

## **EDUCAUSE AUSTRALASIA 2007 CONFERENCE**

### **‘Advancing Knowledge: Pushing Boundaries’**

John Batman Theatre  
Melbourne Convention Centre  
cnr. Spencer and Flinders Streets

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0915

Opening Address:  
**Reflections on the Knowledge Revolution.**

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I was flattered, if a little bemused, by the invitation to be the first speaker at this significant international conference comprising about 600 senior IT staff, support IT staff, academic officers, CIOs, senior managers and administrators, senior librarians and librarians, support staff, faculty, sponsors and exhibitors.

So I recognise you as insiders, masters – if not of the universe – at least of the techniques that help us to understand the universe.

I suspect that the reason for my invitation was that I began talking and writing about the Information Revolution more than thirty five years ago. Back in 1999, Al Gore made the mistake of seeming to claim on a television interview – in a joking way – that he had invented the Internet. I don’t want to fall into that trap and appear to claim that I invented the Information Revolution, but I can safely assert that I was the first Australian politician to talk about the information revolution, or post-industrialism, just as Don Lamberton was the first Australian economist to work in the area.

I talked about information theory in my maiden speech in the Victorian Parliament in September 1972, partly influenced by Don’s work, although we had not then met. It did neither of us any good professionally. We were too far ahead of the pack.

I soon learned that political wisdom is shown by those who proclaim the blindingly obvious about ten minutes before everybody else.

In 1982 Oxford University Press published my book *Sleepers, Wake!: Technology and the Future of Work* which ran into four editions and twenty six impressions.

I ended my chapter 'The Information Explosion and its Threats', with a quotation from T S Eliot, part of a chorus from 'The Rock':

Where is the wisdom we have lost in knowledge?  
Where is the knowledge we have lost in information?

I thought, indeed hoped, that the Information Revolution would be profoundly liberating and would lead to an explosive increase in creativity and a vast improvement in what I call 'labour/time-use value'. I am still waiting.

Friedrich Engels, Karl Marx' collaborator, argued that the clock, not the steam engine, was the central tool of the Industrial Revolution. Imposing discipline by managers in the factory system was essential to Henry Ford's model of repetitive mass production, where millions worked at producing identical products at a central place. The organisation of factories, schools, public transport, telephones and telegraph depended on the clock.

*Sleepers* identified the problem of redefining 'labour/ time-use value', and argued that it should be on the political agenda and made part of education practice. Time budgetting and self-management of time are central to personal development, from infancy on. Time is the medium in which we live: the only irreplaceable resource. Using it effectively involves setting priorities. But there is a paradox: time management, historically, has been an instrument of *external* control. We find it extraordinarily difficult to impute a value to our own time.

In addition, value has usually been *externally* conferred, by a superior (e.g. parent, teacher or employer). We find it virtually impossible to impute it to ourselves. Individual time management should be liberating. In practice, many people feel a psychological inhibition because of self-doubt about judgment. Coming to grips with time management is central to tackling the problems of boredom, alienation, road rage, depression, drug dependence and suicide, which have very high incidence among Australian young people. Even more feel uneasy about the passage of time and have a desperate need to desensitise it, 'killing time' by alcohol and drug abuse, especially smoking, although Australia has been strikingly successful in reducing addiction. Mobile telephony, video and internet games, web-surfing and television become major activity substitutes.

Capacity to manage time is the major distinction between those who exercise power and those on whom it is imposed – the ‘Who/Whom?’ question. Education should encourage development and redefinition of a new sense of ‘labour/time-use value’.

Significant increases in longevity in the West and Japan since World War II is having profound social, economic, political and educational implications, barely addressed by policy makers. For the first time in human history, retirement has become a definite and significant long-term period in most people’s lives. Most people who retire between fifty and sixty can expect probably thirty years of *active* life, and many more than forty. Access to information will be increasingly important to older Australians, as part of a commitment to life-long education.

Through Google and other powerful search engines we have instant access to what would have seemed like unimaginable richness to earlier generations – but I am doubtful if the promise has been delivered.

Paradoxically, the age of the Information Revolution has been characterised by domination of public policy by managerialism, replacement of ‘the public good’ by ‘private benefit’, the decline of sustained critical debate on issues leading to gross oversimplification, the relentless ‘dumbing down’ of mass media, linked with the cult of celebrity, substance abuse and retreat into the realm of the personal, and the rise of fundamentalism and an assault on reason. The Knowledge Revolution ought to have been a countervailing force: in practice it has been the vector of change.

