FUTUREWATCH

Jennifer Coote New Zealand Futures Trust New Zealand

An information service on current international thinking related to our futures, prepared by futures scanner **Jennifer Coote**, **New Zealand Futures Trust**. Annual dates in final two digits.

COMMUNICATIONS/TRANSPORT

Communication and the Knowledge Society

C. I. Hamelink, Society for International **Development.** Development, Vol 45/4, 02, questions whether the current emphasis on information and knowledge distorts their significance for international human social development. It is assumed: that access to and distribution of information is a major factor in raising living standards, that a gap is widening between societies who are information rich and poor, while concerns are raised about protection of indigenous intellectual property. But are information and knowledge the key resources of primary social development? Such resources may be very complex for laymen, or they may be private property, nor does more information reduce conflicts. If development is defined as enabling people to participate in the governance of their own lives, the forthcoming UN World Summit on the Information Society misses this point about how to shape "communication societies." Such societies enable the world's peoples to converse across ethnic, cultural, religious and language barriers, but difficult skills are required:-listening, suspending judgement, investigating one's own assumptions.

Three specialists, Australian and Malaysian, M. Singh et al explore issues concerning Appropriating English: Innovation in the Global Business of English Language Teaching, Peter Lang, 02, as this becomes the global language for business and cyberspace. For its teachers, there are now multiple "Englishes" evolving in various regions, and questions about the purpose in teaching new migrants; should they just learn the language? or learn citizenship and workplace skills?

Long term surveys support Social Consequences of Internet Use: Access, Involvement and Interaction, J. E. Katz, R. E. Rice, MIT Press, 03. Neither the worst, nor the utopian speculations have eventuated, Americans appear to use the system as an extension of their daily lives, part of a much larger fabric of social interaction and communication. It provides new forms of involvement and social interaction and is potentially politically transformative.

UK research by A. Goulding, R. Spacey, *International Federation of Library Associations (IFLA) Journal*, Vol 29/1, confirms that while traditional barriers exist for women in the information society, their experience of the Internet has been much more positive. It extends the feminine use of networking to a global reach, overcomes various forms of isolation and has rad-

ical potential for effecting social change. The Internet is a mechanism for a third feminist wave

UK Policy analyst M. Leonard, Foreign Policy, Sept/Oct 02, examines the role of communication in international public diplomacy, which is much more than just providing information. It's about building relationships with other cultures, and adapting perspectives and communication accordingly. Western governments at present have four communication challenges in public diplomacy: understanding their target audience, confronting hostility towards Western culture, engaging people emotionally and proving their own relevance to the public concerned.

Connected to the Future: a Report on Children's Internet Use, Corporation for Public Broadcasting (US), March, 02. By 2002, 83% of US households had a computer, a 19 % increase in two years, and 78% have Internet access. Although Caucasian children have the greatest share, Afro-Americans and low income children are gaining, while preschool groups show the fastest growth in online use. School use is still mainly in computer labs, suggesting that Internet-based learning is still peripheral; the library is becoming a research as much as curriculum tool, and many Hispanic and Afro-American students like school more because of the Internet.

Telephone surveys reveal that in NZ the vast majority of Internet users also used their library but that Internet-only and Internet/Library use rose among the younger age groups. The 18-30 yr group are more likely to use the Internet only, especially for work-related needs. NZ Libraries. March 03.

Media futurist C. C. O'Hanlon sees western media audiences suffering from information fatigue as the boundary between real content and advertising blurs and art is submerged in commerce, using attention seeking bytes. More empathetic ways to reach the audience could leave space for individuals to reflect and appreciate." Whatever is worthwhile about us as individuals, groups or societies is the inefficient part.. where human life exists,..where love hatred and culture exist." The Bulletin /Newsweek, 18 Feb 03, pp 56-57.

Tyranny of the Moment: Fast and Slow Times in the Information Age, T. H. Eriksen, Pluto Press, 01, is a social anthropologist's exploration of the life and workstyle of "saturated moments" in the Information Age. Comprehension dwindles as the information flow accelerates, well-functioning filters are essential and slowness needs protection.

