? The problem lies in the fact that we can never, as finite, fallible human beings, have access to the actual facts, evidence, and arguments in their pure, objective, unadulterated form. All we ever can access are our perceptions and interpretations of the evidence and arguments – how persuasive they seem to us. And we know, from the fact of widespread disagreement, that our sense of the persuasiveness or reasonableness of such evidence and arguments is, in general, quite unreliable.

Whatever argument you have heard about abortion, whatever evidence you have seen about fiscal stimuluses, whatever religious experiences you may have had, you can be essentially assured that there exist many other equally intelligent people as yourself who have heard the same arguments, seen the same evidence, and had

“Everyone thinks they are right and those who disagree with them are wrong”

uncontroversial. What, then, is the big deal? The big deal, in my view, comes from the conclusion that, I think, we should draw from these facts. Allow me present my main argument in the form of a syllogism.

- If two or more people hold incompatible views on any matter that is not purely subjective (e.g. favourite dessert), then at least some of those people must be wrong
- Many intelligent people hold incompatible views on many important questions, despite being well informed and strongly convinced they are right
- Therefore, many intelligent people hold incorrect beliefs despite being well informed on the subject, and being convinced that they are right
- Therefore, it is perfectly possible for intelligent, thoughtful, intellectually honest, well-informed people, to be strongly convinced about the correctness of their position, whilst nonetheless being completely wrong
- Therefore, it is possible (and given the enormous extent of disagreement, I would say likely) that you, as an intelligent and informed person, are mistaken about at least some of the core beliefs that you consider to be very important and (likely) hold with a high degree of confidence

similar experiences, but who do not find them to be a persuasive reason to believe in your position. This is a fact that we all need to be able to deal with.

Of course, our own beliefs will always feel more ‘real’ to us than those of others, because as finite human beings we are limited by our own nature as embodied, subjective beings. We have direct access to our own beliefs and reasons for those beliefs in a way we can never have for those of others. But how does that justify us in thinking that our beliefs are actually, objectively, more likely to be true? It might sound like I am arguing for some form of relativism, but I am not. In fact, I think it is by ignoring the problem of disagreement that we head towards relativism, because doing so leads to the situation in which whether a particular proposition should be believed, or not, is relative to which person's methods of reasoning one chooses to use in analysing the arguments. Everyone thinks they are right and those who disagree with them are wrong, but if it were possible to switch perspectives and use one's opponents' methods of thinking and analysing arguments, then you would conclude the exact opposite. A model of knowledge that makes justificatory claims so variable and mind-dependent is, in my view, far more deserving of the name ‘relativism’ than the position I am advocating.

It might be tempting to introspect about one's worldview, and attempt to find reasons as to why, given your worldview, many other intelligent people could be wrong about such important questions. For example, the atheist dismisses intelligent Christians, Jews, and Muslims on the grounds that humans have evolved a sense of spirituality, and tend to attribute anthropomorphic characteristics to inanimate objects in an attempt to derive a sense of comfort and meaning in an otherwise uncaring universe. The Christian, on the other hand, dismisses intelligent atheists on the grounds that, whatever evidence is presented for God's existence, many will still choose not to believe because of the stubbornness of their hearts and their refusal to submit their will to God.

The problem with arguments like this is that they do not allow us to distinguish which state of the world actually prevails. Both the Atheist and the Christian expect, given their worldviews, to see religious disagreement among intelligent people, so whoever is right we expect to see the same thing (at least in this respect). We then arrive back at the same question we started with: given such disagreement, who is more likely to be correct? Arguments that

attempt merely to explain disagreement within the framework of a particular belief system thus do not actually address the problem of disagreement at all. Unless a particular viewpoint is actually inconsistent with the existence of peer disagreement (I know of none that are), then all worldviews are capable of constructing such justifications. None of them, however, can address the real question: given the extent of peer disagreement, how do you know that you are not one of the many who are mistaken?

To be clear, I am not arguing that there is no such thing as truth, or that we can never know what it is. There are plenty of issues on which there does exist a considerable degree of expert agreement. Many questions in science are of this sort, as are at least some questions in ethics, politics, and economics. What I am trying to argue is that, if there exists widespread disagreement among equally informed and rational people, then, in general, this means that there exists insufficient evidence to answer the question, and thus we should withhold judgement, or at the very least, substantially lower our confidence that we are correct. Doubt is not a pleasant condition, but certainty is absurd.

Abolish all suffering, now

A British philosopher believes we can eventually stop all pain for all creatures

David Pearce certainly knows how to be extreme. A self-described utilitarian materialist (someone who believes that only matter exists and that the elimination of suffering is the overriding ethical imperative), he sketches out what he sees as a future in which all forms of pain are eliminated, not just for humans, but for most creatures. He calls it paradise engineering.

It is an interesting mental exercise. Pearce's first aim is to take humans off the "hedonic treadmill": the cycle of suffering that humans experience which higher standards of living have not alleviated. The way to achieve this is to use genetic modification in babies to "abolish suffering". At present, he says, "everyone is rolling the genetic dice." He does, though, acknowledge that physical pain may have to continue to play a role to "avoid harmful things."

Nevertheless, he says it will be possible to choose the pain threshold of our future children. "We can maybe abolish the nastier forms of pain. At the moment we can eliminate noxious pain but not the raw feels of phenomenal pain. I believe phenomenal pain will be optional in the future."

To eliminate psychological pain, the simplest avenue will be to use electrodes fixed to reward centres, says Pearce. Drugs can also be used. "Wouldn't it be better if we had a default state of consciousness that we didn't want to change?" he says. "We can use the genetic route to ensure lives that are rich and fulfilled. It is

possible to recalibrate the hedonic treadmill so that we can choose the hedonic range of our children."

Next step in the Pearce project is to stop meat farming. He argues that animals are sentient beings that feel pain, so their suffering should stop. He looks to the creation of artificial created meat, which has recently begun, as the eventual solution to the problem.

Pearce says the amount of suffering that humans inflict on other species is "horrific". It can be stopped through in vitro meat production. "If we are serious about phasing out animal abuse that is the only serious way to do so."

A next step for Pearce is to reconfigure nature. This is, to say the least, an ambitious aim. At the moment, he says, natural creatures fight "tooth and claw" against each other. "The living world is full of hunger, parasitism and disease on a massive scale," he says.

Pearce talks of "wildlife serial killers" and wonders if they should be conserved. He says "every cubic metre of the Earth is accessible to surveillance" which would allow the kind of controls over wildlife necessary to change it. He also imagines genetically treating a lion so that it does not want to feed on zebras.

Pearce's manifesto is perhaps of greatest interest for its logical progression. It is an explication of where utilitarianism can lead when it is taken to a logical extreme.

So what do you think of this science thing?

The CSIRO has undertaken a study of attitudes to science

by Dr Craig Cormick

What do the general public think about science and technology? It's a simple question, but it is decidedly difficult to get a simple answer, due in part to the widely different ways that people interpret the idea of 'science', and also the fact that providing an average statistical answer actually masks the breadth of different attitudes.

Different polls can give different answers as to levels of public support for science and technology, ranging from 58% to 80% community support, but to better understand attitudes we need to dig a little deeper than most simple polls do, and look at what drives attitudes.

