Report

Futurewatch

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Environment

Coping With the Bottleneck

Renowned biologist *E. O. Wilson* provides a lucid and vivid account of the astonishing diversity of life on our planet, *The Future of Life*, Knopf, 02, which ranges from the two million known species to the ten million plus which may exist. This uncounted biodiversity is being forced through a bottleneck as the planetary environment faces the disruptive onslaught of rising human populations and their consumption demands. The future of life depends on moving to a future unlike that of the past century. The epicentre of the change lies in Chinas response as it reaches into global supplies beyond its domestic production and copes with the pressures on its own ecosystems.

Wilson is critical of the conservation focus on "hotspots," arguing that we can only save biodiversity by saving the planet. Unfortunately, human indifference to planetary environmentalism arises from our evolutionary hardwiring for short-term focus and concern for a limited geographic space.

...extinctions?

W. W. Gibbs reports that projections of extinction rates are problematical for ecologists, complicating their powers of advocacy for urgent action. Fast rising depletions may be most severe among vertebrates, yet save for birds, at all biological levels more species are still being discovered. *Scientific American, Nov 01. Science, 27 July, 01*, special survey on *Ecology Through Time*, provides a number of expert studies on aspects of change including human impacts over many millennia. Long-range data bases are essential for this. *J. S. Clark et al consider Ecological Forecasts: an Emerg-*

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ing Imperative for Policy Making, but priorities for this must come from a dialogue involving the stakeholders responsible for the polices.

...or more discoveries?

Tales from the Underground: A Natural History of Subterranean Life, D. W. Wolfe, Perseus, 01. Our biological understanding is dramatically expanding as many thousands of new species are being identified in the soil beneath our feet. Some subterranean biota exist in environments so extreme they were thought uninhabitable, opening up new possibilities of life elsewhere in the universe. While there are exciting new possibilities for useful applications of some of these species, human activity is also polluting this environment.

...meanwhile

A Central American bioprospecting project which attempted to benefit the indigenous people by involving them actively, through theatre, in the project, has failed because of pressures from overseas activist environmentalists. This was a model for collaboration on ethical lines with indigenous peoples to enable them to benefit from some economic development. *Nature, 13 Dec 01, p 685; 7Mar 02, p 15.*

The *Gondwanaland Southern Forests project*, established 2000, is an international initiative involving national and NGO conservationists and ecologists to conserve, restore and reconnect significant types of such forest in Argentina, Chile, New Zealand, Australia and eventually other areas. International timber interests eye these forests. *Ecolink (NZ), March, 02, p5.*

...the business sector

Green chemistry designs and develops chemical products to reduce or eliminate the use of substances hazardous to human health and the environment. *S. K. Ritter* explores this powerful, rapidly growing concept. Many useful technologies exist, but more effort is needed: - finance for development and implementation, with policies and programmes across academia, government, NGOs and industry. *Chemical and Engineering News, 16 July, 01. Down to Earth: Applying Business Principles to Environmental Management, F. L. Reinhardt*, Harvard Business School, 00, explores a number of techniques business can use according to circumstances to improve environmental performance and to increase shareholder returns. The basic approach is to consider the environment as "a business problem," then adapt some proven strategies.

... coping strategies

Unnatural Disasters, J. N. Abramovitz, Worldwatch, 01, outlines the growing share of environmental disasters caused by failure in "natural" systems arising from loss of resilience, the maximum capacity to withstand perturbation without causing a shift to an alternative stable state. These unnatural disasters arise from increasing population pressure and its built environments. Weather prediction improvement and humanitarian relief are insufficient; $1 spent on mitigation can save $7 in disaster recovery costs. Strategies for sustainable management of these natural systems should focus on maintaining resilience. *Global Environmental Risk, Ed J. X. Kasperson, R.E. Kasperson*, UN Press/Earthscan, 01, examines ways of identifying, conceptualising, organising and addressing such risk, under five themes: - this is the ultimate threat to both humans and environment; uncertainty is a fundamental part of outcome prediction; these risks show up in different ways according to spatial scale; there are useful tools to manage the risks; futures are not given but negotiated.

