



future news

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Convergence and the zen of coconut

Convergence is the holy grail of the technocratic futurist: the idea that communication of all forms will soon be seamless, wireless, immediate and always delivered in harmonically perfect stereo. But what does true convergence look like? Not just technological convergence, but social and environmental convergence. Will I ever really be able to prop myself on a sandy beach beneath tropical palms swaying in a balmy breeze, and, unencumbered by wires, communicate with anyone, anywhere via my laptop?

You will if you visit Niue (pronounced new-way), a tiny coral speck east of Tonga in the central Pacific. Niue, with a population of less than 2,000, is the world's smallest independent self-governing nation. The 260 km² former dependency of New Zealand is now also the world's first WiFi¹ nation in a significant social and technological experiment that is aimed at overcoming the impositions of distance and separation.

The service, free to all islanders and tourists, is funded by a non-government, non-profit local internet user group.

The Niue public network is powered by wireless transmitters and solar panels mounted on coconut

¹WiFi is a form of radio technology used for wireless local area network communication. It is a very stable protocol which gets around the humidity, salt and weather problems that beggar copper telecommunications infrastructure in tropical regions [Unstrung – wireless economy webzine 6/2/03].

Consultant futurist Stephen Bright, who wrote this report for Future News, has neglected to mention that he described just such a use for tree-tops in a novel he wrote for Telstra some 12 years ago. About that time, he developed the use of fiction as a powerful tool for communicating to both managers and staff the complexity of managing organisations in a rapidly changing environment. Steve Bright can be contacted at catalyst@netconnect.com.au.

palms around the island. The boxlike, self-contained units include a small, rechargeable deep cycle battery. Operationally, the unit can deliver a range of communication services in different modes, including phone and internet.

In 1997, when the first internet services appeared on the island, about 10 subscribers were sending less than 100 emails a week. Today, several hundred users spend about 6000 hours a month online sending from 20,000 to 30,000 emails a week.

These emails come and go from Niue via a New Zealand-connected satellite.

The species of convergence being played out on Niue is based on bringing information, hard technology and environment together in a simple, yet so far unusual, way.

It's free, it works by using trees instead of man-made steel and concrete relay stations, it produces low greenhouse emissions and it delivers the internet at the speed of broadband – something most of us in Australia still cannot have – especially if we happen to be sitting on a tropical beach.

PLUS

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AND

THE FUTURE OF ...

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- 6 ... Democracy
- 7 ... Food

WHATEVER NEXT?

Telecommunications convergence will probably be the second arena (after military and security) in which we will see the major impact of nanotechnology. Smart dust, that is microscopic data gathering and broad-casting machine filaments, as described by Vernor Vinge, Neal Stephenson and other SF writers, is currently in beta-testing. Laser-based data transfer will be a useful alternative approach in the next 3-5 years, as will data absorbing and broadcasting hard-surface screen materials which can double as solar collector and data transmitter. All well-and-truly at a store near you within ten years.

(See also our p2 story on the Global Grid)

ENTER THE GLOBAL GRID

A new generation in global communication will begin on July 18, when scientists in Geneva launch a network of ten laboratories around the world that talk to each other through their computers.

Editorial:

JUST ONE WORLD

Each time I work on *Future News*, I'm fascinated by the way a disparate group of story ideas evolves into a coherent theme, almost of its own accord. Returning from a long journey, this time, I found a lot of catch-up reading to add to stories I picked up on the way. They ranged from high-tech soccer refereeing to the future of capitalism; from food safety to new ideas about democracy; from video games to global politics. Yet a single powerful theme underpins all of them - and reinforced my own observations from travelling: more than ever before we are recognising the day-to-day reality that we are just one world.