More Cyberspace Issues

You've Got Dissent, M. Chase, J. Mulvenon, RAND, 02 reports on research into the cyberwar between authorities and activists in China. The government is determined to keep the Internet on a leash while acknowledging that this technology is an important yardstick for measuring economic modernisation. S. Kalathil, Foreign Policy, March/April, 03, examines the degree of transformation of several authoritarian regimes, China, Burma, Egypt, Cuba and even Singapore, as the Internet gradually reshapes the relationship between officials and the public. Efficiency improves, the central authority strengthens its links to remote areas and greater transparency develops.

A giant Indian tobacco and agricultural trading firm is building an e-commerce platform across the country in poor villages. With this, it offers on line trading for rural produce, bettering the prices from traditional markets, augment with quality seeds and agricultural advice. The company gets commodities for international resale, closer access to rural consumers and more customers for its goods and services. Far Eastern Economic Review, 5 June 03, pp 28-32.

Launching Into Cyberspace: Internet Development and Politics in Five World Regions, M. Franda, Lynne Reiner, 02. Embedding the Internet globally will take several decades as poorer nations have higher priorities for limited funds. Case studies examine S. Africa and Arab World (restricted use), Russia and Eurasia (thinly developed), Eastern Europe (mixed), China and India (controlled or uneven). In the majority of these areas fewer than 1% have access.

Fantasy realms online engage millions of players in real time video gaming, the fastest growing Internet phenomenon. Men and

women, as well as children, can reach a peak of absorption akin to meditation for many hours. For over 20% of players, virtual worlds are where they would prefer to be, while socialisation takes place through avatars. Various interest groups are focused on the potential of gaming:- for educationalists there are enormous learning opportunities because feedback is instant, enhancing skills, the US military uses them for intensive training, policy mangers are testing strategies, for marketeers there are ways to introduce products into virtuality and governments seek economic opportunities in exports and jobs. N.Z is scoping its chances of moving to creative game exports. The Listener(NZ) 26 Oct, 02, pp 16-22; *BRW*(Australia), 8 May 03, p 68.

Copy Fights, Eds A. Thierer, W. Crews, Cato, 02. A diverse collection of contributions about intellectual property protection. If such protection benefit society and stimulates innovation, then the limits need clear definition and the right balance. As Internet processing speeds accelerate further, the incentive for innovation will be severely weakened and Digital Rights Management will become fiercely contested.

Brave New Unwired World: The Digital Bang and the Infinite Internet, A. Lightman, W. Rojas, John Wiley, 02. Pressures are mounting to skip to 4G systems as the 3G technologies prove less successful. Major trends developing by 2006 include new radio spectrums, convergence of computers and communication, wireless computing, the planetary Grid (version 6 of the Internet protocols) and companies positioning for broardband future. Europe, US, China and Japan are competing for leadership, with China as the dark horse, but all must develop more of the required technologies.

A circuit board the size of a matchbook, developed by MIT researchers, could transform the way we live in buildings. With it, almost any object can become a Web server each with its own address, enabled to talk to any other objects using a simplified form of Internet standard communication language. Controlling computers are unnecessary Cost of networking parts of the homes and buildings are minimised, and easily rearranged for home automation. *New Scientist*, 15 Feb 03, pp 26-29.

Far Out, Far Up, Inside

The quantum computer is becoming, as elementary data storage and manipulation using photons and atoms as quantum bits or "qubits" has just demonstrated. Nanotechnology could also provide solid state 'qubits' for use in working devices. Technical explanation, *Nature*, 20 Feb 03, p 796-797; or *Time*(NZ), 24 Feb, 03, p 56.

Galileo is an incipient Global Positioning System(GPS) being developed for 2008 by the Europeans. Unlike the current US monopoly, Galileo services will be charged for, but it would give countless users worldwide an alternative, especially if deliberate inaccuracies continue to be used in the US system to deter criminals and terrorists misusing the GPS which is primarily a military system. *Wired*, August, 02 pp 76-78; *The Bulletin/Newsweek*, 15 April, 03 p 48.