...to sum up

State of the World 2002: A Worldwatch Report on Progress Toward a Sustainable Society, C. Flavin et al. This nineteenth edition is oriented to the *World Summit Agenda*, late 2002, and includes global security, governance and breaking resource/repression linkages. *Stormy Weather: 101 Solutions to Global Climate Change, G. Dauncey, P. Mazza*, New Society, 01, spreads a very wide net over environmental, attitudinal, energy and other measures for citizens, cities, business, auto producers, to the global level.

Kyoto and Beyond

R. U. Ayres, INSEAD, France, explores the deep divide between economists and scientists over global warming, caused by unquestioned assumptions which are the basis of conservative economic policy. Major government intervention would "harm the economy" because the costs of such action will greatly outweigh the "discounted present value" of future benefits (i.e., costs paid now are greater than those paid later; likewise benefits for future generations are worth less to us now). Certainly the short-term cost increases as mitigation of emissions accelerates. The conventional economic assumption considers this will constrain the optimal range of choices for business, slowing economic growth. The critical issue is whether there are compensations in immediate and later cost savings and other long-term benefits such as new products, services, jobs, which open up new ranges of choice and sustain economic growth. *Worldwatch, Sept/*

Oct, 01. See also *Energy Journal Vol 21/3, 00*, in which a number of articles challenge mainstream economic analysis, arguing that the Kyoto target is achievable at negligible cost. *R. J. Sutherland* examines the unique "no cost" analysis, highlighting this unique methodology only applied to energy conservation.

...solutions?

R. Morgenstern et al, "Reducing Carbon Emissions and Limiting Costs, Resources for the Future, 02, offers a useful hybrid approach for the US dilemma about taxes and targets for controlling emissions. They propose a "cap and trade" which forces politicians to legislate targets, with a safety valve at a trigger level which would gradually rise over time, as the economy adjusted. In *Contraction and Convergence, A. Meyer, Global Commons Institute,* Green Books 01, describes a framework which is inclusive of all nations, and establishes the rules of the game for the survival of the planet, rather than relying on arbitrary deals. Contraction is based on core principles of survival and equity (per capita use of resources). Convergence recognises that this takes time, up to thirty years. Within convergence, emissions trading is permitted, if their total is within the reducing target. Commercial incentives will be needed for countries such as US. An international currency for trade across boundaries is proposed, based on proportional standard emission rights.

...science

Meanwhile research is continuing on the potential for sequestration of atmospheric carbon dioxide in the ocean, which requires a much better understanding of oceanic chemistry. Technically it is feasible, very durable if deep enough, but its biological impacts are unknown. *Science, 3 Aug, 01, pp790-792*. NZ scientists, in researching the exchanges between the atmosphere and the ocean, find that there are seasonal variations in the take up rate of carbon dioxide. *Water & Atmosphere (NIWA) 9(1), 01, pp24 -25*.

...who has the clout?

Climate for Change: Non-State Actors and the Global Politics of the Greenhouse, P. Newell, Cambridge UP, 00. This examines a number of such sectors who contributed to nurturing the climate regime since 1992: - scientists in the relevant programmes, the media, the fossil fuel producers, and the environmental NGOs. The significance of each in terms of input and outcomes bears on further developments in supranational, national and subnational processes.

... it can be done

Thailand has achieved dramatic results in restoring cleaner air to Bangkok, providing a model for regional air-pollution fighters. Government and oil refineries worked on getting the lead out of fuel, Japanese exporters were prodded to produce lower emission cars and motorcycles, and the Bangkok municipal government planted half-a-million trees, with as many to come. A growing environmentally conscious peoples movement provided the vanguard. *Far Eastern Economic Review, 25 Oct, 01, pp 44-46.*

...and the ozone hole

Concerns are being raised about the emergent impacts of four chemicals which may also be harmful to the ozone layer. *N*-propyl bromide, now used as a substitute for CFCs, and halon-1202, a fire-fighting tool, and two other chemicals, could, if production and emissions grow, significantly slow ozone recovery. *New Scientist, 20 Oct, 01, p17.*

Water of Life

The Water Manifesto: Arguments for a World Water Contract, R. Petrella, Zed Books 01, is fresh thinking on one of the three basic contested resources: - water, information and money. The global water crisis arises from unequal distribution of water resources, waste and mismanagement, growing pollution and population growth. A *World Water Contract* is needed with two major objectives: - basic access for every human and human community and modification of existing water laws to recognise water as a vital, common, global heritage. The Contract priority target should be 3 billion taps by 2020, providing access for all humans.

