Jennifer Coote*
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Food/Fibres/Forests

Trading Challenges

Danish and US food and agriculture specialists C. P. Nielsen et al. examined the probable impacts of GM on trade in agricultural products, chiefly on developing countries. Crop producers are responding to consumer demand in some countries by segregating their exports into GM and non-GM varieties, targeted to sensitive or indifferent markets. GM recipients benefit from lower prices. These may include many developing countries, chiefly in S. America, N. America and low-income Asia. There are welfare gains for developing countries in adopting GM crops despite the increase in seed costs, but the continued benefits depend on effective handling separation of the two types. *World Development, Vol 29/8.*

Asian countries have not embraced GM seeds, though China is growing GM cotton. Rice exporting countries Thailand and Vietnam see market benefits by staying GM free, and the handling and separation problems are overcome by banning GM seed imports. GM food field trials of tomato, papaya could face banning. Continued pressure to admit GM rice may come from the *International Rice Research Institute*, in The Philippines, of which most SE Asian nations are members. *Far Eastern Economic Review, 14 June, pp52-53.*

The Western Pacific tuna fishery is the source of half the worlds canned supply, yet is probably underfished. As more foreign vessels, including NZ, are joining Japan, Taiwan, Korea and US, the Pacific Island states want a treaty covering the whole Central Pacific, which will: - block vessels, especially Japan, fishing as they please; put vessels under the control of a planned new fishing agency; require vessels to carry transmitters to fix their positions; prescribe their fishing equipment and require openness to inspection and even arrest for infringement. Japan is campaigning strongly against this. *Pacific Magazine, Nov.*

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B. Dinar, of Indian think-tank *Research and Information Systems for Non Aligned and Other Developing Nations* (RIS), examines *Non Trade Concerns for Developing Nations* in meeting the Agreement on Agriculture (AoA). Although the non-trade concerns are acknowledged - e.g. food security and environmental, the AoA primarily seeks to remove barriers to market access, replacing these with tariffs and reining in market distorting subsidies. His analysis argues that this emphasis undermines domestic grain production and threatens food security. Developing countries such as India and developed, such as Japan and EU, highlight agricultures multifunctional character: environmental and biodiversity protection, intrinsic value as landscape, the need to preserve viable rural areas for sizeable parts of the population especially in large landmasses, as well as providing critical portions of the national economy, in face of the volatility of commodity prices. Contrary opinions, e.g. Australia’s, contend that these attempt to justify subsidisation of agriculture.

The food security issue dominates developing country concerns. Switching from domestic production-based security to import dependence ignores the poor, swelled by the unemployed, who cannot pay market prices; the critical issue of the necessary national foreign exchange; plus the question of availability when scarcities are global, especially for very large populations like India. Government supported measures are needed to bring domestic producers to a competitive international level, with distinctions between such supports and those aimed at increasing international trade.

*Great Possibilities!*?

NZ dairy fortunes will result from the new value-added pharmaceutical and health food industry. Colostrum in milk has already been identified by researchers as a key commercial resource for its immune system enhancement. Milk fat lipids and proteins and whey proteins also have novel applications. *Food Business, March.*

A research achievement is hailed as opening a new era in NZ farming. Rye-grass can form the staple of pastures, without the usual adverse effects of staggers and heat stress in animals, yet with protection from a weevil pest. AR1, a naturally occurring endophyte, can be inoculated into ryegrass seed, with resulting massive improvement in pasture and stock quality and production. *Country-wide (NZ), Jan.*

The promise of “functional foods” providing tangible double benefit to consumers is exemplified by edible vaccines using GM technology, such as bananas. Vaccine delivery in current conditions, especially in poorer
countries, has many problems. Food-based vaccines offer simpler delivery methods, but in turn pose problems of dosage levels, fruit spoilage, problems of vaccine absorption via the gut and the hazards of recombinant vaccines for horizontal gene transfer to other species, which need thorough research. The prime concern for vaccine development is that research, production and profit are developed-world based, while the major market of need is in the South. Food based systems are not necessarily the best way to meet urgently needed, affordable vaccine development in developing countries. *Seedling (Spain)*, Dec 2000.

