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Futurewatch

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An information service of current international perspectives on our Futures, prepared by futures scanner, **Jennifer Coote**. Annual dates in last two digits.

COMMUNICATIONS/TRANSPORT

The Old Tradition Made New

The Economist, 14 Feb 09, p 65-66, reports that while e.books were launched with Kindle, 2007, now Kindle 2 has appeared, to delight readers. They can think of a title and start into it within seconds. The new model holds 1,500 books with a battery charge for two weeks reading and a screen which is very friendly to a reader's eye. Dedicated readers have increased their book or newspaper consumption over 2.6 times. For the less dedicated or poorer readers, mobile phones offer a better choice since there is software which turns the phone into a book reader, requiring only one hand to turn the page. Google has been scanning and digitalising thousands of books which are available for free. Eventually only specialist publications will be produced on paper. For a sample of other models coming to market, see Time, 16 March 09, pp 37-39

Nature, 2 April 09, pp 568-570, reports that undergraduate textbooks are going digital. Three forces drive this development. Firstly new e.readers, which are proving less adaptable for students who prefer using e.textbooks on laptops. The other forces are changes in business and licensing operations which deliver content at affordable prices and new concepts for the content and its creation, with textbooks offered free, written by expert authors, and open to "splicing and dicing" according to the needs of each student group.

E Klein, *Colombia Journalism Review, May/June 08*, reflects on the e.book such as Kindle, as another challenge to books, which have already survived many new media. The true promise of electronic texts lies in the ways by which they can create product beyond books. Text can become an open conversation, with many sources and links and viewpoints. It can be constantly updated, the relationship of writer to reader is direct and opens possibilities for direct payment. Ultimately the new technology will drive the future of writing rather than that of reading.

Remix: Making Art and Commerce Thrive in the Hybrid Economy, L Lessig, Penguin, 08, is an expert, lively polemic on "the copyright wars," held to be harmful to a large body of amateur and new commercial creativity. Remix, the borrowing and re-creation of existing materials is central to all creativity. On the Internet especially, amateur creativity flourishes. Many creative Internet startups are constructing a complex, cooperative relationship with the volunteer practices they facil-

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itate and harness. Thus a new form of sustainable commercial creativity is emerging. Late 20th century copyright laws hurt this development and the writer offers legal reforms to improve the system.

J Zittrain, The Future of the Internet and How to Stop It, Allen Lane/Penguin, 08 is an expert, academic's assessment of the legal issues and dangers involved in regulating the Web. Its general creativity is under threat from viruses and other malicious software. Protective systems could lead back to the managed interfaces and to tethered devices such as iPhone, which are less open to user innovation. He recommends counter measures.

J Leighton John, curator of eMANUSCRIPTS, British Library, *Nature*, *11 June* 09, outlines the challenges the digital revolution poses for the preservation of archives from current scholars and researchers. Authenticating files centuries ahead, and ensuring that key material remains unaltered have motivated the use of computer forensic techniques and the establishment of a secure digital scriptorium in the Library, containing eMANUSCRIPTS. After many generations, many highly personal digital archives will be distributed in society, from which it will be possible to create phylogenetic networks of these.

Here is the News

B Nordenson, *Colombia Journalism Review, Nov/Dec. 08*, reports that a recent in-depth study among young adult news consumers found that while these consumers craved more in-depth news, they were so overloaded with information that they felt helpless or unsatisfied, but unwilling to do anything further. Today, more than 70 million blogs and 150 million websites are growing at the rate of ten thousand an hour. To get satisfied consumer attention, news organisations have to make themselves indispensible by making sense of this flood of information and opinion. While many young people multitask effortlessly, studies question the efficiency of their attention, especially in the acquisition of new information. It is more helpful for the younger consumers if the information highlight the essential material, allowing time to absorb and think. As society becomes more splintered and specialised, the journalist becomes the social glue delivering the big picture which links the pieces together.