Towards this, understanding the impact of people's values is important, and help explain how seemingly contradictory positions are possible. For instance, we see people with strong values on the sanctity of nature demanding we respect the science on climate change, but reject the science on genetically-modified crops. And people with strongly pro-development values demanding we respect the science on GM crops, but reject the science on climate change.

Examining values also provides a better understanding of how different attitudes towards issues such as infant vaccination rejection, alternative medicines or embryonic stem cells are formed. People don't reject the science behind these because they are scientifically illiterate, nor uneducated. They are often highly both. But they have fundamental values that some science and technology clashes strongly with, such as a distrust of multinationals, or a strong belief in the sanctity of life.

Values-based attitudinal studies have also shown:

- When information is complex people tend to make emotionally-based judgments, driven by values, rather than by the information presented to them,
- Messages that don't align with people's values tend to be rejected or dismissed,
- Broad attitudes towards science and technology and nature can influence consumer attitudes towards particular applications of science or technology, and
- Pro-science and technology values are a strong predictor of support for even contentious science or technology such as GM foods.

To better understand the different values that are spread across the community and the impact they have on attitude formation, the CSIRO undertook two segmentation studies of the Australian Public and then cross-analysed them.

The first segmentation study defined six key segments by attitude to science and behaviour in seeking out information and understanding it, and were defined by the three questions:

1. How interested are you in science/technology generally?
2. Do you actively search for information on science/technology?
3. When you have looked for information about science/technology in the past, have you generally been able to find what you are looking for?

The study was based on a survey conducted by the Victorian Department of Business and Innovation, to be able to benchmark its results, and the six key segments it identified could be summarised as:

- Segment 1. 23%. 'Mr and Mrs Average'. Passive interest in science.
- Segment 2. 23%. 'Fan boys and fan girls'. Actively interested in science.
- Segment 3. 8%. 'Wish I could understand this'. Interested but confused by science information.
- Segment 4. 23%. 'Too many other issues of concern'. Not really interested in science.
- Segment 5. 14%. 'Science is a turn-off'. Not interested in science and don't much trust it.
- Segment 6. 2%. 'I know all I need to know already.' Not interested in science and feel they know enough already.

Six segments by interest and information seeking on science/technology.

Segments 1 and 2, termed 'Mr and Mrs Average' and 'Fan boys and fan girls', who we might also refer to as 'the generally active and generally interested' and 'the active and interested' – make up the bulk of those who watch science programs, read science blogs, take part in science public events and so on (and together make up about 50% of the population).

But the last three segments, who together make up about 40% of the public, comprise people who are either unengaged or uninterested in science and they don't much value it, understand it, nor see the point in it – and some are even openly hostile to it.

Surveys are very helpful for providing broad statistical findings, but qualitative research through focus groups or other forums are useful for digging deeper into issues raised in surveys. Focus group studies into the unengaged conducted by the Department of Industry between 2009–12 and by the CSIRO in 2013 (using targeted recruitment and paying incentives to participate), found there were some interesting and unexpected common themes that emerged among scientifically-unengaged members of our community:

- While interest in Science was low, interest in Technology was a lot higher.
- Nearly all reported a negative experience of science at school (although it's not clear if it was the experience that drove the

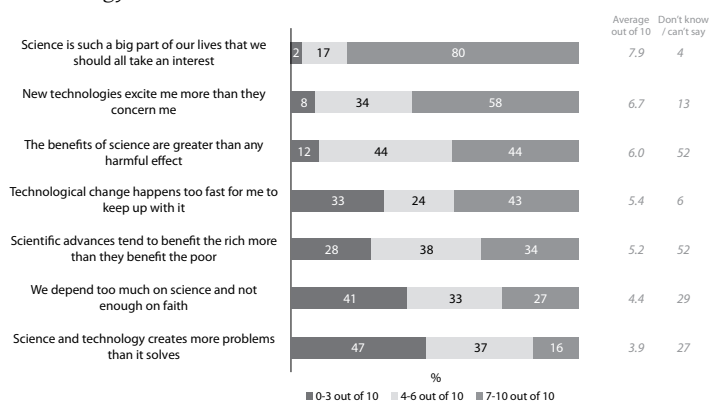
negative attitude or an existing negative attitudes to science that drove the negative experience).

Focus groups studies conducted by CSIRO in 2013 into those members of the public who were generally unengaged on science found that ignorance of many science-related issues was common, and they also had a strong trend with taking a counter position to scientific consensus on issues such as climate change, vaccinations and fluoridation.

Segmentation Study 2: Values

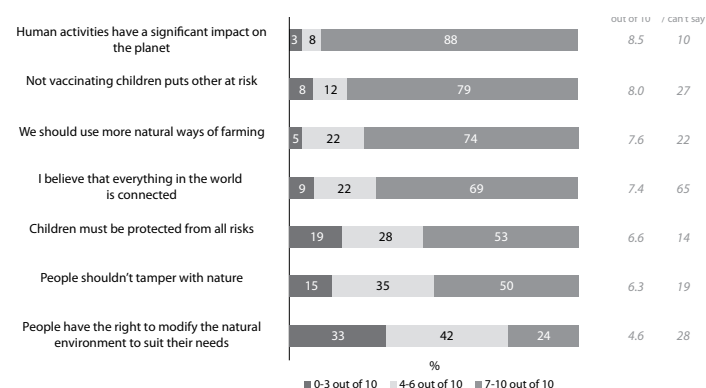
The second segmentation study undertaken by the CSIRO looked at values towards science and the world around us, and found four different segments. This study was based on one conducted by the Department of Industry in 2012, in which 14 values statements were put to the survey respondents and cluster analysis of the answers used to find similar values led segments.

The spread of responses to the values statements on science and technology.



Q1c 1-7 On a scale of 0-10, would you say you disagree or agree that
Filter: 2012 only AND CATI only; Weighted to population; Base n = from 948 to 996 n=1000

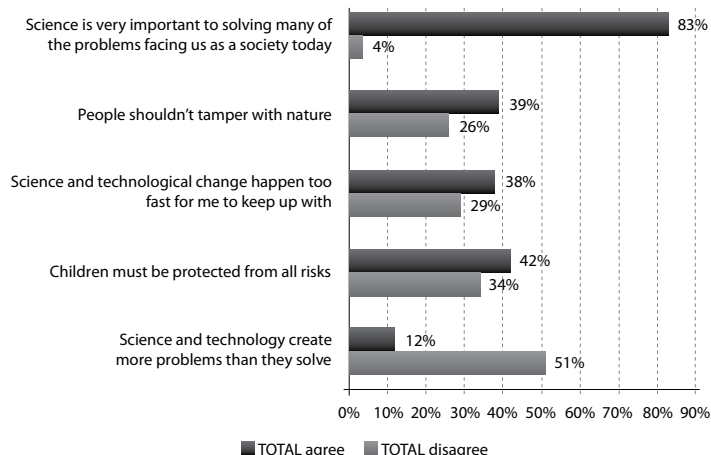
Figure 13: The spread of responses to the values statements on the world around us.



Q1c 8-14 On a scale of 0-10, would you say you disagree or agree that
Filter: 2012 only AND CATI only; Weighted to population; Base n = from 935 to 990 n=1000

Analysing the total responses to all the values statements the study found five values were stood out in defining the four different values-based segments.

Figure 14: The key values statements that defined the values-based segments and general responses to them.