The spreading resistance to antibiotics - exacerbated by uncontrolled use in animal feed in the developing world - is a shared problem that requires shared responses. The rampant abuse of power in business and politics is no longer confined to "banana republics" but is also showing up in leading western democracies, including our own. The ugly face of predatory capitalism in the west is eliciting growing protest, and calls for alternative forms of capitalism, while the growth of work-related health problems in China may change our view of low-cost imports. Notwithstanding the divisive actions of some world leaders right now, at the granular level of society we are increasingly being brought face-to-face with the reality of our dynamic interdependence as a global complex adaptive system. Let's hope that its future includes new kinds of global governance -- or at least that our flawed and weakened global institutions can recover their strength in time to serve this new planetary community.

Jan Lee Martin

While this may sound pretty unexciting in today's world, in fact it launches the biggest development since the birth of the internet, say the scientists.

The new network is known as The Grid, and before long it will change everything we do -- from scientific research to business to fighting fires and arranging travel. By this time next year more than 6000 PCs are expected to be linked to the grid, giving them access to the shared power of large and small computers around the world.

The most significant difference between the grid and the internet is that users are not limited by the power of their own computers, but can access "more power than now exists in the Pentagon" as they access the grid.

"You just say I want this information and the [grid] is set up so that it goes out and collects that for you and makes it accessible," Roger Cashmore, director of research at CERN, the European particle physics laboratory, said in Switzerland.

Backbone of the grid will be computer centres filled with thousands of PCs linked together. Users will be able to use the programs, processing power or the storage they need as if it all existed on their own computer.

And it is seamless, he said. A user could be sitting tapping into a handheld computer on a train in England (or under a coconut palm on Nuie!), using an application on a computer in the United States and storing files in Thailand, and still have unlimited computer power.

The world wide web was unveiled at CERN in 1989. Universities began to use it in the next couple of years. By 1993 there were 130 servers on the web and a year later there were 500. Today there are more than 35 million. CERN anticipates that take-up of the new global grid will be quicker because governments and scientists are already on board.

too much communication

Millions of people in the US swamped the National "Do Not Call" registry when it opened on Friday June 27. The program lists the telephone numbers of people who do not want to be called by direct marketers. Registration is free and lasts five years. Infringements can cost marketers big fines.

More than 735,000 people called to register their numbers on the day the service was launched, and the program's website, www.donotcall.gov, was visited 60,000 times a minute. By Monday, more than 10 million people had registered.

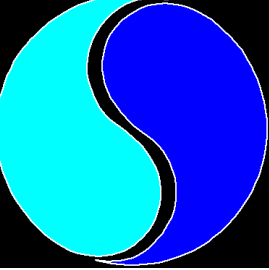
Surveys show that the telephone in the average American home can ring between 10 and 15 times a day with calls from marketers, usually between 5 and 10 pm.

No such refuge is available so far for Australian telephone subscribers, but active resistance is being developed by email networks, with a range of suggested retaliatory tactics.

aren't we clever?

The wonders of science never cease. An article in the Italian magazine *Focus* explains how the Global Positioning Satellite (GPS) system is being used to help soccer referees make their crucial decisions with pinpoint accuracy. Now being tested in Germany for the world soccer series in 2006, the system uses a nut-sized transmitter inside the soccer ball. Other transmitters, each about the size of a credit card, are inserted in the front of players' socks or shin-guards. Both transmit to an antenna on the stand, which in turn transmits to the GPS satellite and a computer. The computer verifies the position of player and/or ball and returns its judgement to the referee.

The journal also reports new technology that takes self-service in supermarkets one stage further by replacing the cashier. Already in use in two supermarkets in Italy, the new automatic cashier allows customers to scan their own shopping by holding the bar code against a scanner, and then inserting a credit card to make payment. (They'll probably say it's to improve customer service!)



GLOCALISING: west to east, global to local

Commentators on global economic growth are anticipating a shift in momentum from multinational companies to more local economies, especially in Asia. While this

may be a surprising view, it is one that is supported by some compelling logic -- and it happens to fit the "glocalisation" model discussed by the late Robert Theobald and other futurists. In this model, efficient local economic hubs are networked into a global grid. Greater efficiencies in knowledge-sharing, resource use and waste avoidance work toward regional economic self-sufficiency as well as improved sustainability worldwide.