When writing *Sleepers, Wake!* in 1979-81, I worried about the implications of adopting economics as the dominant intellectual paradigm, and its impact on non-material values, as if nothing else mattered. Inevitably, as the public domain contracted, education, health and child care were regarded as commodities to be traded rather than elements of the public good, universities fell into the hands of accountants and auditors, research was judged by the potential for economic return and in the arts best sellers displaced the masterpiece. Language became deformed. Citizens, passengers, patients, patrons, audiences, taxpayers, even students, all became ‘customers’ or ‘clients’, as if the trading nexus was the most important defining element in life. Values were commercialised, all with a dollar equivalent. Essentially, the ‘nation-state’ was transformed into a ‘market-state’.

The cult of management became a dominant factor in public life, exactly as James Burnham had predicted in *The Managerial Revolution* (1941), a book long ahead of its time. In Britain in the Thatcher era, and in Australia, after 1983, there was a growing conviction that relying on specialist knowledge and experience might create serious distortions in policy-making, and that generic managers, usually accountants, or economists, would provide a more detached view. As a result, expertise was fragmented, otherwise, health specialists would push health issues, educators education, scientists science, and so on.

At its most brutal, the argument was put that there are no health, education, transport, environment or media problems, only management problems: get the management right, and all the other problems will disappear. Coupled with the managerial dogma was the reluctance of senior public servants to give what used to be called ‘frank and fearless’ advice. Generic managers promoted the use of ‘management-speak’, a coded alternative to natural language. It helped protect insiders from open enquiry. A consultant has been defined as somebody to whom you lend your watch, then ask him to tell you the time. Consultants, eager for repeat business, provide government with exactly the answers that they want to receive. Lobbyists, many of them former politicians or bureaucrats, are part of the decision-making inner circle.

It is hard to identify a Director-General of Education with any experience of teaching and not all Directors-General of Health are across health issues. But they know how to manage (they say).

The managerial revolution involves a covert attack on democratic processes because many important decisions are made without public debate, community knowledge or parliamentary scrutiny. The process of ‘public private partnerships’, known by the acronym ‘PPP’, has been widely adopted in the UK and Australia and involves a substantial impact on public policy with a long term cost to the community. However, the process is far from transparent.

The English writer Francis Wheen argued:

Although 1979 may not have the same historical resonance as 1789, 1848 or 1917, it too marks a moment when the world was jolted by a violent reaction to the complacency of the existing order. Two events from that year can both now be recognised as harbingers of a new era: the return of the Ayatollah Khomeini to Iran, and the election of Margaret Thatcher’s Tories in Britain.\*

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\* Francis Wheen, *How Mumbo-Jumbo Conquered the World*, Fourth Estate, 2004, pp. 6-9.

He pointed to the philosopher Roger Scruton's concern about a counter-revolution 'which puts our entire tradition of learning in question... Reason is now on the retreat, both as an ideal and as a reality', a repudiation of the principles of the 18<sup>th</sup>-century Enlightenment, in which 'despite their quarrelsome diversity' most thinkers 'shared certain intellectual traits – an insistence on intellectual autonomy, a rejection of tradition and authority as the infallible sources of truth, a loathing for bigotry and persecution, a commitment to free enquiry, a belief...that knowledge is indeed power'.\*

The second half of the 18<sup>th</sup>-century eliminated trials and executions for witchcraft and heresy, restricted imposition of the death penalty, proscribed torture, began rational treatment of the insane and ended the slave trade, promoted religious toleration, including emancipation of the Jews, and the systematic organisation and propagation of knowledge, through encyclopedias and dictionaries.

'Enlightenment' has lost its historic meaning and is now often used in the context of self-awareness cults, feng shui, the transforming power of crystals, mysticism, the Rosicrucians and 'new age' religions.

Margaret Thatcher's victory in May 1979 repudiated bipartisan support for the interventionist economic policies developed by John Maynard Keynes, replacing them with market fundamentalism.

She also denigrated 'the public sphere' (such as public education or public health), and emphasised 'the private sphere', marking the end of a generation of consensus politics.

Current citizens are the best educated in Australian history, and the most technologically sophisticated. Is this reflected in our politics, public discourse and media? No, it is not.