R Laugesen, *The Listener*, 2 May 09, reports that unlike their US counterparts, NZ newspaper chiefs see themselves trailing world trends for the good. While many US newspapers are folding, partly because of too much debt and high costs, the local market is holding, the connection to the readership is close, while online and print news complement each other, but as a share of a growing population of readers, daily newspapers are losing ground, while the big challenge of what replaces advertising to pay for journalism is the big unknown.

The Myth of Digital Democracy. M Hindman, Princeton Univ. Press, 08, is a political scientist 's analysis of key questions:- What does the Internet do in the day-to-day business of politics, and how does it affect the distribution of powerful political voices? The Internet has opened up new avenues for communication and fundraising for campaigns, becoming an essential modern candidate's tool. Although it appears that new participants are becoming involved, especially young people, their political

voices are heavily filtered and concentrated through the search engines which concentrate the sites that people visit for political information.

D Robie, Asia Pacific Viewpoint, August 08, provides an experienced critique of the media challenges in the S. Pacific for frontline reporters. Particularly in Melanesia, the region is volatile, often violent. Journalists need to get beyond simplistic stereotypes, but in depth reporting can be frustrated by cultural as well as political blocks. Even in more open states, self-censorship can prevail.

The Kingmakers: How the Media Threatens Our Security and Our Democracy, M. Gravel, D. Eisenbach, Colombia Univ. Press, 08. A politician and an academic offer a lucid and insightful analysis of reporting of recent evens to show that the US press is failing to report accurately and is declining into an echo chamber once a storyline is adopted. To counter this, they look to citizens or participatory journalism, such as bloggers, and the provision of media education in schools.

Technical Developments

"Cloud computing" is the next big thing, according to recent research, for though still in its infancy, it is likely to become the model for mobile applications within a few years. **ABI Research**, http://ipcommunications.tmcnet.com/topics, 28/08 09. Financial Times, 26 March 09, p 9, examines the "cloud" system whereby technology companies set up large networks of huge data centres to take over the tasks currently performed in the servers of their corporate customers. Using a new layer of software, this infrastructure is centralised, and those organisations using the system are either supplied by the technology groups themselves or by other companies keen to recreate online services for customers. The service can also be seen on a web browser running on simple handheld devices.

Science, 20 Feb, 09 pp 1000-1002, examines the challenge faced by chipmakers as the continuous improvement in transistors, based on the near-perfect union between silicon and silicon dioxide, is reaching its limit. Layering in the chips has become matter of nanometers. What other materials can be used as efficient semi-conductors? The semi-conductor alloys, such as gallium arsenide, can carry electrical charges more rapidly than silicon but there are huge problems to incorporate them into transistor chips.

C R Monroe, D J Whitehead, *Scientific American, August 08*, present the progress on creation of quantum computers. These store and process data using atoms or fabricated microstructures, which manipulate trapped ions. The data, stored on the ions, can be transferred to other ions. While extremely challenging, scientists are confident that such technicalities are feasible.

Patent lawyer **R Plotkin** outlines, *The Futurist, July-Aug 09*, how computer-generated inventions are being created via artificial invention. Given initial guidance from humans about a problem to be solved, in language the computer can understand, the computer can work out the solution. NASA researchers used an 'evolutionary algorithm to generate a design for an antenna, and a manufacturer used a Creativity Machine to produce a cross-bristle design for new type of toothbrush. These processes are incorporating insights from new research fields such as evolutionary biology and the thought processes of the human brain. Software can be developed for inventions which can adapt to their environment, learn from experience, heal themselves and pos-

sibly even create their own inventions. See R Plotkin, The Genie in the Machine: How Computer-Automated Invention is Revolutionising Law and Business, Stanford Univ. Press, 09.

Google is reaching further to enhance the search experience for users (and generate profits), looking beyond keywords and type. Voice search is just developing, while video and images is underway and there are moves towards searching the content. aFor more see **R Stross, Planet Google: One Company's Audacious Plan to Organize Everything We Know**, Free Press, 08.

Socio-Economic IT Linkages

D Wright, *Futures*, *June 08*, explores the brave new world of ambient intelligence (Aml), with scenarios and use of the movie Minority Report. In such a world everything will be embedded with intelligence, in sensors RIFID tags, 4th generation mobile phones, and wearable devices. Keyboards will be replaced with voice activation and recognition. A number of European and US research groups have been exploring the implications of Aml, including a 2008 series of "dark scenarios" showing how vulnerable a typical family might be in several such environments.