Advanced brain computer interfaces BCI are being developed using methods such as brain implants whereby patients can direct communication devices by controlling their mental activity. Increasing funding is stimulating development of better technologies for use by various types of disabled people, though the military are also interested. *Science*, 24 Jan 03, pp 496-499.

K. R. Foster et al discuss Bioethics and the Brain, *IEEE Spectrum*, June, 03, as BCl and new ways of imaging brain activity enable us to read minds in real time and control brain function. New methods of criminal investigation and screening of employees, such as brain finger-printing, claim to detect information stored in the brain, open ethical questions about their use. Consequences of these technologies are hard to predict.

Getting Around

Three useful resources from OECD: Implementing Sustainable Travel Policies: Final Report, European Conference of Ministers, 02, covers a three year study in coordination with OECD, to identify why sustainable urban travel policy strategies have had mixed success. Integrated policy packages are needed and proposals are suggested.

Road Travel Demand: Meeting the

Challenge, OECD, 02, Source OECD@oecd.org updates a1994 study on successful measures to affect travel choices, shifting away from predict-and-provide to anticipate-and-manage. Strategies to reduce demand are as important as those to increase capacity, with alternatives assessed on internal as well as external costs band benefits.

OECD Guidelines Towards Environmentally Sustainable Transport, OECD, 02, Source above. In response to worrying trends, using scenarios and backcasting related to desired criteria, the OECD Environmentally Sustainable Transport (EST) project developed several differing policy packages.

A simple framework from **R. Olson**, *Journal of Future Studies*, Nov 02, of trends and emerging trends for Arizona transport provides a model for transport planners elsewhere. Six broad clusters:- new ways of thinking about transport planning; energy-related developments; converging developments affecting urbanization patterns; communication-related developments; demographic and social trends; wildcards (including the Segway).

Road Ecology: Science and Solutions, R.T.T. Forman, D. Sperling, Island Press, 03, is an unusual convergence of ecology and transport planning aimed at professionals, based on US but relevant elsewhere.

Breaking Gridlock: Moving Towards Transportation that Works, J. Motavelli, Sierra Club Books, 03 is a general-reader focused overview covering: past, future, US and Europe, with emphasis on local policy and new ideas.

Listings

Flying Off Course: The Economics of International Airlines, R. Doganis, Routledge, 02. For some years over-capacity and increased competition forced reduction of fares even as costs were rising. Some airlines are consistently successful but many are marginal even with strong government protection. Greatest growth has been in E. Asia. See also, same author, The Airline Business in 21st Century, 01, on alliances, labour costs, no-frills airlines, privatization and survival strategies.

The Segway looks like a motorised two-wheel scooter. It's easy to ride, even for the disabled and could revolutionise local, personal transport, provided it status can be cleared for road or footpath. *The Bulletin/Newsweek*, 1 July, 03, p 66-67.

ECONOMICS/BUSINESS

The Development Debate Continues

R. Kozuli, Bariloche Foundation, Argentina, reports on long-term futures economic research, focusing on poverty and development. The post war decades saw economic development as the way to eradicate poverty, stimulated by population growth. Closer examination suggests that this was a once-off process not common to capitalist economies, reflecting the massive urbanization of the era, and that as this slowed in leading economies, structural over-capacity developed by the 1970s, ending the "golden" capitalist years. Urbanized societies sought greater public expenditure and redistribution to maintain lifestyles stimulated by technological evolution, which pressured natural resources. The neoclassical model assumes that unused productive resources respond to the level of supply and demand. While productivity per worker may rise, structural unemployment remains. Current emphasis on competitiveness on a world scale does not necessarily lead to more significant growth on world scale. Rather it may benefit those countries who are successful competitors. The rigidities of the real economy imply the need for continual, rapid technological change, which seriously limits conditions for sustainable development. It is questionable whether the major new technologies in materials, energy, medicine, etc. will stimulate the "golden years' type of growth. If not, the present chronic economic crisis will intensify by the second decade of this century. If China and India are included, global urban growth, which elsewhere peaked in 1995, will peak at in 2005. Technological Forecasting and Social Change, March, 03.