The four key values-based segments were:

Segment A (23%) – the science fans:

This group was the most positive towards science and technology. They expressed greater agreement that Science is such a big part of our lives that we should all take an interest, that New technologies excite me more than they concern me and that The benefits of science are greater than any harmful effects. Equally, there was disagreement that Science and technology creates more problems than it solves and that We depend too much on science and not enough on faith.

Segment B (28%) – the cautiously keen:

Segment B was defined by relatively high interest in science and agreement that The benefits of science are greater than any harmful effects. However, they also had the highest agreement that Children should be protected from all risks.

Segment C (23%) – the risk averse:

This segment tended to be less positive towards the benefits of science and technology. They were also more concerned with risks. But in contrast to Segment D, they had relatively high awareness of the science. They were least likely to agree that Human activities have a significant impact on the planet and least likely to agree that Not vaccinating children puts others at risk.

Segment D (20%) – the concerned and disengaged:

Segment D was the least enthusiastic about the benefits of science and technology. They had the highest agreement that The pace of technological change is too fast to keep up with and were the most likely to agree that Science and technology creates more problems than it solves, that Scientific advances tend to benefit the rich more than the poor, and that We rely too much on science and not enough on faith.

Figure 15: How the different values-based segments map against interest in science and technology.

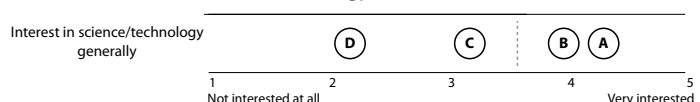
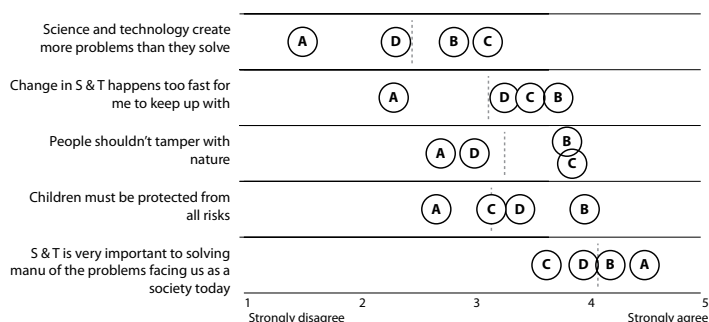


Figure 16: How the different values-based segments map against different values statements.

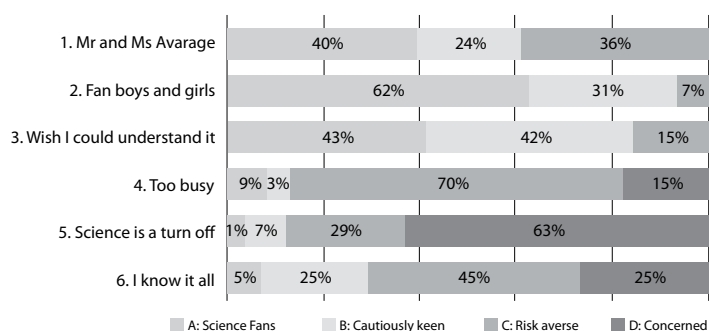


Of interest, when the segments are mapped against value statements there is not a uniform spread of A – B – C – D, and they move positions considerably against different statements. For example, against the statement, Children must be protected from all risks, Segment B was the most agreeing and Segment A was the most disagreeing, but against the statement Science/Technology is very important to solving many of the problems facing us as a society today, Segments A and B were much more closely aligned. And Segment D, who had the least interest in science and technology, was not rated as the most for or against any of the statements. Also of interest was the large extent to which Segment A disagreed with the statement, Change is science/technology happens too fast for me to keep up with, compared to the other three segments. Indeed, on most of the values statements, Segment A (the Science Fans) could be described as outliers, with responses that were more significantly different to the average community responses than any other segment.

This is particularly of interest in understanding how Science Fans so often misread the mood of the general public on issues relating to contentious science and technologies.

By combining the two different segmentation studies, and layering values across attitudes, it is possible to see that certain values are clear drivers of different attitudinal segment groups.

Combining the two segmentation studies allows for an understanding of how values align with, or drive, attitudes towards science.



In particular, Segment 2 had a predominance of Science Fan values (60%), Segment 4 had a very large predominance of Risk

aversions values (70%), and Segment 5 had a predominance of Concerned values (63%). Also, and significantly, Segments 4, 5 and 6, the most unengaged, had the least members whose values reflected those who were Science Fans or Cautiously Keen, and segments 1, 2 and 3, who were the most engaged, had no members at all whose values represented the Concerned. Taken together this provides a mapping of 20 or so key sub-segments of the Australian population.

And that provides significant insight into the values of those who are generally unengaged in science and technology, and what may be driving their attitudes.

What does it all mean?

Applying the findings of this research to application, in engaging with the public, they reinforce the five key findings relating to value and attitudes that:

1. When information is complex, people make decisions based on their values and beliefs.
2. People seek affirmation of their attitudes (or beliefs) – no matter how fringe – and will reject any information or evidence that are counter to their attitudes (or beliefs).
3. Attitudes that were not formed by logic (nor facts) are not influenced by logical (nor factual) arguments.
4. Public concerns about contentious science or technologies are almost never about the science – and scientific information therefore does little to influence those concerns.
5. People most trust those whose values mirror their own.

And for those seeking to engage with the public and end up confronting different values-led attitudes, the give key recommendations for addressing them are:

1. Don't debate the science, look for the values that underline your audiences decisions and debate on values,
2. If possible frame messages that align with those values,
3. Confront emotive defences with emotive arguments,
4. Talk about the outcomes of the research, not the processes
5. Use spokespeople your target audience trust,

Dr Craig Cormick works for the CSIRO.

In praise of common science

A journalist of science has encouraged public understanding of science and changed Britain's libel laws along the way.



Simon Singh is an enthusiast of science who has made a career out of communicating that interest. He has authored five books: *Fermat's Last Theorem*, *The Code Book*, *Big Bang*, *Trick or Treatment? Alternative Medicine on Trial*, and *The Simpsons and Their Mathematical Secrets*.

Singh started off wanting to be a scientist. He completed a PhD in particle physics. But as he was nearing the end of his doctorate he noticed that there were others who were faster and brighter. "I could see they were the people who would really be great scientists. And a lot of them have gone on to be very formidable scientists."

Singh concluded that he would struggle to keep up, so looked around to see what else he could do. He was landed a job doing shows on science at the BBC, a position he held for six years.

"It was really about celebrating science and getting people as excited as I am about maths and science. That led to writing. I think I would see myself as someone who celebrates science, as opposed to attacking bad science but he has attacked alternative medicine."

Singh says there are many reasons people believe in homeopathy -- if you do not look closely. "The UK government spends money on homeopathy so surely there it must work. There are hundreds of doctors who are members of the faculty of homeopaths. They have had many years of medical training and they are convinced that homeopathy works.

"High street chemists stock homeopathy, so surely it must work. Sports people use it, so surely it must work. The Royal family have access to the best medicine in the world and they believe in homeopathy. There are clinical trials that suggest it may be effective. All of these things are good reasons for the public to believe that homeopathy actually works.