Researchers T. U. Gerngross, S. C. Slater, report that while it is now possible to produce plastics from green plants, the environmental costs are far greater than was realised. Biodegradability releases carbon dioxide and methane, while fossil fuels are needed for manufacturing and transport processes. Environmentally friendly plastic production needs to factor in the reverse of carbon release into the atmosphere. *Scientific American*, August 2000.

A World Wildlife Fund study points to overfishing by ocean fleets, dams and other man-made constructions and the huge growth of salmon farming for the near extinction of wild salmon stocks in N. America and much of Europe. Only Iceland, Ireland, Norway and Scotland have healthy supplies. Many thousands of farmed salmon escape and breed with wild stock, yet the industry depends on wild salmon for brood stock. The study calls for stricter controls over the farmed industry to improve sustainability. *Financial Times*, June 2/3, p7.

*Climate Change and the “Down Under” Farm*

M. Jebson outlines policy options for New Zealand agricultural emissions management in the initial stages of commitment to the Kyoto Protocol, more demanding since methane and nitrous oxide from grazing stock form a considerable part of NZ emissions. Management options include - emissions trading, project based trading, regulatory controls, levies, voluntary measures or a mix of these. H. Clark, G. Waghorn outline methods, some still under research, by which animal based-emissions may be reduced. Some focus on reduction per amount of food consumed, others on emissions per unit of product. They include: - modification to diet, immunisation and modification via animal breeding. *Primary Industry Management (NZ)*, 3 Sept. A carbon securities trading business is already operating to assist NZ farmers to start trading carbon credits. Government cautions that the impact on farmers of the finalised greenhouse measures needs to be clarified first. *Country-wide, May*, p 4.
The Wood and the Trees

J. Clark reports on research into longer term global price rise and therefore demand for, wood. Investment in commercial plantations may decline but pressure on biodiversity and native forests could come from demand for quality and cost attractive wood. Environmental Conservation, Vol 28/1. China has come from nowhere to overtake Japan as a wood importer, since it ceased logging its own forests as a flood control measure. Its insatiable wood hunger threatens remaining forests in SE Asia, Africa, and an illegal Siberian trade. New Scientist, 3 March, p17. Forestry researchers are facing the same battle with public concern over GM trees experienced earlier by GM food products. Effects of GM in forestry takes much longer to determine. Research suggest that the concern over pollen spread is real, if slight. The search for consensus continues. Science, 6 April, pp 34–37.

Listings

When Bush Comes to Shove, The Bulletin/Newsweek (Sydney), 20 Nov, pp 38-39,42. A long-term study across Australia shows that farm and other landscapes should retain or restore 30% of their original plant cover if the trauma of ecosystem loss is to be reversed. Clogged rivers, sick soils, salinity, invasive pests and weeds abound. The restoration will be complex, massive in scale and cost but provide many new economic opportunities.


Communications/Transport

Reconfiguring the Information Age Landscape

Debates and developments around this are explored International Journal of Urban and Regional Research, June. S. Graham focuses on “last mile” connectivity, where the pull of the “global city cores, London, NY etc, are strongly shaping IT investment. Resulting urban development is uneven. Groundscrapers emerge, electronic superbanks with immense floorplates. Invisible terminals to super-high capacity, inter-urban, optic-fibre networks are laid along conventional highways and edge city development features massive, windowless IT centres. Critical factors for this industry are: - access to business centres, fibre routes and physical transportation. Ultra secure data storage may move offshore to islands or
fortified bases, especially if outside tax and regulatory systems. S. Sassen observes that in IT mediated urban space, “local” may now be micro-environmental with a global span, as even poor neighbourhoods develop global cross-border networks, a counter geography of globalisation. Downtown is no longer the business centre, services are outsourced but it is the specialised services which are agglomerating. Several varieties of “centre” are emerging while multiple locals constitute the strategic cross-border geography.

