



future news

a newsletter from the *futures* foundation

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Now for some policy foresight?

With the Federal election behind us, the government of Australia has a wonderful opportunity to take a longer view -- at least for a couple of years, before it turns its attention to the polls again.

This issue of *Future News*, coincidentally, offers several examples of where that kind of work might begin -- learning from the failures of the past in such areas as environmental sustainability, global warming, the production and marketing of food, new approaches to health. But before all that, there needs to be a willingness to consider the future, and as we see on page 4, that's something we humans haven't been very good at.

Now is the time to learn. If we are as rational as we like to think, we can see ample evidence that failure to consider the future is putting the planet and its societies at risk. But our capacity for denial is amazing. Tragic. Comic. Tragi-comic. We laugh at stories of ancient kings who killed the bearers of bad tidings, as if that would change the news they reported. We mock mad Nero, who fiddled on the terrace of his sun palace on the Palatine Hill while Rome burned below. We use wise Cassandra's name to

jeer at those who warn us, missing the point that she was right about the fall of Troy. But look at us now!

So what do we do instead?

Futures-oriented policy-making is a powerful way to move beyond the limitations of traditional processes, and to generate rich, new solutions that do more than simply meet local needs as they arise (see panel). It isn't all that difficult. Policy-makers may feel that short-term pressures are overpower-

ing, but in fact there are now simple and effective tools that help us to explore the future, consider the consequences of our decisions, and create a range of plausible alternatives. None of us can predict the future, but we can explore options, anticipate likely outcomes, challenge our assumptions and open up surprising possibilities. Good futures work is about process as much as content: in this case, the processes of consultation and participative decision-making, using the future as a tool to break down barriers and create innovative alternatives with shared ownership and support.

Professor Richard Slaughter points out that "it's hard to make good choices when we don't know what we are choosing between." The whole point of exploring the future, as he says, is to create a context for making choices. Isn't that what policy is all about? (*What futurists said in 1998: see p4.*)

The power of futures-oriented policy-making

Futures oriented policy-making expands, broadens and deepens the policy process, says Professor Sohail Inayatullah, one of several world-renowned futurists who live in Australia.

It does this by focusing on:

- 1. The implications of current decisions on the future**
- 2. Anticipating emerging issues and trends before they become problems**
- 3. Mapping alternative futures so that more effective decisions can be reached today, that is, by using the future to transform today**
- 4. Extending the temporal horizon so costs and benefits include future generations**
- 5. Embedding flexibility into the vision of the future, and**
- 6. Developing processes so that policy remains a living practice - anticipatory action learning.**

"When the issue of the future is raised, more often than not allusions are made to forecasting. Forecasting, however, is only one way to 'use' the future. There are other purposes to the future."

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Our mission: "to engage all Australians in creating better futures"

the *futures* foundation ABN 68 067 598 707 Phone 13 007 CREATE E futurists@futurists.net.au www.futuresfoundation.org.au

Produced by Jan Lee Martin jl@ppr.com.au

What is the State of the Future?

Human beings do have the resources to address the enormous challenges that face us. The big question is whether we will use them for that purpose. That's the conclusion of the 2004 *State of the Future Report* from the Millennium Project, now auspiced in Australia by the Futures Foundation. And it's a conclusion that reinforces previous research.

Last year's State of the Future Report, for example, began as follows: **"It has become increasingly clear that humanity has the resources to address its global challenges. What is less clear is how much wisdom, good will and intelligence will be focused on these challenges."**

This year, the Report repeats that "we may be in a race between the increasing proliferation of threats and our increasing ability to improve the human condition." While acknowledging that the seriousness of the challenges is driving many people around the world to fight "destructive fatalism" by implementing innovations that will benefit humanity, the Report continues that "the emergence of world conscience strategically focused on global challenges is too often distracted by trivia in the media, government pettiness, valueless marketing, daily complexities of survival and all forms of information pollution.

Can we anticipate ethical issues of the future?