"It is only when you unpack these one by one (that it fails). Yes, the government does spend money on homeopathy but it is decreasing rapidly. It can't really justify the expenditure. The High street chemists used to stock homeopathy but they did that because they are making money and the regulations are so weak.

"The number of doctors who practice homeopathy are in a tiny minority and their colleagues regard them with a degree of scorn, I imagine. A lot of the trials are very poorly conducted and when you look at the best ones the evidence is in the other direction. If you see the full story then it is clear that homeopathy doesn't work but if you get only half the story the case in favour of homeopathy is quite compelling."

Singh has also been a stern critic of chiropractors. After publishing a negative article in *The Guardian* he was sued for libel by the British Chiropractic Association. The case caused such a stir it eventually led to libel reform and a new defamation act in 2013. The new law is designed to "ensure that a fair balance is struck between the right to freedom of expression and the protection of reputation".

It was a significant change. Libel law in both Australia and Britain has been used by the powerful to suppress criticism. Under the new provisions, plaintiffs must show that they suffer serious harm before the court will accept the case. There is also additional protection for website operators, defence of 'responsible publication on matters of public interest' and new statutory defences of truth and honest opinion.

"I just assumed chiropractors were high powered physiotherapists or medical specialists dealing with back problems. I had no clue of the weird origins of chiropractic or the bizarre claims made for it. I think it is very easy for chiropractic to fly under the radar and for the public to be misled about what they do."

An experienced communicator, Singh surprisingly admits that he does not know what gets people enthusiastic about science. "I have written five books and the one about alternative medicine really failed dismally. I assumed that if you were spending hundreds of dollars a year on alternative medicine you would be willing to spend money on a book that told you which ones work. Publishers were generally very suspicious about the book and it turns out that they were right. Whereas my other books are written for people who are already interested in science, or at least are curious enough to want to know about science."

To Singh, the biggest threat to the proper understanding of science is the media. "The job of the media in general is to get viewers and sell newspapers and sell advertising. In order to do that they have to be a bit more sensationalist or scare mongering.

"It is really hard to find evidence based analysis. With something like climate change the science is fairly clear and fairly solid, and yet that is not the impression you get."

Singh is also concerned about schooling. He says in Britain if a student is talented at maths and science they may not be nurtured because of an overly heavy focus on the basics of numeracy and literacy.

We're all in this mess together

A consideration of the discontents of globalisation

by Stanley S Schaetzel

I fear that we are ships with amateurs on the bridge. Our society has reached a stage in which events start escaping the authority exerted by our political and societal control systems.

The situation manifests itself in many ways: social unrest, economical and financial crises, vast unemployment; inability of governments, a failure by the EU and the United Nations to pass agreed measures to redress political, societal and environmental problems. Religion, which seemed to have retreated from active political activities in Western Countries, has re-emerged internationally under the guise of suicide bombers.

Communications and data processing speeds have risen according to Moore's Law, but the benefits are often in wrong hands. Understanding of the climate has reached the experimental proof stage, but mental inertia and vested interests prevent the

shops is similar to the status of Russian peasants under the Czars. This is what one of the traders replied when challenged about making money out of the financial crises '...Yeah, the politicians don't rule the world. Goldman Sachs does...'

And the results of Goldman Sachs and others ruling the world were the crises of the late '90s and 2007/8, the results of which are still reverberating. The economic chaos which reigned during the first decade of the 21st Century is described accurately by J.C. Ramo in *The Age of the Unthinkable*. He captures the basic background by quoting the answer of Alan Greenspan, the former Chairman of the American Reserve Bank (and a supposed guru of economics) to a question of a congressman during a congressional review: *'In other words, you found that your view of the world, your ideology, was not right. It was not working?'* Greenspan: *'Absolutely.*

"This is where some physicists opt for metaphysics"

adoption of methods which could prevent our reaching a tipping point. Heads of multinationals have more power in many areas of activity than politicians in the countries in which they operate. In most countries, the revenue of the top one percent of earners exceeds the earnings of the bottom 20 to 40 per cent. The gap seems to widen as time progresses.

There are many reasons for this state of affairs. A snapshot statement would be that the gulf between developed and undeveloped nations has increased, as well as the difference in education between various levels of society. Human affairs have reached such a complexity and inequality of distribution of rewards that political and economic methods cannot cope with same. In fact, some of them may be causing the problems

Let's consider the whole world from a certain distance. The manufacture of goods, building of roads and houses, reaping of crops and excavation of minerals is increasing faster than the growth of world population. We should, therefore, see an increase in average wealth. This does not occur.

We are heading towards chaos because our society distributes awards not in proportion to the value of services rendered to it. Thus, for example, 'money changers' (who don't produce) get large rewards for their egotistical and often unethical endeavours, whilst people like teachers, scientists, engineers, tradesmen and manual workers -- people who create the gradually increasing common-wealth and -health of the society -- get a fraction. The position of workers in the Chinese, Indian and Bangladesh sweat

Precisely. You know, that's the reason I was shocked. Because I have been going for forty years or more with very considerable evidence that it was working exceptionally well".

While all this happens, an authority on paleoclimatology observes that this is the first period in Earth's existence in which a single species consciously occupies and manipulates the entire Planet. We can add to this statement another, valid since year 2000, when it was announced that the human genome has been sequenced: 'This single species, Man, and not Evolution, has now achieved the control of its genome'.

When one considers the variety and range of various living beings perfectly adapted to their environment, it was possible to think that nature will perform its tricks and Man will eventually adapt himself to the currently existing conditions. Unfortunately, this is not the case. We are changing our environment at a much faster rate than nature can adapt. Nature needs thousands, even millions of years to create adaptive mutations whereas gadgets and systems transforming our environment are appearing at almost monthly intervals. We have created conditions in which our nature begins to falter. Some agents, some rules, more refined than the survival of the fittest, must now control our society. The fact that we might be able to change our genome seems rather frightening, bearing in mind the chaos we achieved in other areas of our activities.

There are several ways of looking at the situation. Historians do it by post-factum analysis, forgetting that many changes have

been wrought purely by accident. No government planned for the appearance of personal computers, cellphones, iPads, Facebooks and Tweets. Industry, more subject to the pace of changes, often tries to plan for the future by computer modelling and reacts by rapid adjustments. Politicians, especially in democratic countries, view and try to deal with the future through the coloured dogma of their parties, forgetting that it is impossible for any one party to have a correct approach to every problem. Oppositions often oppose beneficial measures just because they happen to be not in line with their going credo.

Considered from a historical perspective the democratic nation-state is neither an absolute, nor an optimum system. Viewed from such a perspective it becomes a transitional state of affairs, which was very appropriate to the fashions and conventions of the 19th Century, when changes were slow and only the wealthier (and, by definition, better informed) parts of population took part in elections.

The democratic system, as it operates to-day, has several fundamental problems. If we look at currently practiced political systems it would appear that they do not follow the three basic dogmas of the systems approach. To run any large dynamic system correctly we need adequately trained people, suitable organisations and appropriate management methods.

Let's start with the question of adequately trained people. This is how an international pharma company advertises for senior executives:

Job Requirements: A PhD in chemistry, preferably in organic synthesis, or a degree in chemical engineering is required. You have more than 10 years experience in the pharmaceutical industry and have proven to be capable of building and leading a team that gets things done. You like to work in a lab and plant environment and have a keen interest in recent development in organic chemistry and related technologies. Excellent social and communication skills are an assist.