A radical transport solution for Auckland city (and places such as Melbourne) is a proposal for an over head rail system: hung cabs on large steel beams which could cover Airport to North Shore, accessible to 70% of residents. The technology is novel, but the cost compares with existing proposals. The Independent (NZ), 5 Sept, p 9.

Research indicates that automated transport which requires human intervention in an emergency fails to account for human attention shrinkage, making drivers unready with their reactions. Phone-driving is as hazardous as drink-driving depending on where the signal comes from. The voice signal needs to come from the road ahead. New Scientist, 3 Nov, pp 44-47.

Mobile Magna Data

“Wireless”, the mobile data revolution, is just beginning its steep two decade rise, as voice telephony services are elbowed aside by mobile information-transmitting devices. Three technology types are converging from their present niches and could be interoperable in a few years: the wireless LAN (local area networks); the inter-linking device wireless connection of Bluetooth, which links devices together; and cellular network-centred third generation (3G). 3G already operates in Tokyo, providing video calls, music, e.mail, web browsing, telephone and organisers from one handset, in cars, in the street, wherever. The Bulletin/ Newsweek, 13 Nov, pp 78-79, 82.

The Economist, Survey - The Internet, Untethered, 13 Oct, suggests three stages of development with the new technology: businesses will adapt it to existing systems, then it will start to transform existing business models and finally new operational models will emerge such as machine to machine (M2M communication). Problems can arise since Internet users expect many free services in return for some imperfection while mobile uses expect to pay but demand high levels of reliability. Content providers see new opportunities to charge for services, while wireless operators expect to be gatekeepers requiring fees.
Internet Security Contentions

Recent heightened security measures involve the Internet, with increasing political pressure to control encryption software which guards access to high security data systems. Empowering authorities to access their systems is not welcomed by legitimate users, but they depend on the software. Security specialist B. Schneier considers that this approach is mistaken, the real problem is how to analyse data, not obtaining it. Nature, 25 Oct, pp 766-767, 773. US Physicists are confident that they can provide a security system which uses quantum-mechanical properties of light to transmit messages in open air in complete secrecy. The Economist, 23 June, pp 83-84. Asian governments are funding their militaries to develop elite teams to gather intelligence for cyberwarfare. Such methods in times of conflict can cripple the control systems of an adversary. Prime targets in the developed world would be power supplies. The competition will intensify. Far Eastern Economic Review, 16 August, pp 30-33.

Policy and Control

Stanford legal academic, L. Lessig says powerful pre-Internet interests are seeking to regain control through regulation in the US, as the Internet moves to broadband. Dominant US broadband technology is cable which can discriminate amongst its users eg whose content goes quickly. Of the three broad Internet layers, the physical one is private property, the code above that is free or commons, while much of the top layer, content, is protected property. This Free/Commons mix has facilitated the tremendous innovation on the Internet, which came from non-traditional providers and its potential has still to be realised in the developing world. Content control is increasing via software patents, which will particularly threaten open code projects. Effects of copyright holder pressure was shown over online music. US legislators have partially struck a balance by granting copyright owners compensation rights for cable use of their material but allowing cable companies the right to broadcast the material. US regulations impact worldwide. Giving copyright owners power to control content needs to be balanced by restricting self-protecting power against innovative business models. Foreign Policy, Dec, from L. Lessig, The Future of Ideas: the Fate of the Commons in a Connected World, Random House.

J. Roberts, IT business analyst, urges Australia to adopt an overall IT&T policy and an "info-czar" who can direct the future of e-government. It would go beyond providing information and portals to every level of government, examining how the services are being used and transforming these for better outcomes. The Bulletin/Newsweek, 23 Oct, pp 91-92.