Love and Sex With Robots: The Evolution of Human-Robot Relationships, D Levy, Duckworth, 08. Humans have used machines for sexual purposes for centuries, but can love, a real human response, exist between humans and machine-based humanoids? Or ones resembling animals? Several examples show that humans can project their feelings on to a robotic human or animal, regardless of the real response of that creation. Love is not something to do with them; it is to do with us.

Born Digital: Understanding the First and Second Generation of Digital Natives, J Palfrey, U Gasser, Basic Books, 08. The global generation of born technology users are akin in their technical mastery, despite cultural differences. Everything online can be interacted with and changed, including their identities. The writers sift the scary from the "not to worry about," for parents, teachers, lawmakers, using plentiful examples.

Coming of Age in Second Life: An Anthropologist Explores the Virtually Human, T Boellstorff, Princeton Univ. Press, 08. This two and a half year study took place in Second Life as its population mushroomed to several million "inhabitants", and its methodology sets a standard for later researchers. The investigation of personhood reveals that freedom to be what your imagination permits is a major draw. The prospect of a closer relationship between the virtual avatar and its real creator, using voice, led to a revolt within SL. There is real emotional commitment invested in the SL experience.

Global Indigenous Media: Cultures, Poetics and Politics, Eds P Wilson, M Stewart, State Univ. NY, 08. Fifteen academics review the networks of indigenous artist and journalists who are celebrating creatively their unique cultural identities. Sections cover:- Film; clandestine media used in suppressed cultures such as Burma; the role of media in the preservation of cultures challenged by the rapid changes and penetration of outside cultures; and the capability for the current indigenous media for fostering the long-term survival of indigenous knowledge.

Transport

The Limits to Travel: How Far Will You Go? D Metz, Earthscan, 08 is an academic transport expert's look at the "big picture". We have contradictory and fragmented views on transport and travel; greater mobility and greater frustration, while conventional transport policies are unable to deal with the big problems of congestion and environmental damage. After detailed analysis, he offers seven policy suggestions:- be parsimonious in adding surface transport infrastructure; be austere in providing for growth of aviation for leisure travel; generally avoid increasing the speed of travel; utilise info-tech more as a travel substitute; encourage rail travel; maximise use by older people; accelerate introduction of low-and zero-carbon transport.

S Ashley reports on the development of "crashless cars" derived from a combination of customer safety expectations; crowded roads; older drivers and lightweight, less crashworthy vehicles. Add in the capabilities of robotic vehicles, and the crashless car which steers clear of accidents without any driver input, is not far off. *Scientific American*, *Dec* 08

Time, NZ edition), 25 Feb 08, p 37, reports on an innovative Dutch approach "shared space" for making streets safer for pedestrians and drivers. Street signs, traffic lights and surface markings were removed and then the curb between the pavement and the road. This made the different user engage with each other, watch body language and take responsibility. Other European cities are experimenting with the concept.

P Moriarty, **D** Honnery, *Futures*, *Dec* 08, reconsidered the approach to a low mobility, urban transport future, illustrated with reference to Melbourne. As transport is a derived demand, they start from an alternative preferred future, considering that at present the environmental and resource problems of conventional approaches are unlikely to cope with the required changes.

ECONOMICS & BUSINESS

Economists in Turmoil

Macroeconomists are facing a crisis of confidence in their discipline and among themselves because of their failure to foresee the current financial crisis and find ways to resolve it, *The Economist*, *18 July 09*, *pp 58-62*. Over the past century their studies and debates seemed to assure firm foundations for policies, until the crisis in 2007. Their models have proved unreliable. Do macroeconomists need to start all over again, or should they revise their techniques, or should they return to patient, empirical spadework on past and the present crisis? Financial economists are also in turmoil, as behavioural economists highlight the fundamental flaws on which they have based the theory of rational markets. There is also urgent need to get a better understanding of systemic risk and how to manage "moral hazard".