From the rights of robots to the ethics of driving, a whole new range of ethical issues lies waiting in the wings... what will they be? Who will warn us? The Millennium Project is now collecting survey responses from Australian experts nominated by the Futures Foundation as well as other experts from around the world. They are being asked to suggest likely issues, and to comment on those suggested by others. Some examples of possible issues in the near future (2005-2010) include: should codes of ethics be created and enforced by an international agency to guide the behaviour of international corporations? Do we have a right to clone ourselves? Our animals? In the next period (2010-2025) participants have asked if information pollution should become a crime (as environmental pollution is now). Should there be two standards for athletic, musical and other forms of competition: one for the unaugmented and another for those whose performance has been enhanced by drugs, bionics, genetic engineering and/or nanotech? And for the longer term future (2025-2050) participants ask: if technology grows a mind of its own, what ethical obligations do we have for its behaviour? Is it right for humans to merge with technology, as one way to prevent technological hegemony? Should artificial life (life-mimicking software, sentient robots, etc.) have rights?

"Nevertheless," it concludes, "enough wisdom has prevailed to accelerate human development for a growing majority of the world."

We offer some highlights and lowlights on page 4: for more, go to www.futuresfoundation.org.au and click through to Millennium Project.

"Creating global partnerships between the rich and poor to make the world work for all, which seemed like an idealistic slogan before September 11th, may prove to be the most pragmatic direction"

**ACUNU Millennium Project
State of the Future Report 2004**

AIDS AND TERRORISM ARE POLICY KEYS

Reducing AIDS deaths and cutting the risks of terrorism are the two policy keys to the future, according to the 2004 *State of the Future Report* of the American Council for the United Nations University. The report consistently addresses what its contributors see as the top 15 Global Challenges and explores measures that might be taken to address them (see *Future News* June). It also applies a statistical tool -- the State of the Future Index -- to determine whether the immediate future is improving or getting worse, and to explore the dynamics of inter-relationships between the Challenges.

Several years ago it found that improving one of the 15 Challenges improved most of the others, while deterioration in one made the condition of all the Challenges worse. "This led to the belief that more may be learned about effective policies by studying the relationships among the elements of a system than by studying the elements themselves."

The State of the Future Index uses sophisticated software to look for the policies that have the most beneficial effects across the set of issues. It reached the conclusion that without effective policies in the areas of AIDS deaths and terrorism, there is a significant chance of a much darker future.

The Report also said it is increasingly clear that cultural change is necessary to address global challenges.

"The development of genuine democracy requires cultural change, preventing AIDS requires cultural change, sustainable development requires cultural change, ending violence against women requires cultural change, and ending ethnic violence requires cultural change. The tools of globalization, such as the Internet and global trade, should be used to help cultures adapt in a way that preserves their unique contributions to humanity while improving the human condition."

State of the Future: the highs and lows

“Although the interdependence of economic growth and technological innovation has made it possible for 3-4 billion people to have relatively good health and living conditions today, unless our financial, economic, environmental, and social behaviors are improved along with our industrial technologies, the long-term future could be more difficult.....”

“Globally oriented, future-oriented politicians are urgently needed.”

“Public and NGO participation in shaping national, regional, and international policy ... is a growing trend.”

“ Most people do not appreciate how fast science and technology will change over the next 25 years. People are surprised to learn that even today we can see proteins embedded in a cell's membrane tens of billionths of a meter across, that organic transistors with a single-molecule channel length have been developed, that gene variants for schizophrenia, depression, and other mental diseases have been discovered, and that light has been stopped by an yttrium-silica crystal and then released and has been slowed in gas and then accelerated, promising vast improvements in computer capacity. The synergies and confluence of nanotechnology, biotechnology, information technology, and cognitive science -- known as NBIC -- will dramatically increase individual and group performance and the support systems of civilization. Dramatic increases in collective human-machine intelligence are possible **”** within 25 years.

“More than 30 new and highly infectious diseases have been identified in the last 20 years, such as avian flu, Ebola, AIDS, SARS, and cross-species viruses in Africa; for many there is no treatment, cure, or vaccine.”

“In the past 20 years, income per capita has grown almost 10%, life expectancy has increased about seven years, secondary school enrolments have grown by 30%, and infant mortality has dropped by almost 40%. Yet without major policy interventions, the income disparities could grow enough to create global instabilities. The ratio of the average income of people in the top 5% to the bottom 5% has grown from 6:1 in 1980 to over 200:1 now.”