Great Waters: An Atlantic Passage, D. Cremer, Norton, 01. By combining scholarship and readability, this creates an essential introduction for many types of readers. It weaves together discoveries of the strange communities in extreme oceanic environments, the life of the midwaters, many of the hot topics in the use and abuse of the ocean and its resources, the long-term geologic context which is the measure of the human impact and much more.

Listing

Values As Law: The History and Efficacy of the Resource Management Act, D. Young, Institute of Policy Studies, 2001. This assessment of a globally pioneering NZ law indicates that lack of follow-through in public education and the expensive National Policy Statements to buttress the RMA have seriously limited its impact.

Energy/Minerals

The Energy Outlook- Again

Hubberts Peak, K. S. Dreffeyes, Princeton UP, 01, continues the work of the geologist who in 1956 predicted US oil production would peak, then decline about 1970. Adapting the statistical methods used, geologist Dreffeyes predicts the turning point in global oil production, the start of the downward trend, as 2005-10.

An authoritative, far-reaching assessment of the global energy situation comes from the updated report *World Energy Assessment: Energy and the Challenge of Sustainability, Ed J. Goldemberg*, UNDP/World Energy Council, 01, *<www.undp.org/seed/eap/activities/wea>* with a panel of experts analysing the social, economic, environmental and security issues linked to energy supply and use. Options for sustainablity in each area are assessed. This benchmark source is also highly readable. Several specialist responses to this see: - *<www.greenpeace.org/~climate/renewables>*.

World Bank oil economist consultant *M. Salameh* asks if a third oil crisis is imminent since common elements from earlier disruptions are recurring. These are: - rapid economic expansion fuelling energy demand, crude oil production at peak capacity, declining investment in oil exploration and an OPEC price hike as other suppliers stagnated. Today there is an ominous fifth element, a lack of spare capacity in OPEC itself. A prolonged disruption such as war could force Western run-down of strategic stocks. However, unless the price rises to US$ 50 per barrel, a crisis may have less impact on the global economy that in the 1970s. *Survival, Autumn, 01.*

Energy and investment policy specialists *E. L. Morse, J. Richard* warn that a battle is being waged between the worlds two largest oil exporters, Russia and Saudi Arabia, which will have fundamental impacts on the global economy, *Foreign Affairs, Mar/April, 02.* Russia has been quietly increasing its annual output for the past two years. Meanwhile OPEC has cut output to hold up prices in the face of global recession. Russia and its neighbours can continue to increase supply, matching OPEC, and if they do, the Gulf states, who disallow foreign direct investment, will suffer, for their production capacity does not match their vast oil reserves. Russian companies now meet global financial market standards, they are reinvesting capital and present themselves as reliable suppliers. This helps Russia in the new geopolitics of energy, boosting it as a key partner to US. Restraint in US demand would enable a tripartite effort to force greater efficiency in energy use, benefiting all.

China is likely to continue at odds with the established world community, because of its reliance on imported food and energy, according to *T. M. Kane, L.W. Serewicz, Parameters, Autumn, 01.* The fuel shortage is more immediate than that of food, for China at present imports more oil with each economic boost, much of which comes from the Middle East. Three alternative oil sources could be developed: - the South China Sea, the Tarim Basin in Xinjiang, which is particularly challenging terrain for extracting oil, and building pipelines across Central Asia, entangling China in local political tensions. Chinas eventual requirements are so large they will have global consequences, raising prices, forcing out poorer countries and exacerbating the tensions in the poorer world.

The Hydrogen and Fuel Cells Future

A number of small island states are into the transition to *Hydrogen Futures: Toward a Sustainable Energy System, S. Dunn,* Worldwatch, 01. Many companies are seeking to commercialise fuel cells for a broad range of applications, some are creating hydrogen divisions and massive investment is pushing development of the first fuel cell car by 2003-5. Remaining obstacles need government intervention, as in EU, and Japans projected US$4 billion, by 2020, on a World Energy Network.