For decades, politics has been reported as a subset of the entertainment industry, in which it is assumed that the audience looks for instant responses and suffers from short-term memory loss. Politics is treated as a sporting contest, with its violence, personality clashes, tribalism and quick outcomes. An alternative model is politics as theatre or drama. The besetting fault of much media reporting is trivialisation, exaggerated stereotyping, playing off personalities, and a general 'dumbing down'. This encourages the view that there is no point in raising serious issues

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\* Roger Scruton, 'Whatever Happened to Reason?', *City Journal*, New York, vol. 9, no. 2, Spring 1999.

months or years before an election. This has the effect of reinforcing the *status quo*, strengthening the Government's grip on the agenda – and I mean 'any Government', State or Federal.

Four fundamentalist elements that Khomeini and Thatcher shared were a conviction of infallibility, scepticism about 'progress', a commitment to absolutes and an invoking of the Manichean contest between Good and Evil.

Francis Wheen also reminds us that in 1800 the U.S. Presidential election was a contest between John Adams, president of the American Academy of Arts and Sciences, and Thomas Jefferson, president of the American Philosophical Society. In the 2000 contest, the contenders, George W. Bush and Al Gore, were both 'born-again's, and Gore sported a sign on his desk which read 'WWJD?' ('What would Jesus do?').

It is ironic that the United States, with the world's greatest universities and an unequalled record of scientific achievement, should have an enormous anti-science constituency. Nearly 50 per cent of Americans consider Genesis to be the final authority on the creation of the world, a significant minority are doubtful about a heliocentric universe, 40 per cent believe that angels exist and 75 per cent reject Darwin's theory of evolution.

As I was concluding my autobiography, *A Thinking Reed* in 2005, I felt deeply disturbed by the cumulative effect of serious changes in the political process since 1979, coincidentally just as the Knowledge Revolution was taking off. Reason seemed to have been abandoned in high public policy, leadership failed, political parties gave up even a pretence of commitment to principle, the politics of greed was morally bankrupt. The political process has been deformed, Parliaments have lost much of their moral authority, the public service has been increasingly politicised, most universities have become trading corporations, the media is preoccupied with infotainment, while lobbying and use of consultants ensures that vested interest is more influential than community interest. Public debate is dominated by the black arts of 'spin', so that 'framing' the debate becomes central. Appeals to emotion, especially fear and gullibility, and to immediate economic or cultural self-interest ('wedge politics') are exploited cynically and ruthlessly. Establishing the truth of a complex proposition (evolution, stem cell research, climate change, going to war in Iraq, Industrial Relations changes) is less significant than how simple arguments, essentially propaganda, can be sold. Unilateralism had failed, terrorism was spreading and the great problems of poverty, disease, famine and climate

change were ignored. The year 2001, when politics dropped out of politics, and paranoia broke the spirit of political Oppositions contributed to my sense of exile.

An age of technological transformation and scientific revolution ought to mean that we are more rational, analytical, reflective and constructive in tackling major problems than our predecessors. Right? Well, wrong actually.

The decay of mainstream religion has not led to an increase in rationality and enlightened scepticism. Instead the move has been towards fundamentalism, a variety of cults, primitive superstition, confusion and paranoia. This suggests that the challenges of modern life are not to be worked through, by applying reason and questioning, because the answers have already been laid down, generally in print, and may not be contested. Fundamentalism now has a Muslim counterpart which, like the Christian original, is a reaction to complexity and uncertainty. The more complex the world seems, the more people yearn for simple explanations, a formula which provides the meaning of everything.

Australia is a strikingly secular society compared to the United States, where religious observance is high and fundamentalist religion is influential in politics, education, health and research, despite the clear separation of Church and State set out in the Constitution. In the United States, 40 per cent of citizens claim to be 'born again'. Nevertheless, rates of homicide, sexually transmitted diseases, abortion and teen pregnancy are far higher in the 'Bible belt' of the US than in secular Australia. 'Creation science' has only a marginal market share in Australia, while in the United States it is entrenched as a significant paradigm in some states. Relentless commercialisation and commodification of life has not been inhibited by American religious observance. Religious polarisation is far deeper there than in Australia and the Them v. Us dichotomy more conflicted.