Animal Spirits: How Human Psychology Drives the Economy and Why it Matters for Global Capitalism, G A Akerlof, R J Schiller, Princeton Univ. Press 09. Financial "bubbles" have occurred for centuries. For these two economists there are five types of animal spirits which shape the human behaviour which drives bub-

bles:- confidence, fairness, corruption (bad-faith behaviour), money illusion (confusion about the effects of inflation and deflation) and storytelling (narratives which shape our sense of self and others). These five spirits can explain a range of macroand micro-economics, including financial crisis, depression and involuntary unemployment.

G Stix, *Scientific American*, *July 09*, expounds the research into behaviour which drives bubbles and busts, and how this is being incorporated into new models of market dynamics.

Destruction and Creation; Markets and States

Political economists and historians are contributing to the analysis, **Niall Ferguson**, *Harvard Business Review*, *July-Aug 09*, compares the present crisis of global finance with 1870, a six year global slump, less painful than that of 1930. Is the present crisis likely to be short and deep or longer and shallower? It will certainly result in a huge US Federal budget debt, exceeding 12% of GDP. Should the recovery be prolonged, by 2019 the debt could be 146% of GDP, with a more conservative political leadership. higher taxes and weaker financial markets. Of the potential purchasers of the US debt bonds, overseas investors have poor appetites, so it will have to be the Federal Reserve. The uncertain demand is reflected onto the US economy which is still basically in good shape while it has dented China's growth. Europe and Japan have both been severely affected, triggering a divergence in effects and responses within Europe. Russia is using external instability to distract domestic unrest, while the US itself is seen as a haven from instability.

A Gamble, The Spectre at the Feast: Capitalist Crisis and the Politics of Recession, Palgrave Macmillan, 09, is a lucid political economist's analysis which separates crashes (recurrent in capitalism) from crashes (rare). The latter are also essential to capitalism, dynamic, creative and destructive, making the unthinkable, thinkable, and opening up new narratives and new leading players. Thus the eventual resolutions are political. For the present crisis, there is more to be learnt from Schlumpeter and Marx than any of the other greats, and the "anti-capitalist effect", (green) critique of neo-liberalism is most pertinent.

The Economist, 14 March 09, Special Report on Entrepreneurs, notes that the renaissance of such enterprises, despite the economic difficulties, illustrates the truth of Schlumpeter's insight about creation arising from destruction. While US still leads in entrepreneurial efforts, countries as diverse as Israel, Denmark and Singapore have flourishing entrepreneurial companies. China and India are creating millions of such startups.

Innovation: Management, Policy & Practice, Oct-Dec, 08, is devoted to Innovation and the City- Innovative Cities, Ed J Marcea, Univ. NSW. Cities are incubators of growth and innovation, yet growth can also pose huge dilemmas for a healthy city. The contributors, a variety of international experts, explore and synthesise the issues.

In Government We Trust: Market Failure and the Delusions of Privatisation, W. Funnell et al, Univ, NSW Press, 09. This detailed analysis of post-privatisation governance failure includes studies from UK, USA, Australia and New Zealand. The

analysis is balanced, though highlighting the limits to provision of public good by self-interested parties, and that it is very difficult to establish effective competition through regulation, or by trying to artificially break monopoly competitors into cost efficient services.

I Bremmer, Foreign Affairs, May/June 09, explores the development of state capitalism. In developed nations this has arisen largely as a restorative for ailing economies, but over the past decade it has also developed in developing and emerging economies for different reasons. Governments own the world's largest oil companies and control three-quarters of the global energy reserves. Other companies, owned by or aligned with the state, enjoy market power in the major emerging economies while sovereign wealth funds (state-owned investment portfolios) account for one eighth of global investment. These trends are reshaping international politics and a new global competition, not between rival political ideologies but between competing economic models. The rise of state capitalism is introducing massive inefficiencies into global markets and injects populist politics into economic decision making. Its future may shortened if it cannot provide its two leading practitioners (China and Russia) with a working model for sustainable economic growth. The US should reassert its commitment to trade expansion with the EU and with growing economic powers such as India, Brazil, S. Africa, Turkey, The Gulf states and S E Asia, New commercial opportunities can be sought in the state capitalist counties but with a simultaneous investment elsewhere.