Further perspectives are proposed by Eds N. Hanna, R Picciotto, Making Development Work: Development Learning in a World of

Poverty and Wealth, World Bank 02, applying the new Bank's Comprehensive Development Framework as a lens to the experiences of aid agencies and developing countries. CDF emphasises participatory and partnership principles rather than "adjustment." Eds B Cooke, U Kothari, Participation: The New Tyranny, Zed Books, 01 question this approach, while O. De Rivero, The Myth of Development: The Non-Viable Economies of the 21st Century, Zed Books, proposes a "survival of nations" agenda, national survival based on basic food and needs, and population stability.

Globalisation's multiple, clashing ideologies are explored by Politics academic, M. B. Steger, Globalism: The New Market Ideology, Rowmans & Littlefield, 02. These range from left through the populist-democrats to the nationalistic-protectionist right. Three most likely future trajectories:- Globalism with a human face (mildly reformist), Violent backlash (chronic economic crisis and social instability), Global "new deal" (Greater democratic accountability and a global normative ethical framework).

A distinctive critique, Value Wars: The Global Market versus The Life Economy, J. McMurtry, Pluto, 02, examines the underlying contradictions of the language of the global ideology and its certitudes. The deepening contradictions between the market system and ecological cum human needs require a new paradigm, the life economy: regulating the money system for life capital gains; preventing ecocide; global regulation by life standards.

J. Behrman, business academic, Futures Research Quarterly, Winter, 02, offers eight criteria for wider acceptance of globalisation. These are:- efficiency, meaning more than quality of consumption: equity, to counter corruption and buttress common values; participation to sustain acceptable decision-making; creativity, encouraged by wider opportunities; risk adjustments, including work sharing and inclusion of voluntary social contributions; respect, dignity and human rights, harmonised worldwide; environment, protection systems harmonised; responsibility, with society responsible for providing elements not attainable by individuals or groups as necessary for freedom and opportunity.

Germany???

A. Posen, Fellow of (US) Institute for International Economics (see also National Interest, Sept 03), reports on detailed examination of the German economy, which appears to be following similar trends to Japan, aggravating pressure on the global economy. Three of the four key elements of Japan's plight are apparent:incomplete financial liberalisation, macroeconomic policy division and deflationary bias, financially and politically passive households. The fourth element, lack of openness to trade, capital flows or foreign ideas, is emerging as Germany switches from being the leader of equality among the EU states, to aligning with France. This is aggravated by the lack of co-ordination in monetary and economy policy in the eurozone. M. Walker, Fellow, (US) World Policy Institute, voices concern about the social, political and economic stagnation worsening in Germany An ageing population, cumbersome decision-making structures, an expensive social welfare system, apathy, especially among the young, are all part of the malaise. World Policy Journal, Winter, 02/03.

Consumerism

confronting Consumption, Eds T. Princen et al, MIT Press, 02. Mis- and over-consumption are emerging as key elements in the sustainable development debate, but receive limited research attention especially from social scientists. It affects developing as well as developing countries: China has 300 million new consumers. This study conceptualises the issue as a problem of the political and ecological economy, highlighting interconnections. Restricted or redirected consumption is advocated rather than stringent reduction.

K. Green, P. Vergragt, propose a methodology for developing sustainable technological and social innovations via sustainable households, *Futures*, June, 02. Trialed in several European countries, this incorporates development of design-oriented scenarios with stakeholders, their acceptability and application.

Urban Studies, Vol 40/5-6,03 is devoted to

developments in **Urban Housing and Property Markets**, covering housing markets, finance, property investment, urban regeneration and analysis of related issues, drawing on research in US, UK and Europe. **K. Gibb, M. Hoesli** review the contributions, the context, the main underlying themes and cross-cutting issues arising, useful for the policy analyst as for the property investor. *The Economist Survey*, **Property**, 31 May 03 cover the volatility of property markets and coping measures.

Listings

Leading Quietly,: An Unorthodox Guide to Doing the Right Thing, J. L. Badaracco, Harvard Business School, 02. This is what really changes the world, as big problems are resolved by a long series of efforts which may be the quickest way forward. Nine guidelines with case studies included.