In *God under Howard* (2005) Marion Maddox argues that

Sociologists of religion have long pointed out that as societies become more secular, religion comes to be seen in increasingly instrumental terms. It becomes less a system of beliefs relating to a cosmic order that makes claims upon us than a toolbox of therapeutic and goal-setting techniques that can be adopted selectively to achieve individual ends...\*

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\* Marion Maddox, *God under Howard*, Allen & Unwin, 2005, p. 187.

Churches have sharp differences about the problem of poverty. Whose responsibility is it? Is poverty the result of personal failure in which destitution is the penalty for non-performance (the Hobbesian view) or is the pauper the victim of society, which then imposes on society the moral responsibility to provide restitution or support (Lockean). This issue has profound moral implications and there are deep divisions within the churches. Fundamentalist and charismatic churches tend to be opposed to the 'welfare state' while mainstream churches tend to support it.

Fear of difference has been compounded by terrorism and other horrors, before and after September 11, 2001. Appeals to fear are quick, easy and dirty, while rebuilding confidence is hard, complex and long term. Words are bullets – or chain saws – and damage caused quickly may take years to repair, if ever.

After September 11, 2001, fears of terrorism, and emphasis on national security and patriotism, dethroned reason, elevated the irrational, debased democratic practice, perhaps permanently, so that the rule of law was disposable, truth, evidence and analysis became marginal, or irrelevant, leading to the concept of 'the new normal' in the United States, and in Australia fear that arguing an alternative point of view would be political suicide. At its worst, it was an attack on the principles of the Enlightenment, an attack on rationality and a return to the pre-modern.

On 21 October 2001, Vice-President Dick Cheney, in justifying use of Executive power to restrict civil liberties, limit access to courts, restrict debate, and cripple Freedom of Information legislation told *The Washington Post*: 'Many of the steps we have now been forced to take will become permanent in American life, part of a "new normalcy" (sic) that reflects an understanding of the world as it is.'

In the United States, writers are now adopting, and some promoting, the term the 'new normal.' In this view, the 'old normal', where decisions might have been based on evidence, analysis, reason and judgment, using techniques refined by the Enlightenment of the 18<sup>th</sup>-century, had come to an end on 9/11. The 'new normal' depends on instant decisions based on 'gut', 'instinct' and 'faith'. Increasingly, policies have to be 'faith based.'

On 29 April 2007, the Google search engine listed 446,000,000 citations of the 'new normal', but the term has had virtually no currency or recognition outside the United States.

As Joan Didion wrote:

The 'new normal' required that we adopt a 'new paradigm' which in turn required, according to an internal White House memo signed by President Bush, 'new thinking in the law of war', in other words a reconsideration of the Geneva Convention's prohibitions against torture. 'Torture'...had become 'extreme interrogation', which under the 'new paradigm' could be justified when the information obtained by interrogation failed to tally with the information required by policy...

The word 'truth'...had been redefined, the empirical method abandoned: 'the truth' was now whatever we needed it to be, the confirmation of those propositions or policies in which we 'believed in our hearts', or had 'faith'...It was now possible to 'believe' in one proposition or another on the basis of no evidence that it was so...as if the existence of weapons [of mass destruction] was a doctrinal point on the order of transubstantiation...\*

In an era of 'Twin Fundamentalisms', Christian and Islamic, when proponents insist, 'I am carrying out God's will', God does not intervene to confirm which view is correct. One of the disturbing questions of the 21<sup>st</sup>- century is why the United States, with its sophisticated knowledge base in research, industry, arts, literature and music should have such a primitive, fundamentalist attitude to politics, religion and understanding the outside world. Both Bush and Blair are sympathetic to 'creation science' and 'intelligent design' being included in the syllabus of public schools.

One negative effect of the technological revolution is that human relationships may increasingly be carried out not face to face but mediated through the web, through mobile telephones and SMS messages. The recent tragic deaths of Stephanie Gestier and Jodie Gater point to the risks involved in virtual reality through the web, where sites such as MySpace or involvement in sub-cults such as 'goths' and 'emos' take vulnerable young people into a place of irreversible danger.

The appalling killings at Virginia Tech earlier this month are obvious by-products of the Information Revolution as Cho Seung-hui manufactured artefacts for his web site. He had the technological capacity to communicate with millions but felt unable to make personal contact with individuals.