China's immense potential has been unleashed by rapid government provision of a data network, accessible to increasing numbers of users, but there is struggle for control with private providers over content, datapipelines and network revenue. Analysing data detail *E. Harwit, D. Clark*, note that at present, demographics and user profiles support social stability but social and political disruptions could take over the Internet as a channel of discontent. *Asian Survey, May/June.*

US academic *D. Halbert* explores three possible scenarios for the future of Intellectual Property to 2025: One features the rise of Asia as the hegemonic force; Two sees the multinational corporations and the Western economies retain control and; Three develops parallel protection systems and sharing that do not rely on property to protect creative work, illustrated with collaborative and hybrid models of projects. *Journal of Future Studies(Taiwan), Aug.*

**Economics/Business**

*The Futures of Retailing*

From a symposium of futurists: - Three alternatives from *J. Dator:* - One, growth extrapolation leads to a global shopping mall. More people spend more time indoors, tourism and golf notwithstanding; Two, Reversal - new malls are trending down, consumers face the underlying monster of long-term US indebtedness. Widening social divisions continue with underlying discontent. Global capitalism may become economically unsustainable. Three, Transformation, an economy of play. Online shopping beds in as technology and websites improve, virtual agents can show goods in 3-D multimedia. The Web becomes a second "skin", providing entertainment, education, governance, commerce via diverse devices operated from the body by the body. Delivery is the weakest link for the next decade until teleporting matures.

*M. Hollinshead* observes that the previous two Industrial Revolutions have buoyed ever-increasing portions of the population to higher income and consumption levels with retailing responding to technological, social trends. From 1750 the ecological footprint of a retail store has grown massively, for products, energy, consumption and size itself. The current Third Wave, like the first, is transformative, benefiting initially new pro-
ducers until it matures in the mid 22nd century. Two patterns emerge: low-end, mass markets and elite-end boutiques. More flexible and dispersed production/distribution systems and nimble specialists develop alongside chains. Older small rural centres revive as more people move out of metropolitan areas, requiring a new type of retailer. Malls dominate edge cities but the downtown will be static. Less time for shopping facilitates home-based or neighbourhood services. Large numbers of people will demand more self-actualisation in products, involvement in design or green values etc. In large land areas with enormous urban centres, very fast transport systems can transform delivery systems, aiding virtual shopping.

S. Inayatullah sees a new market phase for the rights generation: environment, women, children, labour. The triple bottom line: profit/environment/society, has a fourth dimension; future generations, as Monsanto discovered. We are entering smarter relationships with ourselves as consumers, what we eat or use, since with new IT we obtain constant and direct feedback on our behaviour. If we respond, smart markets can help us create the futures we desire. Labour, the least mobile dimension of capitalism can now roam freely in cyberspace. This could become a true Workers Revolution, leveraging our collective conscience, depending on who owns the pipes and controls the content. Journal of Futures Studies, May.

The Nature of Economies
Jane Jacobs has been a major analyst/thinker on the urban economy for over forty years. The Nature of Economies covers a conversation of urban New Yorkers illustrating the ways by which the rules of economic life parallel natural systems, Modern Library, 2000.

The Market System: What it Does, How it Works and What to Make of It, C. E. Lindblom, Yale UP. A political scientist examines the modern, governed market system; the role of, and need for, the state; two visions of the market system, individualistic and collective; relationship to democracy and more.