Maori Economic Development- Te Ohanga Whanaketanga Maori, Report, Te Puni Kokiri, www.tpk.govt.nz. The first assessment of the Maori economy and its value to New Zealand, with further expansion likely.

FOOD, FIBRES, FORESTS Debates on Food for All

An assessment of how US agriculture achieved high productivity offers warning lessons for aspiring poor countries, B. L. Gardner, American Agriculture in the Twentieth Century: How it Flourished and What it Cost. Harvard Univ. Press, 02. Three major themes are explored, each having its own tensions:- the huge gains in productivity, the changes in income distribution, and the role of government in US farming. Overall, while the gains have been impressive and the rural economy is integrated into the modern market economy, it has become a hollow victory in terms of value added to the national economy. The impacts of US farm policy on international trade in agricultural commodities is not examined.

Fatal Harvest: The Tragedy of Industrial Agriculture, Ed A. Kimbrell, Island Press, 02, comes in a massive coffee-table version, with

articles by 40 leading environmental thinkers in seven themes, making a comprehensive overview. A Reader version offers selections around four themes, adequate for most readers.

R. E. Evenson. D. Gollin summarise a recent study by the International Research Centres for Agricultural Research(CGIAR) on the impact of the Green Revolution 1960-2000, Science, 2 May 03. Many of the international plant breeding programmes worked with national research efforts to adapt varieties for local conditions. The findings indicate that the national work was heavily indebted to the international research, with the Green Revolution impacting not in one sharp burst, but rather as a long-term increase in the trend growth rate leading into the 1980s and 1990s. Improvements in the plants stimulated the greatest increase in productivity, more so than increase in areas planted or use such inputs as fertiliser and irrigation. Without the research input from the international centres, increasing demand, higher prices, increase in planted areas would have produced a "human welfare crisis", highly detrimental to global health. Although international public sector agricultural research is fighting to survive, it is still needed.

Conventional plant breeding is not "sexy" enough to gain the funding needed to continue, as molecular genetics and transgenetic technologies attract academic researchers and funding. Compounding the threat to public sector conventional research are the private sector, intellectual-property restrictions on access to seeds for research. Stimulation may come from collaboration between public institutions to end the practice of granting companies individual licences for a new crop development, and research methods which speed up conventional research. For many GM crops there is already a conventionally-bred variety, e.g. a herbicide-resistant canola. Long term there are doubts that GE involving multiple genes will be amenable to manipulation, whereas conventional breeding can improve subtle traits simultaneously. *Nature*, 6 Feb 03, pp 568-570.

Food For All: The Need for a New Agriculture, J. Madeley, Zed Books, 02. If the World Bank can support eco-agriculture (practised for centuries by traditional farmers) then

industrialised agriculture needs reassessment as a model for Third World Countries. For policy makers and general readers.

Accelerating levels of carbon dioxide in plant foods may stimulate growth but trigger widespread human malnutrition, **G. Lawton**, *New Scientist*, 30 Nov, 02, pp 26-29. Chiefly affected will be poorer countries whose food quality was depleted by the Green Revolution, especially iron, zinc and vitamin A. Current studies are sufficiently concerning to warrant much more research to clarify impacts, since micronutrients are poorly understood.

Intense GE Debates cont... In NZ

Countrywide (NZ) Jan, 03, p10, presents a vision of NZ agriculture in 2050, heavily resourced with high tech gadgetry to tally stock, adjust field feed, analyse soil and climate, energy-wise systems, robotic sheepshearing, remote control cameras for stock surveillance, and GE to eliminate diseases, weeds, improve pasture and triple animal production.

Pros and cons of NZ taking the GE route are debated, especially the effects on the national "clean, green" market image as part of its export drive for top-end, value added commodities. Agricultural biochemist J. Hickford, Lincoln University, considers that the GE route will not add huge value to NZ agricultural systems short-term. Some longer term benefits could include improvements, e.g. to pasture. Public acceptance of these new technologies is slow when there are no direct personal benefits. *Country-wide*, Oct, 02 p36.

NZ farming finance may be used to assist with a US-based project to sequence the cattle genome, the first for a ruminant animal and one which has flow-on effects for sheep and deer. It would enhance the diagnostic tools for assessing stock genetic potential, which normally takes several generations. *Country-wide*, March, 03 p 14.