“One of the greatest dramas is whether ... efforts to achieve sustainable development will be sufficient to prevent global warming from seriously damaging civilization and life-support systems.... Atmospheric CO2 has gone up again for another record year, three of the last five years were the warmest in recorded history, and the world could use more than twice as much fossil fuels over the next 50 years as over past 50.”

“ As mobile phones and the Internet merge, China is set to become a unique cyber phenomenon: it has the most mobile phone users in the world and within two years it will also have the most Internet users. **”**

“The synergies of NBIC technologies plus robotics and genomics promise god-like powers with ethical implications beyond current discourse. Information overload makes it increasingly difficult to separate the noise from the signal of what is important to know, in order to make a good decision. Because the unprecedented speed of change makes people unsure about the future and because globalization is challenging philosophical and religious certainty, people are unsure of the basis on which to make decisions.”

“The acceleration of scientific and technological accomplishments over the past 25 years will appear slow compared with the rate of change in the next 25. The process of scientific R&D that uses peer-reviewed journals and government support is being challenged by those using venture capital and press releases to get products to the market more quickly. Since technology is growing so rapidly along several fronts, the possibility of it growing beyond human control must now be taken seriously. National decisionmakers have not been trained in the theory and practice of decisionmaking, and few know how advanced decision support software could help them. Formalized training for decisionmakers could result in a significant improvement in the quality of global decisions. In addition to policymakers needing training in how to make decisions, processes to set priorities (local, national, and international) need further development.....”

Grassroots leadership?

Either way you look at it, there's a new kind of leadership about. While political heavies consult the popular polls in order to "lead" their nations into the future, millions of citizens around the world are taking matters into their own hands. And although there's clearly a big difference between the poll-mediated "leadership" of the political followers who led last weekend's election result in Australia, and the concerns of the leaders of global change, both of them originate at the grass roots of society.

Is it time, then, for leadership to shift to the sprouts?

There are encouraging signs that emerging generations are bringing new ideas with them – and if Max Planck was right (see p5), that's the only way we'll get new ideas since we find it so hard to change the way we think. But will we welcome all of those new ideas?

"Global warming is not going away, and legal mechanisms to recover damage seem inevitable," says the 2004 *State of the Future Report* from the Millennium Project. We are already seeing class actions against corporations and governments. What about inter-generational equity? Could we be sued by our grandchildren?

We can hardly deny that they'd have good cause. And how could we complain if they rejected the heavy burden of supporting their profligate forbears, when the upside-down demographics of the immediate future place that requirement on them?

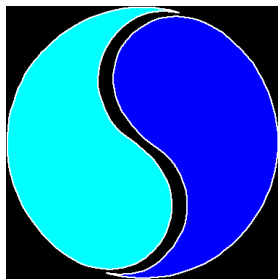
At precisely what point does our natural reluctance to face unpleasant facts become criminal negligence?

Ignorance is no defence. It was 1962 when Rachel Carson published *Silent Spring*. Garrett Hardin's *Tragedy of the Commons* was published in *Science* in December 1968. In 1972 the first version of the famous *Limits to Growth* report was published by the Club of Rome. Now a 30-year update of that report confirms its conclusions and tells us that humankind has already overshot the limits of sustainability by some 20 per cent.

"Humanity has squandered the past 30 years in futile debates and well-intentioned, but halfhearted, responses to the global economical challenge. We do not have another 30 years to dither", it says.

Isn't it tragic that the only thing that may save us from the contempt -- and retribution? -- of our descendants is likely to be their willingness to share the guilt, with their own enthusiastic adoption of the culture of denial and distraction that we have perfected over the past 30 years?

Or, noting cultural shifts in western society tracked by researchers like Ray and Anderson, can we consider that things might be different? Work for a better future? That, of course, is what futurists do. **Jan Lee Martin**



THE STATE OF THE FUTURE

what Australian futurists said in 1998

Australian futurists considered the Millennium Project's 1998 *State of the Future Report* at a workshop in Sydney soon after its release, and added ideas to enrich it for use in Australia. Let's revisit some of those ideas....

"There would appear to be little point investing much effort in 'fixing' the economy in an isolated fashion if society is falling apart at a broader level. There would appear even less point if the ecological processes upon which life depends are under threat and receiving little attention."

-- **Martin Hanlon**

"There are probably limits to the human body's ability to cope with the ever-increasing rate of change. This has not come out anywhere... all the opportunities [identified in the report] pre-suppose our unlimited ability to cope with the combined effect of these changes."