Inequality Issues

Recent NZ figures show that inequality has diminished for the first time in decades, largely due to the policy Working for Families, progressively introduced from 2004 to 2007 to help low-to-middle income households with children, *The Independent, 30 July 09, p18*. Equality is a fundamental feature for an ideal society but to get the details right is very difficult. The current financial upheaval has eroded some of the policy gains, according to **Ministry of Social Development Report 09, Household Incomes in NZ: Trends and Indicators of Inequality and Hardship 1982-2008.**

The Spirit Level:- Why More Equal Societies Almost Always Do Better, R. Wilkinson, K Pickett, Allen Lane, 09. They used indices of health and social development for 23 of the world's richest nations and individual US states. Their findings show that those societies with the narrowest income differentials such as Japan and the Nordic countries and New Hampshire, US, do best for their citizens. Life expectancy and incidence of mental illness, substance abuse, obesity, child neglect, violence in various forms and poor educational involvement correlate strongly with greater inequality. A key factor appears to be endocrinal stress arising for awareness that others are so much better off, which undermines self-esteem, elevates hormone cortisol levels and then blood pressure.

Australia and New Zealand compare badly in terms of the representation of women on company boards. *The Independent 28 May, p 18 and 9 July, p 19*, reports on recent study using overseas data which showed that companies where women were strongly featured in both management and on boards, performed better on range of

financial indicators. *Business Review Weekly, May 7-13, 09, p 46-47*, comments that the knee–jerk reaction to risk by alpha male Australian managers has resulted in a drastic downsizing of company staff and talent. Speeding the recovery cycle should include a rethink of the leadership style, including a reappraisal of the strengths women bring to management and board directorship. An overseas report finds the following behaviours feature strongly in women's leadership style, and gives companies a competitive edge:- inspiration, participative decision making, expectation and rewards, people development, role modelling. The male style combine two behaviours:- control combined with corrective action and individualistic decision making.

R Milne, A Ward, Financial Times, 30 July 09, p 7, examine the Nordic economic model, finding that some of its distinctive aspects are not easy to replicate elsewhere, and it is showing stress under globalisation and an acceleration of immigration. Financial Times, 15 June 09, p 5, examines the effects of recent Norwegian legislation requiring sharply increased quotas of women as company directors. So far the outcomes are beneficial.

R Eisler, The Real Wealth of Nations: Creating a Caring Economics, Berrett-Koehler, 07 provides a structure for business and political leaders to transform economic systems, emphasising the value of human effort and nature, and promoting improved health and educational levels among all socio-economic levels and increasing productivity.

FUTURES THINKING

Global Identity and Citizenship

M J Karlberg, *Peace Review*, *July-Sept*, *08*, explores how the concept "global citizenship" can shape the way we think and talk together and understand ourselves. At a time when humankind has arrived at an unprecedented social and ecological interdependence on a planetary scale, we have not yet learnt how to live together in such a context. The traditional indentities which shaped us are now under enormous pressure.

We can start by cultivating an inclusive global identity through a conscious strategy of new understandings, getting away from the former "Us" and "Them" categorisations, which in extreme cases can force costly efforts to compel the allegiance of "Them".

An examination of the fundamentals of altruism defined as "behaviour intended to benefit another even in face of possible self-sacrifice" found that the common denominator among a range of altruistic persons, was a world view which acknowledges sense of oneness with the rest of humankind. This sense of human oneness,or global citizenship, is essential for solving such problems as social injustices and inequities. Sceptics argue as that the formation of the individual human ego and identity requires a sense of self-differentiation, does this apply to collective identities? There is no evidence that the collective "Us" also requires a counter of "Them".