Late Victorian Holocausts: El Nino Famines and the Making of the Third World, M. Davis, Verso, combines climatic, economic and colonial history when the free trade imperative of Victorian era empires combined with intense drought in Ethiopia, China, India, Brazil. Each drought opened the doors for an imperialist landrush, as village welfare and trade-based systems collapsed, millions starved and the food trade was diverted to Europe.
Globalisations Future
Finance Professor M. Pettis notes that globalisation has been developing fitfully over several centuries. The expansive periods of innovation exploited by finance and commerce pull in peripheral areas, reforming their economies. Eventually the self-reinforcing cycle repeats itself, liquidity contracts, globalisation stalls, with enormous socio-economic disruption. Foreign Policy, Oct. See also H. James, The End of Globalization: Lessons from the Great Depression, Harvard U. P., an historians view of several centuries of boom and bust, especially the 1930s. Each collapse results from patterns of thought and institutional mechanisms arising in response to a new and unfamiliar world. This may be happening, though slowly. Global investor A. Hill considers what would happen if demand died and never returned? Despite some superficial blips and booms due to improved efficiency, fundamentally US sales growth has been declining for 30 years. Reawakening demand will be slow. US consumers are sated, emerging economies slow. Financial Times, June 25, p15.
A. T. Kearney Inc and Foreign Policy, issue Jan-Feb, present the initial Globalization Index with several key indicators. Leaders: - Singapore, Netherlands, Sweden, Switzerland, Finland, Ireland. US is 12. Surprises: - the number of leading Nordic countries, despite their older-style tax and welfare; that growth has been fairly stable, in fact may now be slowing.

Listings
Does Foreign Ownership Really Matter, J. Birkinshaw, The Independent (NZ), 28 Nov, p28, reprinted from Chartered Secretaries, Australia. Regardless of the nationality of corporate ownership or its HQ location, the keys to a vibrant industrial sector for any country depends on: - its management capabilities, subsidiary or otherwise, supporting a compelling case for value of a company, and its being part of a cluster of companies with an entrepreneurial vision.

Spiritual/Religious Sources of Entrepreneurship, R. P. Stevens, Stimulus (NZ), Feb. A key factor in the character of entrepreneurs is faith, some sort of push or pull. New Business Spirituality provides a corporate model of spirituality for individual and company success: - awakening intuition, joy, energy, compassion creativity and sense of higher purpose. Many of its concepts are entirely congruent with Judeo-Christian tradition.

The Divine Right of Capital: Dethroning the Corporate Aristocracy, M. Kelly, Berrett-Koehler. Capital creates wealth for shareholders, but how much of their risk-taking and investment justifies the imperative to maximise their profit above all else? Most sharetrading is in fact speculative,
only the initial common stock is investment. The failure of the legitimacy of this position begins with demythologising its ideas.

**Education**

*Visions and Models of a Learning Society*

Findings from a lengthy UK research programme on *The Learning Society* is presented in *Differing Visions of a Learning Society: Research Findings, Vols 1, 2*, Ed F. Coffield, Policy Press, 2000. Previously this was an evidence-free zone despite its ascendancy in policy. The research uncovers the paradoxes and contradictions. "Credit-based" learning makes a limited contribution to a learning society under present conditions unless it is very clearly related to the kind of learning society desired. A democratic scenario is contrasted to the technocratic "push". The development of a genuine lifelong learning society proceeds from romance, to evidence to implementation.

R. Miller, *Creating Learning Communities: Models, Resources and New Ways of Thinking about Teaching and Learning*, Foundation for Educational Renewal, 2000, examines a diversity of examples, mostly US, of the alternative holistic approach to education which is democratic and person-focused.

N. Selwyn et al, *Educational Policy, Vol 15/2*, analyse results from the range of initiatives set up in US to utilise ICT as part of the development of the lifelong learning society. This was seen as the best way to widen educational opportunities for those traditionally deprived. The barriers for these groups are: situational (related to lifestyle), institutional (related to opportunities available), dispositional (personal knowledge and motivation). ICT has been developed as a learning model which relies still mostly on pre-existing structures such as educational institutions, libraries, thus repackaging existing institutional barriers to lifelong learning, especially for those whose early experience of these was unsatisfactory.