More detailed accounts of projects and the stages by which a hydrogen economy might develop in *Tomorrows Energy: Hydrogen, Fuel Cells and the Prospects for a Cleaner Planet, P. Hoffman,* MIT press, 01. Hydrogen fuel cell buses are to be trialed in a number of cities including Perth by 2003, a joint effort of UNDP, BP, the W. A. State and Federal Governments. *Clean Air, Vol 36/1, 02, p15.*

For a specialists overview of leading edge technologies involved: - photoelectrochemical cells, fuel cell materials, hydrogen storage materials, rechargeable lithium batteries and superconducting cables, see *Nature, Insight Section: Materials for Cleaner Energy, 15 Nov, 01. D. Voss, Technology Review, Nov 01,* describes micro fuel cells, 5 by 13cm powerplants, which could eliminate batteries, and promise a huge electronic boost for equipment ranging from cellphones to laptops, as they move to commercial production.

Other Possibles

Distributed generation is the latest electrical technology wave, facilitated by the deregulation of the utilities. It may be possible to purchase a system over the counter, to plug in at home. The system uses gas turbines, internal combustion generators, microturbines, photovoltaic solar panels, wind turbines and/or fuel cells, to provide power at, or close to, the point

of use. The customer is served "off the grid" but can also interact with the main network. *NZ Centre for Advanced Engineering* is examining the NZ potential. *e.nz, Mar/April, 02.*

R. U. Ayres, Worldwatch, Nov-Dec, 01, a former Engineering academic, discusses methods to reduce greenhouse gases by use of sequestration (intercepting emissions before they reach the atmosphere), nuclear power, and conservation, emphasizing immediately-applicable low-cost and longer-term radical improvements in energy-efficiency. 5% is a fair estimate of current real energy efficiency the US economy, leaving ample room for comfortable reduction in energy consumption. Non-carbon energy alternatives are ranked for cost and a radical, fixed, carbon entitlement proposed, tradeable, for every citizen.

UK environmental scientist *K. L. Anderson* applies a backcasting model to reconcile a reliable and affordable electricity industry with sustainable development, *Futures, Sept, 01.* This method recognises the wider environmental and social framework as basis for a more flexible and responsive policy agenda.

Listing

Tarnishing the Earth: Gold Minings Dirty Secret, Environmental Health Perspectives, Oct, 01. Gold mines, new or old, negligent or environmentally responsible, threaten the environment and the health and wellbeing of many host communities. Either the mines should be worked only in the most arid and seismically stable areas or gold consumption (and demand) reduced, even eliminated for non-essential use, such as jewellery.

Futures Thinking

After September 11

US farmer, poet, futurist W. Berry reflects. Unquestioning technological and economic optimism underlying the "new economy" has ended. The euphoria built on endless innovation was overridden by the unforeseen: - that previous innovations have become deadly weapons. This also terminated the corollary that a complex global economy is protectable by "national defence." We face inescapable choices: - to continue a global economic system of unlimited "free trade" among corporations linked by vulnerable communication and supply lines, whose expensive global protection will oversway privacy and freedom for all; or, to decentralise the global economy, focus on local self-sufficiency in vital goods, though still enabling international trade.

National self-righteousness is a weakness. America has long been part of warfare which held that civilian populations could be guilty and militarily punished. Peace speaking is hard, it arises, not from passivity but from peaceableness, an alert, informed, continuously practised and active state of being. Nations cannot be peaceable when the poor are exploited, yet their governments are armed with the newest means of war. Our present concept of education must change; young people need to order their lives by knowing which things are most important. *In the Presence of Fear*, Orion Society, 02, *<www.OrionOnline.org>*.

H. Linstone, Editor, *Technological Forecasting and Social Change, Vol 68, pp. 309-313, 01*, applies the drivers of a fifth Kondratiev economic/technological upswing. 1. IT. Evolving warfare will require new, unique sensing and information processing for identification, intelligence analysis, simulations and insights from complexity science, plus molecular-scale manufacture, genetic applications. 2. Space Technology. This is re-energising the military-industrial-university complex; space becomes a virtual military theatre, IT satellites are targets, microwave guns and others develop space control technology. The cost may overstretch the US resources. 3. Influential Organisations. Power networks also now involve corporations, banks, media, crime and ideological groups, all vulnerable to terrorist hackers. The frustration of billions in the poor world (some of which is geographically part of the rich world) can explode, since it provides fertile ground for religious and ideological movements. 4. Privacy, Security and Technology. Balancing these needs is illustrated in the government-industry standoff over encryption technology, or personal identification cards, opposed in US, yet widely accepted overseas.