A globally inclusive human identity can include other "nested" indentities, based on gender, culture etc. Fostering a sense of oneness with the rest of humankind can be strengthened by many social and institutional changes. Begin with ensuring that decision making processes are guided by this sense of oneness, and use this as a standard with which to critically re-examine our cultural habits and norms. The principles of global citizenship should be incorporated into all levels of education. The development of institutions which facilitate democratic decision making on a global scale should be encouraged, and the fetish of national sovereignty should be challenged.

Finally, the role of religion in human affairs both its positive and negative aspects, need a critical revaluation. This is a complex and highly sensitive issue. It requires a balancing of respect for the religious life of many millions of people with questioning those aspects which are incompatible with inclusive global values. Particular areas include the narrow interpretations of religious texts, the privileging of one's own faith experience over that of others, and an assertion that religion remains a primary sphere of human identity formation worldwide, which needs to be recognised by believers and non-believers alike.

Looking-Ahead and Making Decisions

Global Catastrophes and Trends: the Next Fifty Years, V. Smil, MIT Press 08. This prodigiously, multi disciplinary scientist differentiates the long-term, incremental trends from the sudden discontinuities which can dramatically affect human societies. The latter include asteroid impacts and mega volcanic eruptions, but Smil considers that pandemics and major wars are more likely to have such effects and that investment in prevention is well justified. Unfolding trends include as shift away from major dependence on fossil fuels, widening inequalities and disturbance of the nitrogen cycle. These will have to be adapted to. Insecurity is part of the human condition.

Future Savvy: Identifying Trends to Make Better Decisions, Manage Uncertainty and Profit From Change, A. Gordon, AMACOM 08, offers a useful critique of forecasting, in non-technical language, not overly dismissive, with detailed analysis of what's involved.

WORK

Rethinking Work

G. Standing, UK Professor on Economic Security, *Labour and Industry, April 09*, explores a new paradigm for work for a sense of occupation, which crosses old labour concepts and is more suited to a tertiary society. He expands the ideas in **Work After Globalisation: Building Occupational Citizenship**, Edward Elgar, 09.

A focus on occupation builds on what we do rather than for whom we do it. The current crisis in globalisation marks the end of a system of national markets and national systems of regulation including welfare systems. Yet making the individual responsible for economic security is immoral. Globalisation has also fragmented classes, resulting in the development of what may be called a 'precariat', millions working in precarious jobs and becoming almost urban nomads. White collar groups, the 'salariat' and 'proficians', the latter somewhat precarious but by choice, are the new social groups.

A decisive shift in thinking is needed, from labour to work, away from the focus on the standard employment relationship. Work would include play and leisure. Currently modern living is squeezing out time for civic engagement, resulting in a public participation deficit.

We need a concept of tertiary time, compatible with a tertiary society, rather than an industrial one. For many today, work is not confined to a specific workplace, and working time can include preparation and study time. For all the new classes, the workplace and the life cycle need to be thought as combining activities in distinctive working patterns. The meaning of skill is changing. It is wider than technical competence, and includes understanding ourselves and how we relate both to work and all with whom we work, how we manage our time, and the ethics we employ.

As the concept of career is dissolving, the individual is redefining to changes both in their identities and in the kinds of work they undertake in a world, where today's job may no longer exist in a few years. Some important issues arise. Should there be a "right to practise"? Regulating occupations, for example through licensing, is increasing, to prevent restrictive practices. But should this rather be based on a presumption that there is a right to practise, subject to doing no harm to others? Occupational bodies should be able to function, subject to guidelines set by overseeing bodies, with separate conflict resolution bodies. Such collective occupational bodies should not only defend emerging forms of work, including flexible time for leisure, but also strive for economic and ecological rights, linked internationally to similar bodies. Should there be a separate category of labour law? or should it become part of common law dealing with contracts and torts? Globalisation has systematically restructured the social income, with many workers losing benefits, while money wages are an unreliable indicator of worker earnings, Restructuring social income with tax credits raises questions, for while they may reduce poverty traps, are they in fact a form of subsidy and therefore protectionist?

Among the chronic labour-related stresses, which should be noted with concern, is the increasing amount of sophisticated monitoring and "dataveillance", together with control and adjustment occupations linked to behavioural economics.