-- **Joy London**

"The top two 'opportunities' -- achieving sustainable development and increasing acceptance of long-term perspectives -- are important and urgent...[they] suggest a meta-opportunity: calling on new thinking for the sake of the future.... The task... challenges long-held assumptions, such as the primary of economics and competition."

--- **Tony Stevenson**

"Redefining success and what is to be valued seems to be already at the core of the ethical investment movement and we need to encourage this. We have a world today that is fixated on action and doing rather than reflecting and becoming. We need to separate the personal from the economic and challenge ourselves to define what it means to be human first."

-- **Attracta Lagan**

"When science uncovers the secrets of the human genome in the next decade, we face the extension in our societies of the 'eugenics of the genome' which is a more technically competent and effective approach than that espoused by earlier generations [e.g. Nazi Germany]. There are many disturbing questions that arise....what will be the consequences for society, for humanity and for human life?"

-- **Hon. Professor Dr Peter Baume**

"[Many] projects are in existence but are not necessarily purposefully synthesised to produce intended outcomes. An Australian push to synthesise these areas and develop a course of purposeful activity will reshape the country."

-- **Gary Saliba**

"The Report continues to perceive work as an economic construct rather than a social construct. The most profound changes in work, unemployment, leisure and underemployment are arising because our economic system can no longer provide for us what we once assumed it could: meaning and purpose."

-- **Charles Brass**

Looking for change? Don't hold your breath

While humans clearly have the capacity for great intelligence and rapid learning, this issue highlights just how slow we are to learn some of the things that matter most. Is it because we are excluding too much from our tunnel vision? Would it help to slow down a bit? Does this idea mesh with an emerging global resistance to the speed and complexity of modern life in the west? Can we take a leap of the imagination into a future "Creative Australia", once more the Timeless Land?

HARE BRAIN, TORTOISE MIND

Australian management was quite quick to recognise the key role of innovation and creativity to deliver competitive advantage in the age of knowledge industries. *Why has it taken so long to recognise the concomitant conditions?* Just for starters....

- that creativity and innovation are human attributes that cannot yet be replicated by machines, so we need talented, creative people
- that creativity and innovation cannot be driven or coerced, so we need creative people who are inspired by work that has meaning for them
- that creativity and innovation cannot be delivered by the clock: we need talented, inspired, happy, unstressed creative people!

Perhaps British professor Guy Claxton has the answer to our question. In a book entitled ***Hare Brain Tortoise Mind: why intelligence increases when you think less*** he explains that the mind has three different processing speeds -- the first is faster than thought, like our instinctive reactions to save a fall; the second is thought itself, the sort of intelligence which does involve figuring things out logically; and the third is less purposeful and clear-cut, more playful, leisurely or dreamy. This third mode is a different mental mode from the one we use to plan a meal or dictate a letter.

"These leisurely, apparently aimless, ways of knowing and experiencing are just as 'intelligent' as the other, faster ones," he says.

"Allowing the mind time to meander is not a luxury that can safely be cut back as life or work gets more demanding. On the contrary, thinking slowly is a vital part of the cognitive armamentarium. We need the tortoise mind just as much as we need the hare brain." Indeed, in some cases, the slow mind is more effective, especially as the complexity of our subject increases.

"Recent scientific evidence shows convincingly that the more patient, less deliberate modes of mind are particularly suited to making sense of situations that are intricate, shadowy or ill defined. Deliberate thinking [which he calls d-mode] works well when the problem it is facing is easily conceptualised... This third type of intelligence is associated with what we call creativity, or even wisdom."

Claxton offers a wealth of research to support his claims and to illuminate details like the different success rates of "successful intuition"

In Praise of Slowness: How a Worldwide Movement is Challenging the Cult of Speed

This new bestseller from Carl Honoré (HarperCollins 2004) explores the global "slow movement", from Italy's slow food and slow cities (which we have savoured in previous issues of *Future News*) to newer "decelerating" experiments, in the workplace, medicine, children's education and sex -- all of them activities unsuited to use of a stopwatch.