D. Guile, *Univ. London Lifelong Learning Group*, introduces the concept of reflexive learning, which is especially important for enabling lifelong learners to meet the challenges of rapid change. This extends the current focus on acquisition of pre-existing knowledge and skills, by developing capacity for individuals and communities to apply experience of resolving dilemmas in one situation into another context. *Futures, August.*
Futurewatch

Education Policy Analysis 2001, OECD. This report provides a useful overview of lifelong learning including fifteen national approaches, and six extensive scenarios for the next two decades: robust bureaucratic; extended market; schools as core social centres; schools as focused learning situations; learner networks and the network society; teacher exodus and meltdown. <www.sourceoecd.org>

Birmingham has a University of the First Age system to provide out-of-hours learning in communities. S. Burgess, Educational Review, Vol 52/3, 2000, describes its innovative Extended Learning Centres providing enriched learning opportunities for young people, using H. Gardner’s transforming theories of Multiple Intelligence. Courses may be one-off through to yearlong, covering four main areas: skill development, including methods to enhance learning potential in various modes; extension; enrichment; and supported study. The wide variety of skills, learning and courses is challenging for teachers as well as students. Parents, families, employers and others can be involved. The core UFA philosophy “all young people have the potential to achieve success.”

On Culture and Gender

R. Nash, Massey University College of Education, examines the educational achievement problems faced by many students from NZ’s Pacific Island cultural communities. Schools can become for many of these families, “a source of desperate hope” a way out of poverty. Many families have minimal prior experience of schools and the requirements of higher educational qualifications, but they expect their children to succeed at these, placing intolerable burdens upon their children who are unable to measure up. Special and sensitive policies must be used to mediate this gap. Social Policy Journal of NZ, Dec 2000.

In 2000, The Dakar International Education Conference, after reviewing a less than satisfying decade, set 2015 as a deadline for all children, especially girls, to complete free and compulsory primary education. A further pledge to eliminate gender disparities in primary and secondary education by 2005 is unlikely to be achieved. While most governments recognise the social and economic importance of educating girls, especially for poverty reduction, entrenched social discrimination, indebtedness and, particularly in Africa, the impact of AIDS on teaching numbers, are major hurdles. While many families want education for their children, costs for fees, uniforms and books, plus the loss of female labour in home and field, are deterrents. Two musts stand out as “fixes”: improving quality of schools and getting parents and communities involved in the schools. UNESCO, Courier, May.
W. D. Imms examines the debate about development of masculine identity and the behaviour of boys in the school system. Various theories of masculinity are inadequate to define its structure and thus how it develops. Attitudes and theories defining males as incurably “toxic” are damaging for boys. Sociology, psychology, anthropology and history provide insight into a complex web of knowledge about masculinity. Further research is needed premised on “multiple masculinities”, that each boy’s masculinity is unique and his actions are responsible for its structure. Further insight into this is coming from boys’ programmes in a number of Western countries which aim to: 1. find strategies focusing on boys’ relationships; 2. develop their level of knowledge, not only academic, but different ways of knowing; 3. explore their experiences of justice or its lack. Canadian Journal of Education, Vol 25/2, 2000.

Listings

Futures Thinking
Three Perspectives on Cultures and Conflicts
R. Eisler, macro-historian of systems and cultural transformation, interviewed by LA Weekly, Vol 23/45, 28 Sept-4Oct, considers that the key to all self-help starts in the family relationships. On terrorism and transformation, she comments that while the short-term strategy calls for stern measures against terrorism, the longer term must look at relationships in families, societies through to nations, across all cultures.

Terror and hate go deeply into structured relationships. They are part of a dominator model which exists and has existed in many places now and historically. These are rigid, top-down societies, with superior/inferior, in/out rankings, depending on force and terror to hold power. In such societies children learn that it is OK to force your will on others, never to express your pain. Resulting anger can be redirected onto out-groups. Dominator cultures exist as much in Western nations as in Islam, but the
West has also used it's economic power to cause enormous suffering in many countries. Repressive Islamic societies have two additional reasons to hate the West: freedom for women and Western-style democracy, threaten power holders.

Cultural transformation addresses the foundations of violence to rebuild society on the partnership or respect model, where power is nurturing and empowering, with male and female having equal value. There are many in Islam as in the West who are doing this.