In a fresh look at the dynamics of global economics Marc Faber, an Asia-based financial expert, argues that the giant economic powers have had their moment in the spotlight, and it is now time for the developing world and their companies to have theirs. This is not about fairness or karma, he says, but stark economic reality.

"The environment that was good for multinational companies in the 1990s will shift to more local economies," he told Bloomberg News Service. "You don't have the same problems or overvaluation issues in emerging markets in Asia that you have in the biggest economies."

Even after more than a year of sluggish growth in the US, Japan and Europe, US stocks carry much higher price-to-earnings ratios than those in Asia. And while many Asian equity markets are up strongly this year (Thailand 24%, Indonesia 20%, Singapore 11%) Faber claims valuations in Asia are markedly cheaper than those found in the US or Europe. At the same time, the biggest economies are spurring growth by printing currency.

Faber thinks investors will realise, over time, that Asia's smaller stocks have more upside than bigger, more liquid ones. Bloomberg's William Pesek Jr agrees that, while this is not the conventional wisdom, Faber may be on to something.

"The bottom line is that easy money may spur global growth in the short run, but it will merely paper

over the cracks that caused the slowdown to begin with," he said. "The imbalances will resurface again -- perhaps sooner rather than later."

Another key factor is China's transition from socialism to capitalism. If Beijing manages this reasonably well, China will morph into the biggest customer for regional exporters. It is already buying more and more exports from Asia, and smaller Asian economies are likely to benefit.

"China already is a ferocious consumer of global commodities and that will only intensify as Chinese households grow wealthier. The same could be true elsewhere," said Pesek. "The faster integration of India, China and other large-population, low-cost Asian countries has proved deflationary. But in the years ahead, these massive populations will become customers, perhaps primarily of Asian companies. The West's demographic trends are quite different."

Alan Carroll, executive chairman of the Pacific Rim Forum, also points out that since 2000, Asia-Pacific has again become the fastest-growing region in the world. And he notes that China already provides more than half of Asia's reinvigorated and fast-growing activity between trade partners inside the region. "It is ironic to realise that almost all the underlying problems supposedly endemic to developing Asia have now shown up in similar forms in the US," he wrote in BRW (26 06 03). "The names of Enron, WorldCom and Tyco Industries are sufficient to make the point. Similar problems have also appeared more recently in Europe."

E&Y undermining reform?

Consumer groups in the US claim that accounting firm Ernst and Young is undermining reforms designed to make the audit more independent, by advising companies on a loophole that gets around the auditor independence provisions in the Sarbanes-Oxley Act. For more information, see http://www.consumerfed.org/E&Yletter_release.html

West outsources work - and health problems

As the momentum of global growth shifts east, Chinese workers are paying a high price for the health of their economic dragon. They are victims of a surge in fatal respiratory, circulatory, neurological and digestive-tract diseases like the ones that American and European workers suffered at the dawn of the industrial age more than 100 years ago. Last year 386,645 Chinese workers died of occupational illnesses, according to ILO statistics. However this may understate the problem in China's east coast industrial centres, where tens of millions of migrant workers produce the bulk of China's exports for much less than a dollar an hour without employment contracts, health care plans or union representation. And when industrial accidents are added, the picture blackens still further. Last week's explosion in a Chinese coal mine, for example, underscored the high number of deaths that occur each year in this industry alone.

Rocky transition for banks

China's four biggest state-owned banks are struggling with the legacy of years of forced lending to unprofitable state-owned enterprises on their way to privatisation, with an estimated 24.1 per cent of loans "nonperforming". Although the government bailed out these four banks in 1998, another bailout may be needed as they get ready to present their books during initial public offerings in the next three years.