The slow food movement, which promotes the leisurely preparation and consumption of local, organic food and wine, now has followers in 85 countries including Europe, the US and Australia. The Slow City movement followed, and soon there was a rush of new books exploring the phenomenon of slowness. Honoré says we must re-examine the fundamental links between time and work. Futurist and economist Jeremy Rifkin says that this "will determine the future course of politics around the world in the coming century".

Think what it could do for tourism... health...leisure...entertainment...sport and recreation...Australia as a tourist destination...a centre of creativity for the knowledge economy....

But how do we unhook ourselves from the dollar-clock that is driven, ultimately, by the cost of borrowed money?

and "wild guesses". A lot of evidence confirms the common impression that when people feel threatened, pressurised, judged or stressed, they tend to revert to ways of thinking that are more clear-cut, more tried and tested and more conventional: in a word, less creative. He even explains why it is so hard to achieve big changes in society (the central theme of this issue) and quotes 'Planck's dictum': ***major advances in science occur not because the proponents of the established view are forced by the weight of evidence to change their minds, but because they retire and eventually die.***

No doubt that's why our top futurists place so much emphasis on teaching the next generation.

IF WE ARE WHAT WE EAT.....

Food allergies now cause up to 20 deaths a year in Australia. These fatalities are the tragic tip of a vast iceberg of physical and emotional health problems that are only now being sheeted home to the mass production of food. Meanwhile, the food industry rushes ahead with aggressive treatments designed to extend shelf-life, cut manufacturing costs and seduce our senses: more than 20,000 new packaged foods and beverages are released to the market every year (see panel).

The DuPont Food company is even planning to use nanotechnology to assemble food from carbon, hydrogen and oxygen atoms present in the air as water and carbon dioxide. Why bother with plants and animals, they say, if they can simply replicate their atomic structures? Kraft is also looking at nanotechnology, and working actively to bring its products to market. Yet as we reported in June, the CSIRO's Dr Terry Turney told a Sydney workshop on nanotechnology, *"We need to recognise that carbon nanotubes can breach the blood/brain barrier. No-one yet knows the significance of some of these issues. Studies are expensive. They have to be international. The cost is prohibitive, and there is no adequate support for doing those studies in Australia at the moment."*

British organic farmer, Richard Young, repeats warnings offered by others. Commenting on extreme technologies used to extend product shelf-life, including treating the food with chemicals that are suspected carcinogens, he agreed that one of the great successes of agriculture in the last century has been to extend the range of produce that can be enjoyed out of season. "But when you've got shelf lives going even into

a second year, it seems we're moving into an area where the risks outweigh the benefits." The big danger of the modern food industry, he says, is "that the rate of change is occurring on a completely different scale to anything in human evolution....we're not giving ourselves any time to adjust to problems that we can't yet see." Exactly what Richard Mackarness said in 1976 - see below.)

In recent weeks we have seen a spate of stories that highlight how little we know about the effects of nutrients, additives, therapeutic drugs and other components of our modern high-tech diets - and their interactions with each other. In just one of them (*SMH* 23 09 04) Deb Richards reports that a commonly prescribed diuretic also depletes potassium; that grapefruit juice and other drinks containing bergamottin can poison patients on immuno-suppressant drugs; that birth control pills deplete several nutrients, including folic acid; that antidepressants, anticonvulsants, antibiotics and more have food interactions, side effects and deplete some nutrients. Drugs given to treat heart disease can affect key vitamins and minerals, with the result that they actually worsen the problem they are intended to treat. And patients taking statins to lower their cholesterol may also be lowering their energy.

My allergy is driving me crazy...

"Modern medicine has become a major threat to health and its potential for social, even physical, disruption is rivalled only by the perils inherent in the industrialised production of food".

When Ivan Illich said this in 1974, he was putting into words two of the worst and so far largely unspoken fears of doctors in developed countries, wrote Dr Richard Mackarness two years later, in his own book about the effects of food allergies and intolerances (*Not All In the Mind: how unsuspected food allergy can affect your body AND your mind*). He quoted astonishing cases from his own practice, where serious psychiatric disorders had arisen from nothing more sinister than an allergy to glutens - and were instantly cured by a change of diet. Discussing the prevalence of "emotional disorders" that mystify the modern doctor every day, he said "although the drug companies give him every kind of chemical to prescribe for the mitigation of symptoms, he must realise in his heart of hearts that he is still pouring drugs of which he knows little into patients of whom he knows even less".