P. Watson, *A Terrible Beauty: a History of Ideas that Shaped the Modern Mind*, Weidenfeld & Nicholson, surveyed 150 scholars, leading specialists in their fields in Europe, America and Middle East and Asia, asking what were the three most important ideas of the 20th century in their disciplines. There was much agreement. Scholars from non-western cultures, many born in those other conditions, also concurred that in the modern world in the 20th century there were no non-western ideas of note, although there were important artists and writers. Watson notes the insight of black psychiatrist/writer, *Franz Fanon*, into the 1950s Algerian liberation struggle, that a creative extremism absorbed most of the creative energy of non-European Algerians. How far this has come was revealed in 2001. *New Statesman, 29 Oct, p30-31.*

S. American writer *M. Vargas Llosa* considers that the 21st century will be less picturesque and full of diverse human cultures than its predecessor, due to modernisation. While this destroys many traditional lifestyles, it opens up new opportunities, for cultural identity historically is not a static process. It can be a dangerous, doubtful, artificial concept, politically threatening humanity's most precious achievement: freedom. Even among archaic communities "collective identity" is an ideological fiction. Globalisation extends to all of us the possibility to construct our individual identities through voluntary action.

As for Latin America, its "cultural identity" is being polarised by the Hispanics and indigenes, neither of whom fits the continent's expansive diversity. The best defence of our cultures and languages is to promote them vigorously throughout the world. *New Statesman, 5 March, pp42-46.*

**Complexity Applied**

*Cities and Complexity: Making Intergovernmental Decisions, K. S. Christensen*, Sage, 1999. Uncertainty is a very challenging experience for modern societies. Illustrated by case studies from the US governmental systems, the different dimensions of government structures are explored with particular reference to both the vertical linkages between the federal
and state levels, and the horizontal area of interests and time, how relations change over time. The latter considerations, horizontal and time, are especially useful, since they clarify otherwise obscure and complex functional chains. Also valuable are considerations of ends and means, using a framework of variable policy elements to build four different strategies 1. Agreed goal, known technology. 2. Agreed goal unknown technology 3. Goal not agreed, known technology and 4. Goal not agreed unknown technology.

*Ubiquity: the Science of History...or Why the World is Simpler than We Think*, Weidenfield & Nicholson,2000. Imagine a pile of rice building up gradually. Avalanches slide down as stresses accumulate slowly then release in sudden, spontaneous bursts. Studying the variation between the larger and smaller avalanches, scientists have found that while one grain may trigger a minor slide, as the pile accumulates a single grain can trigger a major sweep through the pile, the “critical state”. A power law applies in the critical state, that as avalanches double in size they become twice as rare. This pattern can be applied to earthquakes and other phenomena. Dramatic, violent causes may not necessarily apply to catastrophes.

*Listings*

*Creating Futures: Scenario Planning as a Strategic Management Tool*, M. Godet, Economica. Expert French Strategic Management Professor presents a distinctive approach to this futures tool with seven useful case studies from Europe.

*Futures of Technological Forecasting*, V. Coates, H. Linstone et al, *Technological Forecasting and Social Change*. Six renowned US technology assessors and futurists explore the futures of this tool, noting the element of public input, greater scepticism about technological progress, emerging forms of TF and more.
Letter to the Editor

Jan Lee Martin
*The Futures Foundation, Australia*

Sir:

Readers of Peter Baume's essay in your last issue (The Health Endeavour of the Future) may wish to know more about the man behind the ideas. He listed himself simply as being associated with the Australian National University, but he could have noted that rather than being an undergraduate student he is, in fact, Chancellor of that University.

Emeritus Professor the Hon. Peter Baume, AO is also a specialist in internal medicine and a former Australian Senator who has held a range of portfolios including that of Federal Minister for Health. He recently retired from the position of Head of the School of Community Health at the University of New South Wales in Sydney. A member of the board of the Futures Foundation in Sydney, he serves on many other boards and organisations concerned with health and health policy.

It's interesting to speculate on the difference this information may have made to your readers' reception of his ideas. How open-minded are we, really?

Jan Lee Martin
The Futures Foundation, Sydney
INVITATION FOR AUTHORS

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