The local party officials scrutinise the candidates according to a somewhat different list of requirements which, if advertised, would look like the example shown below:

Job requirements: You have more than 2 years of experience in public speaking and excellent social and communication skills. You are at least 1.8m tall and have a pleasant appearance. You can answer any questions according to our party formula whilst looking your questioner straight in the eye. Good memory for relevant facts is essential and influential friends are an important asset. Attractive wife/husband and young children will add to your eligibility, as will achievements in sporting or show business arenas.

Let's look now at suitable organisations. The first aspect we shall examine is decision-making. In private organisations these are made at various levels, depending on their importance. The general method is the same: they are made by people, experts in their specialty, with relevant data at their disposal, who make

decisions appropriate to their level of responsibility and who have only one policy in mind: the success of their company.

In democratic countries changes are usually initiated by politicians trying to solve a problem which has been festering for a long time and which causes visible public disquiet. The contents of the necessary changes are initially drafted by public servants, but their recommendations are filtered through the philosophy of the party in power. As a rule, any proposed changes are opposed by the opposition and, in many cases, this may happen against national interest (because politicians look at the situation through the coloured sights of their doctrine). Often, due to parliamentary opposition, by the time a given law is enacted the circumstances have significantly changed.

The whole lengthy procedure thus contradicts the law of stability in dynamic systems, and the life of a country is a dynamic system. In order to get stability, the controlling system must have a phase advance in the correcting signal.

Let's now look at the systems by which nations are governed. The Western Democratic Countries are governed (I am purposely avoiding the use of the word managed) by an uneasy collaboration between temporary politicians, often taken from the street, and well educated, permanent public servants. This seems to exist in curious contrast to industry, where people with appropriate qualifications are employed at every level. Management methods are used and the top decision-making strata is stable, while lower rank personnel levels are more fluid. While changes in CEOs and individual board members do occur in industry, there is rarely a wholesale change of top management and a change of direction, because this is seen as a sign of failure and is usually followed by a reaction of the stock exchange.

I used the phrase 'uneasy collaboration' and this state is created by two factors: differences between their respective backgrounds and their objectives. For public servants, there are fixed minimum levels of education for various grades and there is a gradual specialisation in a given area of activity. Politicians are selected according to the formula mentioned above and, during their party period in power, they may change from being a minister of, say, health to that of defence (as often happened during the Howard period). In other words, we are governed by amateurs who have to learn on the job.

Objectives also differ substantially. For politicians, the main objective is to get elected and, for a Party, to stay in power. For the public servants the objective it is to get on personally, that is, to increase the importance of his or her section, get access to information and progress upwards on the many rungs of the public service seniority ladder. Their main output is 'activity': meetings, symposia, minutes, reports, analyses.

The problems of governments are augmented by the fact that no country is isolated from the rest of the world and many, if not most, of a country's internal activities are affected by what happens

in the rest of the world. Witness the recent financial crisis.

A brief history of globalisation

Consider the history of international trade. The need to coordinate activities on the world scale arose in commerce much earlier than in politics because trade began to replace local barter and started to cross into bordering nations. International Non Government Organisations (NGOs) have a history dating back to 1839, and by 1914 there were some 1,083 of them. Their main role was, and still is, mainly regulatory rather than political. These days there are over 40,000 NGOs.

The progress of science and technology led to the need for standardisation of units, measures and procedures. ISO, the International Organisation for Standardisation began in 1926, was disbanded during WWII in 1942, but was regenerated in 1946.

The first attempt at an international supra-political organisation, the League of Nations happened after World War 1. It was, however, limited in its effectiveness due to the non-participation of the United States, in spite of the fact that it was their President (Wilson) who proposed its creation. It did not stop the Italian and German wars of aggression of the 1930s and it collapsed at the beginning of WWII.

Real globalisation started after WWII following the Bretton Woods conference in 1945 and the formation of the United Nations, operating through its two main venues, the General Assembly and the Security Council. Whilst the above bodies are political and thus, by definition, largely toothless, the real value of the UN is demonstrated by their various professional bodies, which coordinate and direct most areas of human activity. The creation of the World Bank and the enactment of the General Agreement of Tariffs and Trade (GATT) were the first world organisations created through the UN. The International Court of Justice was also created in 1945. World Trade Organisation (WTO), World Health Organisation (WHO) and many others with 'World' prefix followed. Some of same, like for instance, the WMO (World Meteorological Organisation) existed in a less formal form before, (as IMO, founded in 1873).

It is through global NGO (non-government organisations) such as ISO, ICAO (International Civil Aviation Organisation), manned by professionals, that real globalisation is effected. The same road signs greet you in Kenya as they do in San Francisco or in Moscow. The same credit card will extract funds from automatic tellers in Beijing as they do in Berlin or Montevideo. The same language (English) is used by international flight controllers and pilots. On the roads of every country you find similar cars made by handful of international companies to rules enacted by various NGOs.

Since the beginning of the 21st Century it is the world-wide-web (www) which provides the most efficient and speedy agent of world integration. Search engines, like the Google or Yahoo and knowledge repositories, like Wikipedia, and social contacts by

Facebook and Twitter, provide what could be called the 'nervous system of the world'. Currently it is just a proto-nervous system which is still very far from coalescing into a proto-mind.

It would appear that the most unifying factors in our civilization were, and still are, the scientific and technological activities, which are based on universal laws. The same equations, symbols and units are used throughout the world. Results of research are broadcast as soon as they are experimentally proven and international awards, like the Nobel Prize, are recognised everywhere.

There are other unifying activities which, due to the progress of various forms of communication, involve contacts across the world, namely sports and entertainment. The same films are seen in cinemas and on TV screens of every country and world athletes compete in local and international events such as the Olympic Games, soccer (FIFA), tennis, and so on, both as individuals and as nations. Some people see sporting contests between nations as healthy substitutes for wars.

One must also mention benevolent organisations, such as the International Red Cross and Red Crescent, as well as Medecins sans Frontieres. The first one, the Red Cross, was initiated by the activities of a Swiss citizen, J.H. Dumant in 1863 following his account of the Battle of Solferino (1855).

Wikipedia ends its long article on globalisation as follows: "In general globalization may ultimately reduce the importance of nation-states and substitute sub-state and supra-state institutions such as EU, WTO, G8 and the International Criminal Court replace national functions with international agreements."

Whilst I broadly agree with this vision, I also reckon that things might get worse before they get better. I can also discern a possibility of two, less peaceful, outcomes. With Russia returning to being a dictatorial regime and considering its recent rapprochement with its traditional enemy, China, we could see the world split into two blocks: the West and the East – each with a different approach to government and to human life and its value.

The other, less likely, outcome may be an international upheaval of people in countries where the Gini7 Coefficient is well below 0.5. Such an event implies an efficient international collaboration between the neglected national strata in a way that communism tried to do so at the beginning of the 20th Century. The world-wide-web gives them opportunities unavailable to the communist commissars of the early 20th Century.

The results of recent elections in Australia are a good example of politics being invaded by an assault by amateurs of the various micro-parties, whose credo is based on a few simple objectives, which are far from representing the best interests of the country.

History rhymes

by Allan Sparx

Is history repeating itself? Again! Reviewing an old very controversial novel may offer us a clue.