How many of you watch Channel Nine's new one-hour quiz program, '1

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\* Joan Didion, 'Politics in the "New Normal" America', *New York Review of Books*, October 21, 2004.

vs. 100', transmitted on Monday nights at 8.35? It is essentially a populist exploitation of the competing emotions of fear and greed. When I look at the mob reaction (and 'mob' is their word, not mine) I can't help wondering if the program is compatible with universal suffrage.

Education seems to have become increasingly narrow, instrumental, technical and non-creative – and the recently launched Melbourne Model is an audacious attempt to break the existing mould, by insisting on broad education before professional specialisation. I encourage you to see Alan Bennett's *The History Boys*, either the stage or film versions, for a thoughtful analysis of two views of education.

I would like to see more emphasis on creativity in our intellectual life instead of treating innovation as if it was purely instrumental/ technological.

Creativity enables individuals to maintain a sense of control and wellbeing, through a process of resolving difficulty rather than by disengaging from it. The importance of creative thinking in addressing social and environmental challenges facing local and global communities needs to be acknowledged and fostered. It has also become imperative that our education system identifies how best to prepare young people for new roles and employment as the emergence of creative industries become the mainstays of our economy. Young people who have not been adequately schooled in creative learning will be severely disadvantaged in future working lives.

Innovation and Creativity are sometimes defined as if they are synonymous. There are large areas of overlap but I think that useful distinctions can be made:

Stravinsky died in 1971 and Shostakovich in 1975. Who is now the greatest living composer? Eliot Carter? John Adams? Philip Glass? Well, perhaps, but it would be a brave person who ranked them with Stravinsky or Shostakovich. The greatest painter? Picasso died in 1973, Dali in 1989, Bacon in 1992. Do Jasper Johns, Robert Rauschenberg and Lucien Freud fill their gap? Well, perhaps. And I could go on with novelists, poets and playwrights. Much film and most popular music (and I am commenting from an elitist position) is aimed at a visceral or instinctive appeal rather than an intellectual one.

Incidentally, the longest running best sellers in Australia's non-fiction lists, now there for months, are books on dry cleaning and speed cleaning (two separate books) and diet. How creative is that?

There must be room in our education for the abstract, the intangible, the spiritual, the aesthetic? Are medicine, education, knowledge, politics, understanding, philosophy, sport, research, aesthetics, literature, religion, music, and art all to be regarded as ‘business activities’? Perhaps they are. Where do values come in?

The concept of innovation ought to include ideas, creativity, imagination and values: both material, and non material, commercial and non-commercial. It is not a matter of either/ or – we must have both.

## CREATIVITY

Personal  
 Human  
 Quantum Leaps  
 Intangible  
 Intuitive  
 Values  
 Subjective  
 Unique/ one off  
 $e = mc^2$   
 Non-cyclical  
 Original  
 Without components  
 Understanding  
 No rules  
 Arts/Music/ Literature  
 Understanding existence  
 Non economic  
 Intellectual  
 Hard to measure  
 Hard to teach  
 Partly innate  
 Jesus, Shakespeare, Bach  
 Culture  
 Flexible  
 Subconscious elements  
 Joyful

## INNOVATION

Process  
 Systemic  
 Linear  
 Tangible  
 Logical  
 Utilitarian  
 Objective  
 Replicable  
 Edison, Ford, Bell  
 Cyclical  
 Downstream  
 Building on components  
 Outcomes oriented  
 Rules  
 78>LP>CD>DVD  
 Productivity  
 Entrepreneurial  
 Material  
 Easy to measure  
 Easy to teach  
 Largely experiential  
 Gutenberg, Wright, Marconi  
 Economy  
 Blueprint  
 Conscious elements  
 Aspirational

In real life, Creativity and Innovation overlap, with a profound and complex interaction, in which cause and effect are inextricably linked: touch a cause, and it changes the effect, which then changes the cause, and so on...

In theory, the information revolution looks like a superb instrument for increasing citizen involvement in politics and MoveOn in the United States led to the creation of GetUp in Australia in which large numbers of citizens can become involved in electronic campaigning. In practice, there is a grave risk that it will become a substitute for direct personal involvement ('I added my name to a collective protest e-mail. What more do they want?')

You are the masters of your vocation. I urge you to go out and transform our thinking, and commit yourselves to enlightened, passionate scepticism, involvement and detachment, reflection, enthusiasm, knowledge and balance – an odd mixture, but an essential one.