Much of NZ's greenhouse emissions come from livestock, as methane and nitrous oxide. Methane rates have been falling over recent years, and methane in the atmosphere decomposes in about 12 years. Research to further reduce this is underway, e.g. using cereal silage

instead of nitrogen-boosted pasture, but results so far suggest than the cost of reducing the emissions would be higher than the carbon credits gained. Other research indicates that NZ pastures may be absorbing more methane than previously realised. Differences in the character of NZ soils from those in the N. Hemisphere may enable pasture and forest soils to act as more efficient greenhouse sinks. *Country-wide*, Feb 03, p 24, April 03, p57.

......

....Further Afield

China's enthusiastic adoption of GE agricultural technologies appears to be slowing because of a subtle government policy to frustrate commercial ambitions of Western agribiotech firms until the domestic research, lavishly funded and staffed, can match imported products. At present Chinese farmers prefer the more expensive but better quality imports. Alternatively, Chinese research institutes and Western firms could collaborate on research. *Nature*, 13 March, 03 pp 111-112.

Genes for Africa: Genetically Modified Crops in the Developing World, J. A. Thompson, Univ. Capetown Press, 02. A clear, concise study by a microbiologist covering the issues with special reference to the African need to achieve food security. GM technologies for better crops need to be combined with better input and output markets, cheap fertilisers, better water and soil management. *Nature*, 20 March 03, p 246, reports that the four major agribiotech firms are joining with a charitable foundation to help provide GM technologies at affordable prices for African farmers, though conventional methods will also be promoted.

Controversy surrounds a mysterious local Indian cotton, bollworm resistant, which duplicates a Monsanto product. Political complications mean that efforts by the agribiotech firm to enforce protection of its product in India are being ignored. Developing countries may be unwilling to enforce laws protecting imported seed. *Mother Tones*, Sept/Oct 02, pp 28-32.

Other Crops and Catches

Q. Schiermeier examines the prospects for global sustainability of fish stocks, many of which are now overexploited. Some conservation biologists advocate a break with assessment on individual stocks and adoption of a whole-ecosystem approach, to take account of the dynamics of the individual stock in a wider context. Increasingly fishermen are being involved in policy making. Further debate focuses on how reversible overfishing is, since some stocks a not recovering even fifteen years after collapse. The value of marine reserves, proven on small scale, will involve huge changes in fisheries management and decision making if applied worldwide. Nature, 17 Oct, 02, pp 662-665. Water and Atmosphere, (NZ NIWA), Vol 10/4 02, reports on research in the Southern Plateau, S-W Pacific Ocean, into understanding ecosystems as a key for fisheries management.

Science, 13 Sept, 02, pp 1797-1798, reports on assessment so far about the risks that transgenic fish, especially if farmed, pose to wild stocks if they escaped.

The world banana supply is under threat from a fungal disease capable of eliminating the present stocks, which are sterile mutants, "genetically decrepit." A Samoan variety, adaptable to a wide variety of environments is unaffected by the fungus and could save the trade. *Island Business*, Feb 03, p43.

NZ Forestry biosecurity expert D. Hammond warns that NZ biosecurity to counter face of pest incursions is along-term war against many types. It will require substantial investment, in planning for robust security systems and research, to be credible internationally and with the NZ public, especially those near ports of entry. NZ fournal of Forestry, August 02, p 2.

Changing patterns in NZ forest ownership are examined in depth, NZ Journal of Forestry, May 03. Large company ownership is decreasing; private US companies are increasing share, some for long-term investment in alternative species; Maori land owners are increasing share with emphasis on maximising return, and TIMOs (Timber Investment Management Organisations (institutional investors) are increasing. Farm

forestry continues steadily, as part of farm policy of balanced land use.