The novel has resurfaced again in the United States because right wing media commentators and shock jocks are using it as a template to describe the way Barack Obama rules. Today's controversy seems greater than the debate that occurred when it was first published. The current interest in Woodrow Wilson has been peaked by *Wilson*, a 2013 Pulitzer Prize winning biography by A Scott Berg.

Philip Dru, Administrator: A Story of Tomorrow, 1920-1935 is a novel about a successful revolution born of a hopelessly corrupt union of the wealthy elite, in particular bankers and the American Government. It has parallels with what exists today in the US (as commentators like Noam Chomsky have extensively documented).

The revolution's leader becomes a benevolent dictator. He restores the rule of law to the Republic. Again, there are parallels. IMF whistle blowers are claiming that the US today is far from the rule of law and that the same can be said for international bankers.

The author, Edward Mandell House, was a Texas political insider who worked assiduously to support Woodrow Wilson president. After the 1912 election, he became such a close advisor to Wilson he took up residency in the White House helping to set up the administration. He served as foreign policy advisor until Wilson removed him in 1919. House's stated aim was to "to serve wherever and whenever possible."

When one of the most important documents of the twentieth century, The Treaty of Versailles, was being drafted, House functioned as Wilson's chief negotiator in Europe. He was prominent during the negotiations for peace (1917-1919), working as chief deputy for Wilson at the Paris Peace Conference.

House's influence on international and US politics was tremendous.

He played a major role in shaping wartime diplomacy. Wilson instructed House to assemble the "Inquiry" — a team of academic experts to devise efficient post war solutions to all the world's problems.

In September 1918, Wilson had House prepare a constitution for a League of Nations. House served on the League of Nations Commission on Mandates, along with Lord Miln, Lord Robert Cecil of Great Britain, M. Simon of France, Viscount Chinda of Japan, Guglielmo Marconi for Italy, and adviser George Louis Beer.

British biographer Godfrey Hodgson describes House as "a flunkey of the Warburg family", a fawning Anglophile and Confederate dreamer who engineered the creation of the Wall

Street-controlled Federal Reserve system. Hodgson also claims that House had strong British Intelligence connections and dealt as an intimate equal with the British war leaders, Herbert Asquith, Arthur James Balfour, and David Lloyd George. He concludes that House was a British agent of influence, drawing a parallel between the tumultuous events of 1910-1920 and the present world situation.

On May 30, 1919 House participated in a meeting in Paris, which laid the groundwork for establishment of the Council on Foreign Relations (which many believe is one of the most powerful groups in the world).

In short, E M House was intimately associated with world power and with the creation of the Federal Reserve, the League of Nations, The Treaty of Versailles and the Council on Foreign Relations.

House's character Dru pursues fairness and justice, shows disdain for the unthinking religious, displays military brilliance and pursues a modest way of life. His idealism is summed up in the sentence: "*The strong will help the weak, the rich will share with the poor, and it will not be called charity, but it will be known as justice.*"

Dru believes that unregulated laissez-faire capitalism has failed to serve, and that the world has fared best when individuals have strived to achieve benefit for all of humanity with rectitude rather than avarice. He believes that a global, rectitudinous leavening is what is required to lift mankind out of perpetual conflict and impoverishment for the majority.

Ironically, the individualistic style of Dru's hero is reminiscent of an Ayn Rand hero, although they are opposite ends of the political spectrum.

It is unfortunate that many words have fallen into disfavour because of their perceived connection with religion. One such word is rectitude (piety is not essential for rectitude).

Although Dru speaks of spirituality, he is disdainful of Christians who selfishly pursue a better life after death. oblivious of the plight of humanity before them.

The plot of the book is that the wealthy conspire to create a slush fund which they draw upon to support controllable political candidates. They choose candidates with skeletons in their closets making them easy to manipulate. It is claimed that Woodrow Wilson's affair with a client's wife was used to control him. Apparently Samuel Untermyer went to President Wilson claiming that a female client was seeking \$40,000 in damages for Wilson's illicit affair with her. Untermyer paid the supposed claim when Wilson showed his allegiance by appointing Supreme Justice Brandeis.

A character that has many modern parallels is Thor, the high priest of finance.

When House was writing, only one person fitted this description, J. P. Morgan. In the book, Thor's influence is world wide. *"There were but few men of business between the Atlantic and Pacific or between Canada and Mexico, who did not consider themselves fortunate in being called to New York by Thor, and in being asked to join him in a blind pool looking to the safe-guarding of wealth"*. One suspects there are many such powerful figures or groups at play today.

Dru feels that voters are demoralised and that the peoples' interest in public affairs is easily manipulated by a media that offers a flurry of alternative views, many without any true merit. Confused, the voters withdraw any interest in real politics and content themselves with arguing about the rights and wrongs of inconsequential matters. Not much has changed.

Most fascinating was the revelation that, as early as 1912, US corporations had earned very bad reputations. "The people were asked to curb their prejudice against corporations. It was promised that in the future corporations should be honestly run and in the interest of the stockholders and the public." These were far sighted words.

The book has many mawkish parts. But it is an intriguing tale of politics that remains relevant. The novel is often quoted in contemporary US political discourse. It even gets a mention in the profound scholarly work, *Tragedy and Hope* by Professor Carroll Quigley.

The idea that citizens can be looted by wealthy men in power ought to be of interest to all who seek a better fairer world.

If you enjoy this book, a good follow up is President Woodrow Wilson's *The New Freedom* which contains controversial and relevant assertions. Here are some:

"Our Government has been for the past few years under the control of the heads of great allied corporations with special interests."

"The Government has not controlled these interests ... it has submitted itself to their control".

"We vote : we are offered the platform we want ; we elect the men who stand on that platform, and we get absolutely nothing."

"We know that the machines of both parties are subsidised by the same persons, and therefore it is useless to turn in either direction."

This from a former President of the United States!

Don't look down

By Chris Doig

It is now, and high above us. Veteran astronaut and shuttle commander Matt Kowalski (George Clooney), is on his final

mission to make repairs to the Hubble Space telescope. Shuttle crew member and bio-medical engineer Dr. Ryan Stone (Sandra Bullock) is on her first shuttle mission and is gingerly dealing with her first walk in space to assist with the repair of the telescope. An urgent message arrives from mission control on earth: an unaccounted for explosion has destroyed a Russian satellite, its wreckage has spread out, destroying several orbiting spacecraft. The combined debris cloud is now on a high-speed collision course with them and it will arrive within minutes.

Contact with mission control is lost and before they can reach the Space Shuttle the debris strikes, destroying it and killing the crew. The disintegrating telescope throws Ryan into a head-spinning trajectory into space and towards certain death. Kowalski, however, has survived this initial collision and via radio contact with Ryan and the use of his jet pack he manages to retrieve her. He believes their only chance of survival is to reach the International Space Station about 100 kilometres away before the debris field completes another orbit and threatens them again. But they are stranded, completely alone – gravity-less and spiralling out into the blackness.

This is a technically brilliant film, all the more so for not dwelling on the technology and the physics of space that are so realistically, and dramatically, represented. Rather, from its long and visually stunning opening shot of the grandeur and three-dimensionality of space to the beautiful metaphorical sequence at its close re-presenting the precarious, faltering path of human evolution, it becomes clear this is neither a science fiction film fetishizing technology nor a high-tech wilderness survival story.