There needs to be much greater debate on inequality. Income is being redistributed from labour to capital, with offshoring weakening the bargaining power of workers. What would be the social and labour market consequences if no countermeasures occurred? What feasible measures of redistribution can be employed to enhance dynamic efficiency and yet promote economic security and reduce inequality?

The International Scene

World Migration 2008; Managing Labour Mobility in the Evolving Global Economy; report by the International Organization for Migration, 08. This predates the global financial crisis 2008, but its analysis of trends is still relevant though its recommendations may be less so, at least temporarily. Migration may be forced, (refugees or internally displaced) or it may be voluntary, either across or within borders or within borders. The scale and economic impact is huge, and closely intertwined with the forces of globalisation. Remittances sent home by foreign workers in 2007 rose to \$US 337 billion, for some states comprising almost their entire income. Demographically aging areas such as Europe depend on inflows of younger workers,

and there are huge markets for both highly skilled and unskilled workers in rich or developed nations.

Ending Slavery: How We Free Today's Slaves, K. Bales, Univ Calif. Press, 07, continues an earlier authoritative investigation of a major human rights issue, defined as "control through violence, economic exploitation and the loss of free will." Using case studies, the role of communities and individuals as well as governments and international organisations are explored. Communities are the key starting points where slavery can be stopped. A lot of modern commodity supply chains have a little bit of slavery in them. Consumer boycotts are less effective than systems of monitoring and certification.

Putting Labour Into the International Division of Labour, Ed M Taylor, Whole Issue, Third World Quarterly, Vol. 30/3 09. Over the past decade several key areas of labour studies have developed. These are:- the social construction of labour forces internationally; the self-organising potential of workers, especially those seeking to counterbalance the overwhelming power of capital; and the possibilities for transborder movements to support the second issue. Much mainstream analysis by political economists appears blind to the role of labour. This selection of contributions is not comprehensive, but provides studies from China, Malaysia, Mexico and Canada, Brazil, S. Korea, Lesotho together with several general themes such as corporate social responsibility.

Local and Global

EEO Trust, Winter 09, reports on gender and age skews in the New Zealand workplace, Workplace Age and Gender: Trends and Implications, M. McPherson, (www.eeotrust.org.nz/research), using analysis of 1991-2006 Census data, for over thirty occupations. Professions currently dominated by older men and younger women such as law, medicine, planning and veterinary medicine are likely to be hit by double loss over the next decade as large numbers of older workers retire and the younger women leave to start families. Similar experiences could occur in business with comparable demographics. Fields with particularly mature workers such as engineering, management, transport and trades will likewise feel the impact of an ageing workforce. Younger people predominate in IT media, call centres, policy analysis, science and catering. But the numbers of young people entering the workforce will decline. Management, August 09, pp 32-34, also explores the report, noting that to overcome potential problems employers will need to use strategies which emphasise succession planning, advancing younger women to more senior levels with more flexible conditions, and teaming up older and younger workers, especially where hard physical labour is needed. More positively, the greatest increase in labour force participation over the period was the over 50yrs olds. The comparative absence of younger men arose from their having gone overseas.

Urban Institute (http://www.urban.org/url.cfm?ID=411705), **Will Employers Want Ageing Boomers?** July 23, 08, reports that most of the fast-growing occupations employing workers 55 or older, rely of educational skills, such as vets, social and community service managers, surveyors, registered nurses, and personal financial

advisors. Occupations requiring lower academic qualifications were in personal care and homecare.

A. Levit, *The Futurist*, *Sept-Oct 09, p 39*, reports on the market for the Gen X new graduates. Technology is changing so quickly it is difficult to predict tomorrow's workplace. The Boomers remaining in the workplace could be subordinate to new graduates, as will be a large influx of immigrants. Workplaces will be smaller, and often outsource most operations which can be broken down into component parts (including some professional areas) and exported overseas. Work will be spread across many locations around the world with an eight hour day spread across fourteen hours. Workers will be constantly upgrading, developing innovative, creative strategies in cross-functional teams. New graduates will need to understand human behaviour, engender co-operation and bring out the best in workers.

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