Long Views

Environmental chemist *P. J. Crutzen* considers that the post 1780 era in terms of the Earths history should be called the "Anthropicene," since this is the human-dominated epoch. If 25% of the global human population have had such unprecedented impacts on earth, then mankind will become the major environmental force for many millennia. *Nature, 3 Jan 02, p23.*

Australian futurist *R. Slaughter*, President of the *World Future Studies Federation*, an international network, advocates the term "foresight," as a comfortable term for many who prefer to live in the present. Foresight is a necessary practice in business to gain competitive edge, but it should be generally applied, provided we look at a wide range of options, then work towards a preferred goal. Sticks may drive us to look for alternatives to

muddled drifting, but the carrots encourage us to create a better world by indepth examination of other views. We need to avoid the "having" mode, in favour of "being": calm, centred, connected. Interview, *New Scientist, 1 Dec 01*.

A Brief History of Tomorrow: the Future, Past and Present, J. Margolis, Bloomsbury, 00. Bizarre ideas for the future may or may not come true, which makes looking back at past predictions a salutary exercise for present seers. The major hurdle to getting it right, is "the arrogance of the present," especially if confined to one worldview.

Work

Good Work

Alternatives, Winter 01, asked four experts if society can deliver "good work" which balanced the environment/jobs tradeoffs. Economist *E. Goodstein, J. Schor, R. Douthwaite* and New Work leader *F. Bergmann* all saw good work linked to meaningful living, beneficial effects on relationships with community and environment, creativity instead of boredom, and some saw lower consumption rates and shorter hours. There was range of views as to how readily the environmental tradeoffs affected jobs: nationally it was neutral, locally there would be shifts in work areas, but *Douthwaite* and *Bergmann* both wanted a more radical structuring of the job system with local work for local needs, and monetary reform.

An ILO-commissioned study on the social dimensions of globalisation looked at the social and economic linkages in a context of seven selected countries, developed or undergoing development: - Bangladesh, Chile, South Korea, Mauritius, Poland, South Africa, and Switzerland, each published individually. They are summed up in *Towards a Socially Sustainable Economy: An Analysis of the Social Pillars of Globalization, R. Torres*, 01. Policy suggestions are in two parts: - Enhancing Business Opportunities and Strengthening the Four Social Pillars, covering education and training, social safety nets, labour laws and industrial relations and core labour standards. Tradeoffs at national and international levels are needed, such as lead times for developing countries to cope with the social consequences of reduced trade barriers, maintaining innovative incentives yet addressing income inequalities, with implications for tax regimes.

Futures, August, 01 covers a wide range of leading-edge thinking, down some surprising paths, in *Learning at Work-Developing Human Potential.* If work is more than an economic activity, who is responsible? What implications are there for the person, the economy, the organisation? Does

the notion of the Knowledge Economy require acknowledgment and development of the whole person?

For seven years UKs *Tomorrow Project, <www.tomorrowproject.net>* has been examining the future of work to 2020, *Tomorrows Workplace: Fulfilment or Stress, M. Moynagh, R. Worsley*, 01. Seven key features are highlighted, mostly unsurprising, with three scenarios for work/life tension in 2020, another three of workplace communities, plus studies of the organisation of work and managing the gap between consumer and organisational values.

Workplace Issues

...wages

"Monopsony" is a neglected labour market theory whose time is here, in the low-paying companies who prefer to cut costs and keep wages low, rather than maintain a better paid, stable staff. This aspect of the minimum wage argument could have a net advantage for employment, illustrated by *M. Stewart, Estimation of the Individual-level Employment Effects of the Introduction of the National Minimum Wage*, Low Pay Commission (UK) 01, in *Financial Times, 20 June 01, p9*. Economist *R. Pollin* argues for a living wage, *Challenge, Sept-Oct, 01*, a development introduced in a number of US cities, from campaigns by soup kitchen activists to meet the needs of the working poor.