Shifting patterns in global population

Population pyramids...

Today there are 30 pensioners in the developed world for every 100 workers. By 2040, there will be 70. Most developed countries are experiencing net population losses. Falling birthrates are not being balanced by net migration. These societies are ageing, with better health and extended life for the elderly while fewer children are being born.

This creates a population profile that looks like an upside-down pyramid. Policy planners are concerned about the economic consequences, with the costs of social services like health and pensions increasing while a diminishing number of people are entering the workforce to pay the taxes that fund these services.



Developing countries, on the other hand, are seeing rapid population growth with high fertility rates. There the average age is dropping, with growing numbers of young people to be fed, clothed, educated and kept in good health in countries whose social infrastructure is less well established than in the developed world.

Running against the pattern is the United States, with a population growth rate faster than any other developed country. Between 1990 and 2000, nearly 33 million people were added to the US population, the greatest ten-year increase ever, according to a report by Mary M. Kent and Mark Mather in the *Population Bulletin* of December 2002 (www.prb.org).

To see an animated history of China's population pyramid -- and to watch the clock ticking before your eyes with new births -- visit <http://www.cpirc.org.cn/eindex.htm>.

At 288 million in 2002 the US is third largest following China (1.3 bn) and India. India, which reached 1 bn in August 1999, is growing at the rate of 18m a year, while China, with its one-child policy, has recorded about 8.3 million births so far this year. By 2050 US population is projected to grow by 46 per cent to 420 million. Natural increase accounts for 60 per cent of this growth, with net migration accounting for the remainder.

Russia (145m) and Japan (127m), who are next biggest in size, both have falling population totals and expect to have about 20 per cent less people by 2050. Italy, Germany, Poland and Spain also expect to lose population over that period. Other countries expecting to increase their populations include Canada (29.8 per cent), Australia (24.6 per cent), the UK (6.8%) and France (1.8%).

Australia's projected population figure at around midday on 7 July was 19,890,986. This ABS projection is based on estimated resident population at 31 December 2002 with an assumed net growth since then of:

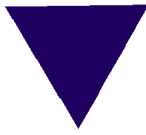


- one birth every 2 minutes and 5 seconds
- one death every 3 minutes and 46 seconds
- a net gain of one international migrant every 5

- minutes and 50 seconds, leading to
- an overall total population increase of one person every 2 minutes and 35 seconds.

...and value shifts

Will the apparent instability of our population pyramid be reflected in social instability? Generation wars? Or will an ageing population create a wiser and more socially mature society? Consistent indicators of value shifts in western populations suggest growing support for the latter, including a strong emphasis on social justice and environmental sustainability. Flagged by author Marilyn Ferguson as early as the 1970s (The Aquarian Conspiracy) this trend has been confirmed more recently by the work of US researchers Ray and Anderson and other social researchers. Now even the marketers are talking about it. What kind of impact might such value shifts have on the nature of our economic environment? Is it possible that wealth production (to generate the taxes that support social services) could come from something other than the rampant growth of materialism? The social research also indicates that consumerism is itself losing momentum, in the developed world, at least. If materialist, monetarist and consumer values are weakening, what will replace them, and how will that play out in the economic arena?



AGED MAY BE ASKED TO CARRY MORE COSTS

Australian government analysts are proposing that individuals carry more of the cost burden of aged care, and that private insurance be extended to cover nursing home costs. Only about six per cent of those aged 65 and over now live in nursing homes or similar facilities, rising to about 26 per cent of those aged over 85. A report released by the Productivity Commission in July said that increases in demand were likely to be manageable over the next 20 years. However it said that "anticipated increases in costs, compounded by ageing, are likely to present more significant funding challenges under current policy settings in the third and fourth decades of this century".

The future of capitalism

When novelist Kate Jennings urged Australians to adopt progressive capitalism, as opposed to the aggressive, take-no-prisoners variety, she was adding her voice to a growing chorus (see *Future News* stories since 1999).