Moving to the second half of Illich's quote, Mackarness asks: could this be one of the keys to the doctors' dilemma? That the food we eat is now so refined, processed and adulterated with chemicals that it is causing all or most of these new and strange epidemics, through our failure to adapt to it and stay healthy?"

FOOD WARS: mouths, minds & markets

People are now eating 25 per cent more food than their grandparents, write Tim Lang and Michael Heasman. Except, of course, the 800 million people who are short of food: in about 33 countries, mostly in Sub-Saharan Africa. The health costs of obesity in Europe and North America now exceed the costs of smoking, and in some developing countries there are more obese people than hungry ones.

The influence of companies is staggering. In the US, four companies control 81% of beef packing, 81% of maize exports, 80% of soybean crushing and another four control nearly half of pork, chicken and turkey production. Turnover of the top 30 retailers amounts to almost \$1tr per year. For every \$1 the WHO spends to improve nutrition, another \$500 is spent by food companies on promoting processed foods.

Of food and farming

Something is badly wrong with the way we feed ourselves, agreed experts from all parts of the food industry at a conference held in London in July. The event was organised by *New Scientist* and the Royal Institute of International Affairs at Chatham House to present some badly needed new ideas.

Key points

- a growing consensus that people in industrialised nations are overdosing on sugars, fats and salt, leading inevitably to obesity, cardiovascular disease and premature death. People in many developing countries are following suit.
- already, ten per cent of Europe's health costs go on obesity.
- while governments ask people to listen to health education, other policies point the opposite way ("the European Union's Common Agricultural Policy, for example, pays farmers to churn out fats")
- the food industry would sign up to sustained public education on the benefits of healthy eating... but the public doesn't seem to take any notice: one researcher has found that even when people accept advice on what they should eat, they don't act on it. "Palatability, convenience and price tend to overwhelm healthy eating decisions."

A tax on fat? Too hard, says one expert – how about a tax on advertising?

The field of nutrigenomics, already heavily funded by industry, seeks to identify the genes that contribute to diet-related diseases, then give people diets that help them avoid those diseases.

But perhaps the most powerful new force for change, reports the *New Scientist*, has emerged from the finance industry. "Two studies last year rated food manufacturers by the unhealthiness of their products. This could have a major impact because pressure from the mainstream stock markets makes companies nervous." [*The carrot of ethical investment or the stick of liability?*]

The trend to farmers' markets that is bringing US and UK consumers into line with Europe, is also putting pressure on the food industry. Its middlemen are under attack for

- pushing up pollution by transporting food "crazy distances" to centralised collection and processing centres;
- pushing down prices, so farmers earn less money for their produce, and
- cutting consumers off from the farmers.

Farmers markets are a multi-million pound industry in Europe and are now supported by AlimenTerra, the European Network for Sustainable Food Systems.

Parts of the food industry are clearly listening to their consumers (or employees, or investors, or...). Unilever has started to create sustainable food chains for crops such as peas, tomatoes and black tea. It publishes guidelines on good farming practice and measures such things as soil fertility and loss, pest control, and even the impact of their plans on local economies.

"Is Unilever acting altruistically?" asks the *New Scientist*? Not totally.

"It makes sense for the company to safeguard its future business," said Steve Parry, its head of research into frozen food and sustainable agriculture. "We can only continue to be successful long-term if the societies we operate in continue to develop well and sustainably."