...older workers

Research indicates that the increasing numbers of older workers are not accessing the training they need to continue their productive working life, *Employment of the Older Worker Survey, <http://masseynews.massey.ac.nz>*. 10% of those surveyed considered they had been denied because of age, which had also affected chances of promotion. Older women face a double jeopardy of age and gender discrimination. Reported in *Changing Times, May, 01*. W. European companies and governments are starting to reverse earlier policies to encourage early retirement. A different agenda operates in workers minds, at 55 they want to enjoy the Good Life. A mix of policies is needed: - communication, tools and structures. Companies are redesigning work, adjusting payment systems and changing cultures. Workers expectations are being modified by education courses. *Financial Times, 26 June, 01, p9. Australias Social Policy Research Centre <www.sprc.unsw.edu.au>* is conducting four studies on the links between Mature-age Workers, Redundancy, "Early" Retirement, and Prospective Welfare Expenditure, *Newsletter 80, Dec 01.*

...teleworking

P. Kerslake, property consultant, has extensively researched Australia and NZ on the future of the Central Business District affected by the growth of teleworking and similar flexible workstyles, *Australian Property Journal, Aug, 01*. This workstyle is growing now, particularly for experienced or professional workers, but companies expect that they will increasingly rely on these systems over the next five years. There are similar reports overseas. The CBD faces a tremendous outflow of older, or more successful workers, plus more family-oriented telecommuters who will live and work at least some of the time beyond its range, with office rent rises aggravating the trend. In *Management (NZ), May, 01, Kerslake* identified a reality gap between the office-tied workers with rosy views of telework-based, balanced work/family lifestyles, and those who had found problems adjusting to the reality. Successful teleworking requires training courses and personal policy programmes. *V. Di Martino, The High Road to Teleworking: Promoting Decent Work*, ILO, 01, takes a global overview of the development of teleworking and the good practices which can realise its potential. Among the countries studied, Brazil may become the great, future, teleworking engine. Mobile work and call-centres are the fastest developing forms.

Parenting and Work Dilemmas

Debates about relentless work pressures on the needs of families are reported from studies in Canada, *E. Church, (Toronto) Globe and Mail, 13 Feb, 02, p B1*,(by private e.mail, 19 Feb 02). Even if firms have family-friendly policies in place, career pressures nullify this. There are also elder care responsibilities looming. Sociologist *F. Furedi, Paranoid Parenting*, Lane, 01, questions this widely held view that children are missing out. Studies of British parents show a trebling of time spent with children over this century as a result of expansion of new claims on parenting. More attention is expected to the development of children and to children's activities, aggravated by environmental changes, plus expectations of parental involvement in schools. By 2010 it is expected that parents will average 100 mins daily with their children compared with 25 mins in the 1970s.

Listings

Information Technology and Urban Labour Markets in United States, L. Wolf-Powers, International Journal of Urban Research, June 01, explores the reshaping of cities permeated by IT intensive industries and occupations and the policies which can be used at national and local level.

World Affairs/Peace/War

Ancient Warriors or New Paradigms?

R. D. Kaplan foresees major powers international affairs increasingly conducted by a unified diplomatic/military command which reflects the ancient warrior world rather than the separate systems of the past two centuries. Military and civilian high-tech systems are mingling, collaboration is accelerating between corporate interests and military, and much warfare will be within states, unconventional and undeclared. Globally, warrior classes are growing, cruel as ever and better armed. The media is short on analysis, heavy on emotion and individual rights which can lead democracies into wars they should not fight. Just wars require a universal arbiter of justice; power balancing is history, states will go to war when they decide it is in their interest to do so in a world of shifting alliances, with alliance leaders acting like barbarian chieftains. *The National Interest, Winter, 01/02.*

Rockets Red Glare: Missile Defenses and the Future of World Politics, ed J. J. Wirtz, J. A. Larsen, Westview Press, 01. Contributors assume that National Missile Defense, a major change in US Defense strategy, is operational by 2010, and how this might affect the international strategic landscape. Three alternative modes of NMD are explored: -limited defense in a co-operative setting; moderate defense; unlimited defenses.