Co-written by director Alfonso Cuarón and his son Jonás, this is a story that while set physically between space above and earth below is primarily concerned with its protagonist's, and our, interior emotional landscape and the struggle to deal with real existential challenges. As director Cuarón himself has put it " [a] . . . thematic element of the film [is] the possibility of re-birth after adversity". This is illustrated very early in the story when we learn that Ryan feels a terrible, and probably unjustified, sense of responsibility for the death of her young daughter. She has lost a sense of meaning and purpose in her life. Better known for her roles in lighter films, Sandra Bullock's representation of a person attempting to deal with such a complex external and internal situation is emotionally powerful and thoroughly convincing.

Cuarón's film is a compassionate exploration of human weakness and strength, presented simply and directly, without cynicism or irony. It allows the protagonist's face, voice and, remarkably, her breathing, to convey the human struggle to survive -- up there in space, within our own psyche and, we feel, back on earth.

Gravity Directed, co-written, co-produced and co-edited by Alfonso Cuarón. 2013.

Let's get it right

by Lance Chapman

In the Spring 2013 issue of *Australian Rationalist*, former member T Michael Ellis attacked the RSA and the Journal on several fronts. Ian Robinson powerfully rebutted Mr Ellis's main allegations.

Mr Robinson was courteous and diplomatic. I may fail to emulate him as I critique four issues in the discursive Ellis article, What is the best way forward for the Rationalists?

Mr Ellis's prejudices and dodgy arguments prove he is far from "100% rationalist" (as he claims) and he fails on fairness, sensitivity and respect.

Muslims

Mr Ellis asserts that the RSA is "ignoring the atrocities of Muslims everywhere". His only evidence is female genital mutilation (FGM) performed in some African immigrant groups in Australia. It can be horrific butchery as practised in countries including Egypt, Ethiopia, Nigeria and Sudan. (See map.) FGM in Africa is cultural – all about tradition, patriarchy, family honour, social acceptance, increased male sexual pleasure and even hygiene (sic). There can also be a mistaken belief that it is a religious given.

Female genital mutilation was pre-Islamic and is not supported anywhere in the Koran. In 2007, Al-Azhar Supreme Council of Islamic Research in Cairo, the Muslim world's most respected authority, ruled that FGM has no basis in Islamic law. I agree with Mr Ellis that the RSA should join the fight to make every female in Australia safe from this barbarism, but expect final victory to take decades, even generations.

I am no apologist for Islam. Muslims must be condemned and confronted for their crimes: for example the Taliban in Afghanistan use violence to stop education of girls, and Muslims are heavily over-represented in statistics of honour killing, world-wide and in Australia. However, I reject Mr Ellis's idea that Australian Rationalists should cease "Catholic bashing" to concentrate criticism on Muslims.

Catholics

In living memory, there has been much to criticize Catholics for – Pius XII's collusion with the Nazis during the Holocaust, the Magdalene laundries in Ireland cruelly exploiting unmarried mothers (see the movie *Philomena*), Opus Dei support for dictators like Franco and Pinochet, John Paul II working to quell liberation theology in South America, Catholic hierarchy collusion in the "dirty war" in Argentina, and popes and bishops concealing child sexual abuse by priests in the 20th century.

It is disgraceful that Mr Ellis now mocks the priests' victims by describing this sexual abuse as "the sins (sic!) committed decades ago by a tiny minority whose victims have not lost any

body parts!".

Scientific Literacy

PISA results prove Australian children are not leaving school "totally and utterly scientifically illiterate", as Mr Ellis alleges. Australian 15 year olds' mean score in 2009 on scientific literacy was significantly higher than the OECD average for 34 countries. However, five Asian countries and Finland had significantly higher scores.

Mr Ellis wants more scientific literacy. So do I. This requires that students enjoy, respect, identify with and internalize science and become lifelong learners of science. After 47 years as a secondary teacher and principal, I know Mr Ellis's idea of making Science compulsory to Year 11 would be neither effective nor viable. Most teenagers dislike things forced on them, and do not engage. Also, most Year 11 students (and their parents) are focussing on Year 12 scores, and would resent distraction.

The best way forward is investment in effective science teaching: pedagogical research, curriculum development, recruitment and training of more and better teachers, and quality learning resources, including IT. Science needs to be taught more excitingly, earlier in life, and for more time each week. Problem-based learning takes time, but is the best way to go.

It is irrational and simplistic for Mr Ellis to assert that "when society is scientifically literate, religion and superstition will simply wither away." There are professional scientists with PhDs who are also religious. Maybe they are scientifically illiterate by Mr Ellis's standards?

The NAPLAN-driven focus on literacy and numeracy is overshadowing all else in Australian education. As well, the Abbott Government's refusal to properly implement the Gonski reforms is a major obstacle to educational advances in public schools.

Fortunately, some Australian media is helping improve adult scientific literacy. *The Conversation* website offers free news and analysis on Science & Technology, Environment & Energy and Health & Medicine. *The Monthly* magazine includes fine reporting on Science, Technology and the Environment.

Intellectuals

Mr Ellis writes that "right wing intellectual ... would practically be considered an oxymoron" (by the "presumptuous RSA pushing political ideology"). Well, top-tier public intellectuals with right-wing views are very few in Australia. Historian Geoffrey Blainey, political journalist Paul Kelly, and poet Les Murray just about sums it up.

Many right-wing "Claytons" intellectuals write for *Quadrant*. I force myself to read this, to learn what conservatives are

thinking. Rational argument is rare. Mostly, they just fulminate. Footnotes are never provided. Left wing intellectuals are rubbished as “élites”.

But Rationalists could find a lot of value in the research of Richard Denniss at the Australia Institute, even though he is left wing and thus unacceptable to Mr Ellis.

Final Thoughts on Islam

Rationalists should reject Islamophobia and indiscriminate Muslim bashing. We can leave these to Christian fundamentalists and Hindu extremists.

The US military industrial complex relies on West vs Islam “clash of civilizations” rhetoric to stay in business, now that there is no Cold War to justify their huge waste of resources and wrecking of lives. President Eisenhower, himself a former US Army Chief of Staff, warned against this lot in his farewell address in 1961. Half a century later, there is also the huge and growing security industry. As Edward Snowden revealed, they have zero respect for human rights as they fight the “war on terror”.

It is predicted there will be 2 1/2 billion Muslims in the world in 2050. So the West (and China) must come to terms with Islam in a constructive way so all humanity can cooperate on meeting common challenges.

Civilized dialogue is going to be necessary, including dialogue between Rationalists and Muslims. Many Muslim majority countries are secular, like Indonesia and Turkey, so maybe we could start there.

URLs

Female Genital Mutilation

<http://www.forwarduk.org.uk/key-issues/fgm>

Catholic Church

<http://www.magdalenelaundries.com/>

Scientific Literacy

<http://www.acer.edu.au/documents/PISA-Report-2009.pdf>

<http://books.google.com.au/books?hl=en&lr=&id=zvyBq6k6tWUC&oi=fnd&pg=PR6&dq=kogan+the+challenge+of+problem+based+learning&ots=>

<https://theconversation.com/au>

<http://www.themonthly.com.au/topic/science-amp-technology>

Intellectuals

<http://www.tai.org.au/>

US Military-Industrial Complex

<http://www.americanrhetoric.com/speeches/dwightdeisenhowerfarewell.html>

The Just

By Jorge Luis Borges

A man who, as Voltaire wished, cultivates his garden.