GLOBAL WARMING WARMING UP

- **The US Conference Board, whose membership of 2000 includes major global corporations, has noted growing consensus on global warming and predicted increased pressure on companies to address the issue.**
- **Right on cue, a coalition of 19 consumer and environment groups in Australia is calling on energy ministers to change the laws that rule the national electricity market. They want them to require energy supplies and other players in the \$7 bn p.a. market to cut consumption and reduce greenhouse emissions. (More than 90 per cent of our electricity production still relies on fossil fuels.) The electricity industry is still arguing that alternatives would not be competitive... though it's hard to see the logic of that argument if the new conditions applied to all suppliers in the industry.**
- **A report from the Sydney Centre for International and Global Law says Australia could be sued for failing to cut greenhouse gas emissions. Several activist groups are considering legal action. Under the World Heritage Convention, the Australian government is obliged to "do all it can" to preserve the Great Barrier Reef, a World Heritage site. However it has refused to ratify the Kyoto protocol or take other steps to tackle climate change.**
- **Scientists report that the loss of the Antarctic ice shelf that was the subject of the fiction movie *The Day After Tomorrow*, has had a big impact in real life. According to reports in *Geophysical Research Letters* (22 09 04), studies have found several glaciers flowing out to sea up to eight times faster in 2003 than in 2000. While a floating iceshelf doesn't affect sea level itself, this speeding up of glacier movement could have a significant impact if warming spreads further south to the larger glaciers of Antarctica, they say.**
- **An Australian inventor has signed a contract with Country Energy to test a new system that will harness ocean currents to produce clean and renewable energy. The system is expected to drastically reduce electricity costs on islands.**

Signals in the noise

It's about time

Management researcher Steven Berglas suggests managers consider the performance of employees in terms of their "time abuse". Are they pre-emptive, compulsively beating the clock? Or people-pleasers, saying 'yes' all the time? Are they perfectionists, seeking to meet unrealistic but deeply internalised standards of excellence? Or procrastinators, leaving assignments to the 11th hour?

BOSS September 04 1221

Governance the new focus

Corporate governance and ethical dilemmas are the hot new subjects attracting students at US universities, reports Colleen DeBaise. In recent years, business schools have added courses on ethics: now they have waiting lists. And so do the law schools. "People are moving a step back and not just dealing with the symptom of whatever the problem is, but trying to deal with the root causes," said one educator.

Wall Street Journal 15 09 04 1222

Diseases detected while you wait

One area where the slow movement won't make waves is medical diagnosis. In London, the first DNA-based test that can diagnose a range of diseases within 30 minutes is about to go on trial. And the respected British medical journal, *The Lancet*, has reported (again) that dogs have the ability to diagnose skin cancers and other health problems. For example, they can detect an epileptic seizure about 30 minutes before it occurs.

London Daily Telegraph/Australian Financial Review Sept 2004 1223

The gurus

It's good to see increasing media coverage of the work of futurists, even if the glamour of the overseas visitor still overshadows the excellent work that is being done in this country -- and that's because business groups are inviting overseas speakers to star at their local conferences. It's interesting to speculate how long it will be before the main media appoint a reporter to the local "futures round" -- it could be the best job on the paper!

Sydney Morning Herald/AFR 07, 16 09 04/27 09 04 1224

Islam and the need for change

The Muslim world is changing, writes UK-based Ziauddin Sardar. Three years after the atrocity of September 11, it may be in the early stages of a reformation. From Morocco to Indonesia, people are trying to develop a more contemporary and humane interpretation of Islam, and some countries are undergoing major transformations.

Australian Financial Review 17 09 04 1225

Work satisfaction will aid productivity

Next to our health and relationships with close family and friends, nothing matters more to us than the quality of our working life, writes Dr Nicholas Gruen. All the research suggests that for all but the most menial jobs (and many would argue even there) there are strong synergies between job satisfaction and productivity - and the higher the skill level, the stronger the effect.

Sydney Morning Herald 29 09 04 1226

NEW WORLD ORDERS: *These and more in Future Survey July 2004* 1227

Planetary citizenship

Futurist Hazel Henderson and Caisaku Ikeda, president of the lay Buddhist association Soka Gakkai, explore the idea of establishing political and economic goals that reflect personal and spiritual values. The concepts of planetary citizenship and evolving personal responsibility for the human future are developed through personal reflections and institutional reform proposals.

State-building: governance and world order

Francis Fukuyama argues that nation-building is an important international priority, because weak or failed states are the source of many of the world's most serious problems, from poverty to AIDS to drugs to terrorism. Yet current development policies undermine capacity-building in the weak states.

Manifesto for a new world order

The Global Justice Movement is "a large number of people dispersed among most of the nations of the world who, in contesting the way the world is run, regard each other, most of the time, as allies," writes George Monbiot. Its manifesto is a program for collective action. It rests on the assumption that democracy is the least-worst system, favoured over Marxism and anarchism. "*That the international institutions have been designed or captured by the dictatorship of vested interests is not an argument against the existence of international institutions, but a reason for overthrowing them and replacing them with our own.*"