Eucalypts are making a comeback in NZ forests as well as in many other countries besides Australia. They are highly versatile environmentally and commercially: for building, and furniture, for woody biomass in fine paper, for oils and solvents and for medicines. NZ Geographic, No 58, 02

WORK

Quality of Life and Work

Happiness-Hardship: Opportunity and Insecurity in New Market Economies, C. Graham. **S. Pettinato**, Brookings, 02. Based on research in seventeen advanced industrialised countries, this develops a new framework analysing the relationship between well-being (happiness) and the political sustainability of such market economies. Three values were studies: the effects of market reforms on mobility and opportunity of various age groups; income and education age groups; and the mediating effect of the real position of the subjects on the income ladder on their relative income differentials. Frustrated achievers were widespread in these societies, most of them urban, from middle and lower income brackets, who yet were doing relatively well under market systems, but were dissatisfied with both markets and democracy. Mobility and wide income disparities in market economies is highly stressful, especially for those with limited skills or education. Democracies need policies to enhance mobility for the middle and lower groups, to encourage confidence, unleash potential, unblock market distortions and to provide better safety nets.

NZ survey among workers by Univ. Auckland researchers P. Boxall, E. Erasmussen, 01, revealed that the fourth most common reason for changing employers was "to achieve a better work-life balance." S. Forsyth, (NZ) Employment Today, Aug 02, pp 6-7, comments on this and other studies which identify specific factors making employees decide to stay. This in turn influences staff turnover. Highly significant were:- the extent to which work stress affected life areas, e.g. family, work performance, etc.,

bringing work home or weekends working, and the perception that the employer was not helping to alleviate the pressures. It was also noted that firms focused on cost-minimisation had high turnovers, while those focused on customer service or innovation seek to retain staff. Research also identified other factors:- poor match between job-holder values, competencies and job requirement when hired, career growth and CV building, high self-rating and relationships with bosses. Effective performance management overall is critical to staff retention.

(NZ) The Listener, 2 Nov 02, M. Revington reports on the reaction to the long-work-hours culture of the deregulated late 20th century labour market. As firms and employees respond to the desire for better life-work balance, compressed working weeks are noticeable, indicating job redesign rather than tinkering at the edges. Shorter working weeks may pay off in increased productivity though firm evidence is needed. Long term, with both parents working, and a high technology workplace, productivity increase will come from a mix of work design, innovation and use of technology.

I'll be Short: Essentials for a Decent Working Society, R. Reich, Beacon Press, 02. Readable summary of America's working families, getting nowhere though they are working harder than before. Three principles for a DWS: as companies do better, so should their employees; jobs should pay enough to lift a family out of poverty, with an indexed minimum wage and earned income tax credits; adequate lifelong learning from early childhood to enable all to realise their potential.

Workers and Work...Older

V. Spiezia, International Labour Review, Vol 141/1-2, 02, analyses the effects of ageing in the OECD labour markets and policy measures needed for this. The rising rates of older people and dependency ratios projected over the next four decades, on the evidence so far, are unlikely to have negative effects on aggregate savings of older workers, or on their relative productivity. Transfers from younger workers, if permissible, would not adversely affect employment.

Disproportionate decrease in labour demands in some countries could occur unless countering polices are introduced. Careers for older workers will need to be managed over their whole working lifespan.

...Automated

Supermarket checkout operators could be cut back by an automated system which is reaching Australasia. One operator could oversee up to six fast lanes making up about 20% of the total lines. Shoppers place their container of purchases next to a barcode scanner and follow a voice instruction system. It is cost-efficient for large chain retailers. *National Business Review*(NZ), 6 Sept, 02, p27

"Lights-out factories" in US are a way to cut costs but retain quality, as machines can now be relied upon to make flawless parts without direct supervision. One operator can monitor, and if necessary, correct via computer, several plants simultaneously. Not all factories are fully "lights-out", since it may be applied partially. Machines must be ever more finely tuned to meet customer standards. *Wall St Journal*, 19 Nov, 02 (via private e-mail)

...Professional

Professionalism, the Third Logic: on the Practice of Knowledge, E. Friedson, Univ. Chicago Press, 01. Three models of the practice of knowledge and the tensions between them are examined: free market consumerism, rational-legal bureaucracy, professionalism (occupational control). Professionals have been undermined by mistrust, thus weakening their moral voice, and jurisidictional boundaries may change as less qualified workers take over professional duties.