M. McGwire advocates for shifting the national security paradigm which has prevailed for this past half century. Its emphasis is adversarial, seeking enemies, dehumanising them and upholding ones own moral stance, resorting to offensive diplomacy. Exclusivity, adversarial modes and deterrence were its operational terms. Moving to a new paradigm of co-operative global security requires a shift in attitudes, which are fundamental even though their policies may change. It recognises that in a globalised nuclear world there is no such thing as national security, only international security. Engineering the paradigm change is a learning process built on four prerequisites: - an impulse for change derived from shared fears and a common vision of an alternative; the absence or removal of obstacles to change; an engine of change, and a precipitating cause. Fatalism underlies the present adherence to the old paradigm. Is last September a precipitating event? *International Affairs, Vol 78/1, 02.*

Islamic possibilities

A Turkish perspective informs *P. Bilgin, Futures, June 01*, in five scenarios for the future of the Middle East: - globalisation, fragmentation, clash of civilisations, democratic peace and formation of a secure

community. On balance the creation of a secure community is preferred since the others in various ways are potentially chaotic. There is little basis for such development. Some human agency is needed to propel new interpretations of the past, present and future and encourage the regional players to view each other as potential partners.

CIA leader *G. E. Fuller* urges the US to address the deeper sources of political violence in the Muslim world. Islam embraces an enormous variety of movements and positions, but its ideals are fundamental to the political debates in an evolving, liberal Islam which criticises and opposes the corrupt, incompetent, authoritarian regimes. The real issue is what Muslims want; they seek creativity, freedom and independence, meaning democracy and political human rights. They face great obstacles: - political oppression, radicalised mujahideen, past grievances, Islamic posturing and a sense of being under siege by the West. *Foreign Affairs, Mar-April 02.*

Peaceful Paths

Justice and Reconciliation: After the Violence, A. Rigby, Lynne Reinner, 01. A lucid investigation, with examples, of four alternative approaches: - amnesia, punitive trials, truth commissions, and reparations. Among the conclusions - all strata of society must be involved in the healing process.

Reshaping World Politics: NGOs, the Internet and Global Civil Society, C. Warkentin, Rowman/Littlefield, 01. Case studies from three broad sectors of NGOs, as they pursue their agendas for public good: - environmental, development and online resource networks.

Without a Gun: Australians Experience Monitoring Peace in Bougainville, eds M. Wehner, D. Denoon, Research School Pacific/Asian Studies, ANU, 01. Policemen, soldiers, public servants and academics reflect on this unusual experience of unarmed peace-keeping after bitter civil war. Besides Australians there were New Zealanders, ni-Vanuatu and Fijians.

21st Century ANZUS

The fiftieth anniversary of this once tripartite, now bilateral Treaty is widely explored, *Australian Journal of International Affairs, July, 01.* Besides the national official perspectives, and cultural/economic aspects, present/future-oriented concerns come from NE and SE Asia (the latter concerned by possible, regional, offensive power projections from an Australia as US deputy - sheriff). Eminent politician *M. Fraser* is wary of

Australian entanglement in current/future US strategic developments. *D. Ball* analyses the hardware and the strategic issues. Two younger Australian senators indicate that their generation takes a fresh view of the US/Australian relationship; friends, yes! allies? They want answers to questions. *K. Rudd* notes the lack of the NZ dimension, but considers that for this century new agendas, e.g. environmental, will need to be incorporated for an enduring strategic relationship.

INVITATION FOR AUTHORS

The *Journal of Futures Studies* (JFS) is published by the Center for Futures Studies, College of Education, Tamkang University, Tamsui, Taipei, Taiwan. The editors invite contributors in the areas of foresight, forecasting, long-range planning, visioning and other related areas. Contributions should be based on critical and/or empirical research in the field of Futures Studies. The journal attempts to attract contributors who can offer distinctive viewpoints on a broad range of future-oriented issues. Contributors also should comply with the following guidelines:

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- for more than 3 authors use "et al."
- with more than 1 reference to an author in the same year, distinguish them by the use of letters (a,b,c) with year of publication (1975a)
- earlier publication should precede later publication in brackets with parentheses (Tocqueville [1835] 1956)
- enclose a series of reference - in alphabetical order - in parentheses, separated by semicolons (e.g., Adler 1975; Adler & Simon 1979; Anderson, Chiricos & Waldo 1977; Bernstein et al. 1977; Chesney-Ling 1973a, 1973b).

References Following Endnotes List authors alphabetically, by

surname. Spell out first names of all authors and editors. For authors with more than one work cited, list works earliest to latest.. For articles, next give title of article (caps and lower case), name of journal, volume number, and pagination. For books and monographs, give title, followed by publisher.

Format of References Please spell out the first names of all authors and editors, unless they use only their initials or a first initial and a middle name in the source cited (e.g., Paul Radin, T.S. Eliot, and J. Owen Dorsey).

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