He who is grateful that music exists on earth.

He who discovers an etymology with pleasure.

A pair in a Southern café, enjoying a silent game of chess.

The potter meditating on colour and form.

The typographer who set this, though perhaps not pleased.

A man and a woman reading the last triplets of a certain canto.

He who is stroking a sleeping creature.

He who justifies, or seeks to, a wrong done him.

He who is grateful for Stevenson's existence.

He who prefers the others to be right.

These people, without knowing, are saving the world.

Membership Application

The Rationalist Society of Australia Inc. is Australia's oldest free-thought group, dating back to 1906. Join us and be part of the international movement to defend the legacy of the Enlightenment and to further the cause of genuine secularism in Australia.

Check our website www.rationalist.com.au for up to date information about what we stand for and what we're doing about it.

You may also use this form as a gift subscription, to introduce those you care about to the ideals and actions of the free-thought movement.

I hereby apply for membership of the Rationalist Society of Australia Inc. and affirm that I agree with the aims of the Society and will abide by its Rules, as set out on the RSA website.

Name

☐ This is for myself

☐ This is a gift

Address

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Signature

Date

Please tick

☐ \$50 Single

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☐ ____ Donation? (many thanks)

Student or Healthcare
card number

Send this form and your cheque to The Secretary, PO Box 1312, Hawksburn 3142, Victoria, Australia.

Or send in the form and transfer funds electronically to RSA Admin, BSB 313-140 account 1200 2918, being sure to cite your name as reference so we know where the funds are coming from.

Rationalism grows out of a respected tradition of critical thinking that goes back to the ancient Greeks, flourished during the Enlightenment, and in modern times continues to develop its views in the light of new evidence and argument. It is an ideal approach to public life and personal belief in the twenty first century.

To achieve our aims we:

- Publish a journal, the Australian Rationalist
- Host a website, rationalist.com.au
- Organise public lectures, debates, and conferences
- Participate in media discussion on issues of concern
- Make submissions to public inquiries
- Lobby MPs, governments and other relevant bodies

As rationalists we:

- Propose ethical principles based on shared values rather than religious doctrine
- Defend freedom of thought and conscience
- Advocate for the separation of church and state
- Work for the secularisation of the education system
- Endorse and support science and the scientific method
- Adopt a sceptical stance towards supernatural and paranormal claims
- Campaign to eliminate superstition
- Promote an open and just society
- Oppose the intrusion of religious dogma into public decision making

Official Aims of the Rationalist Society of Australia Inc.

To propound and advance Rationalism, that is adherence to the principle that all significant beliefs and actions should be based on reason and evidence, that the natural world is the only world there is and that answers to the key questions of human existence are to be found only in the natural world.

To stimulate freedom of thought.

To promote inquiry into religious and other superstitious beliefs and practices.

To encourage interest in science, criticism, history and philosophy as connected factors in a progressive human culture, independent of theological creeds and dogmas.

To promote the fullest possible use of science for human welfare.

To promote a secular and ethical system of education.

The Purpose of Rationalism

Published in The Rationalist, December 1938.

Careful readers of the reports of speeches delivered at the World Congress of Freethinkers will note that there is one recurrent theme. We meet it in one form in Dr. Hayward's speech, when he declared that "the reactionary elements in our society must be attacked for their falsification of the truth, and for their general incompetence"; but he went on to point out that progressive folk should not be merely negative in their attitude.

Mr Renaud Strivay sounded an optimistic note, with its suggestion of constructive effort when he said, "The time has come for a new hope and a clear vision, which shall give the young man or woman a better attitude towards the world at large."

Mr. W.B. Curry underlined the fact that "the Freethinker must stand for a liberal view of life, which must not be restricted to the adult world, but must permeate the schools where the spirit of free enquiry should be fostered."

The trend of thought we are now following was expounded more fully by the great American psychologist, Professor J.H. Leuba, perhaps the world's leading authority on the psychology of religion. After supporting the English psychiatrist, Dr. D. Forsyth in the contention that the developing science of psychology has struck a death blow at religion, he went on to say that "he considered that it was not enough for those who accepted the findings of modern science to be merely destructive in their efforts. They should work to provide new ideals to take the place of Christian ideals which for so long have ruled the world. "Man," he concluded, "was a creature feeling an urge to change and improve himself, and those who wish to rebuild life on rational lines should utilise that urge."

One fundamental need in the rebuilding of the world was stressed by the leading ethical positivist lecturer and writer Dr. H.J. Bridges. "Free thought," he said, "was not a new dogmatism, but the foe of the dogmatic spirit is everywhere." He stressed the need for the formulation of a secular system of ethics now that supernatural ethics have decayed.

Mr. Cotoreau, of France, who followed Dr. Bridges, further developed this theme, claiming that "it was quite possible to organise a stable society without any belief in deity. The principle of unity and selflessness must be the foundation of any satisfactory secular morality, and it follows that man must subordinate his passions to reason, must strive for peace and universal brotherhood."

Mr J.P. Gilmour stressed the thought that "any secular ethic worthy of the name must perforce be on the side of peace against

war, for the emancipation of women, for the reform of the marriage laws, and for birth control; it further requires freedom of the Press, free discussion, free assembly, and complete personal liberty." Here the chairman of directors of the Rationalist Press Association lays down some planks of a definite constructive policy for Freethought. In Australia the Council for Civil Liberties is fighting for the preservation of the fundamental liberties outlined here. As is becoming increasingly evident, there is a tendency in influential quarters to restrict our liberties, to undermine our democracy, to fetter the Press, and to place shackles of ignorance on our minds. There is work to hand for the Freethinker.

Professor Launcelot Hogben, a famous scientist, widely known for his valuable book "Mathematics for the Million" tackled the problem we are at present concerned with from the standpoint of the scientist, "who desired to carry on his work of research unfettered by ecclesiastical or other restrictions." He was interested in fighting religious institutions only in so far as they interfered with the operation of the spirit of free enquiry. Reason itself was not sufficient. What was wanted was reason disciplined by experiment and research. Totalitarianism was a product of despair, and the most effective way of countering it was to make available to the people, as a whole, the great social improvements which scientific advance had made possible, to give them, in fact, a system which was worth defending."

And so we could go on showing how the thread of our thought is interwoven into the texture of almost all the speeches at the Conference. We will, however, let the famous economist G.D.H. Cole, make the final contribution. He declared that "he was not very interested in the Freethought Movement in as far as it was concerned merely with fighting religion, but in wider aspects. In the course of historical studies, he had been impressed by the fact that the real pioneers of the Freethought movement, like Richard Carlile, Robert Owen, and, later, Charles Bradlaugh, had sought to make their belief in freedom more comprehensive by linking it up with a demand for better social conditions ... In his view what believers in freedom should aim at now was a radical, hopeful philosophy covering the whole field of life."

There, then, in this provocative statement, is the problem set before us. What is Rationalism for? What is the task we set ourselves? Are we to confine ourselves to the criticism of outmoded forms of supernatural thought, or are we to take an active part in the creation of the new world?

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~ Barbara Tuchman ~*



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