Listings

Managing in the Next Society, P. Drucker, Truman Talley/St Martin's Press, 02 incorporates a number of articles by the guru over recent years.

Journal of Futures Studies

OECD Employment Outlook, OECD 02, www.SourceOECD.org. Generous data and analysis from member countries around seven major themes.

Correspondence

New Zealand Futures Trust, P.O. Box 12-008, Wellington, New Zealand g.coote@clear.net.nz

INFORMATION FOR JFS SUBSCRIBERS

The Journal of Futures Studies is published quarterly: February, May, August and November. Subscriptions entered after the appearance of the first issue in a volume should specify whether the subscriber wants the current volume (including back numbers) or wishes to begin the subscription with the next volume. Subscription rates: Individuals US\$30, NT\$800/year; Students US\$10, NT\$300/year; Institutions US\$40, NT\$1,000/year. Postage (by air mail) and handling charge are included. Please make US dollar denominated bank check payable to Tamkang University.

COPYRIGHT POLICY

Unless a prior agreement is reached with the editors, it is a condition of publication that manuscripts submitted to this journal have not been published and will not be simultaneously submitted or published elsewhere. By submitting a manuscript, the authors agree that the copyright for their article is transferred to the publisher if and when the article is accepted for publication. This transfer does not negate the authors' rights to use their own work in the future, as in a book they are writing. The copyright does cover the exclusive rights to reproduce and distribute the article, including reprinted, photographic reproductions, microform or any other reproductions of similar nature, and translations. No part of this publication may be reproduced, stored in a retrieval system, or transmitted in any form or by any means, electronic, electrostatic, magnetic, mechanical, photocopying, recording or otherwise, for commercial purposes, without permission in writing from the copyright holder.

Any correspondence on this subject should be addressed to:

JOURNAL OF FUTURES STUDIES

Center for Futures Studies
College of Education
Tamsui Campus
Tamkang University
Tamsui, Taipei, Taiwan
website: www2.tku.edu.tw/~tddx/jfs

E-mail: future@mail.tku.edu.tw

Contents abstracted by Future Survey, Future News and New Zealand Futures Trust

STYLE

The Journal of Future Studies is an English-language revue published in Taiwan for the global futures community. Due to the transnational nature of the publication, JFS will accept either British or U.S. orthography and conventions consistent with objective article and essay composition (as opposed to business, letter, promotional, etc...) usage. For details concerning this usage, authors are urged to consult The Chicago Manual of Style. Parts of this manual and questions about it may be accessed on-line at: http://www.press.uchicago.edu/Misc/Chicago/cmosfaq/

Articles must include: title, author's name, author's institutional affiliation, abstract, main text, endnotes (as necessary, see below), and optional correspondence information. Essays follow the same format, however, an abstract is not required.

Manuscripts must be submitted in Microsoft Word document format. Paragraphs should be unjustified and spaced without bias. Sentences should be single-spaced after periods.

JFS utilizes a simplified convention for reference notes. Quite simply: **All notes and citation of sources should be given in the form of end-notes.** In order to observe this rule, certain conventions must be applied:

- 1) Complete bibliographic information should be given in the endnotes.
- No additional bibliography is required, and bibliographies of referenced material will normally be deleted.
- 3) Authors should take care that important reference information is given in appropriate end notes. Please be aware that parenthetical citation (such as [Chang, 1990]) is unacceptable and must be replaced by endnotes.
- 4) End notes should be conventionally sequenced.
- 5) For books:
 - Elise Boulding and Kenneth Boulding, The Future: Images and Processes. London, Sage Publications, 1995, 153.
 - Eleonora Masini, "Rethinking Futures Studies" in Ziauddin Sardar, ed., Rescuing All Our Futures: The Futures of Futures Studies. Twickenham, England, Adamantine Press, 1999, 36-48.
 - Johan Galtung, Essays in Peace Research. Vols. 1-5. Copenhagen, Christian Elgers, 1978.
- 6) For journal articles:
 - Yongseok Seo, "From the 39th Parallel to a Border: Exploring Alternative Futures of Korea," Journal of Futures Studies (Vol. 6, No. 4, May 2002), 5.