"I like the idea of stakeholder capitalism, where all constituents -- employees, vendors, pensioners, the community, as well as executive management and shareholders -- have a say, a real say," Jennings told the Sydney Institute. "We've seen stakeholder capitalism run into trouble in Japan and Germany but that doesn't disqualify it from being adapted in some form to Australian conditions and to suit our national psychology...."

"The time could not be more propitious, with the faults in the US system becoming obvious, for hard thinking about economic and financial structures, or for the thinking that has been done to make its way from theory to practice -- and make its way quickly, not at a snail's pace as is usually the case -- all of which is possible in a country the size of Australia."

Jennings was critical of the way Australian business people use American business jargon.

"We don't have to follow American business models as if they were handed down on a tablet. Our corporations don't have to be clones of American ones. The US might speak loudly and carry a big stick, but it doesn't have all the power. If you look at world foreign currency reserves that are held in US dollars, a huge chunk is held by East Asian governments. That's leverage, a big negotiating stick."

American capitalism is also coming under fire at home, not least from the growing number of activists specifically targeting corporate and political scandals (www.moveon.org, <http://www.citizenworks.org>). Now Harvard business professor Shoshana Zuboff, (*"In the Age of the Smart Machine"*) and her ex-Volvo CEO husband James

Maxmin are arguing that capitalism as we know it is failing us as individuals and that there is a need for "distributed capitalism" to provide deep support for individuals.

"Society has changed," says Ms Zuboff. "We are way ahead of the corporations we depend upon for consumption and employment. Our frustration at dealing with shoddy customer service and our distrust of institutions are proof of this breach."

Zuboff and Maxmin label the outmoded form of capitalism "managerial capitalism", a model with roots in the early 20th century, with men like Henry Ford and the principles of mass production. They foresee a new form of capitalism which embraces the needs of a more educated consumer.

"People have opinions, they want choices - they are not like their parents and grandparents who had certain roles to play," says Ms Zuboff. Under this model, car manufacturers, banks, supermarkets and other companies form federated networks, or alliances. Pooled resources and a single infrastructure within the federation - made possible by digital technology (see p2 story on The Grid) allow the companies to offer custom-built products and services. In their new book, *The Support Economy: Why Corporations Are Failing Individuals and the Next Episode of Capitalism*, Zuboff & Marmin describe the way a hypothetical family uses its federation to buy a socially responsible car, made with recyclable material and with personalised accessories such as a GPS system. The car is delivered to their door, complete with insurance and tax.

While some British professors argue that Zuboff and Maxmin are over-generalising, and that their critique applies more to the American context than the European one, other commentators enthusiastically endorse their reasoning and their "truly extraordinary" leaps in thinking (see www.amazon.com).

VERY PRIVATE JAILS

On top of continuing controversy about the increased privatisation of "corrective services" comes news of a further step -- toward the privatisation of law.

Big stores in the US now have their own jails, where suspected shoplifters, including minors, may be body-searched, photographed and handcuffed by security staff, reports *The New York Times*. The paper says that private security operations in retail, like those in gated communities, amusement parks and sports stadiums, have grown in force over the last three decades, yet remain largely shrouded from public scrutiny.

Critics of the growing habit of private policing argue that accused shoplifters are often deprived of some of the basic assurances of public law enforcement proceedings, including the right to legal representation before questioning; rigorous safeguards against coercion, particularly in the case of juveniles; and the confidence that the officers in charge are adequately trained and meaningfully monitored.

Retailers argue that public police are too burdened to chase small-time thieves. In-house arrangements also save retailers legal costs.

At Macy's Manhattan store an elaborate security system includes 100 security officers, four German shepherd dogs, hundreds of cameras and a closed-circuit television centre that looks like a spaceship control room. Here, several people a day are taken to "a cool, halogen-lighted room containing two chain-link holding cells" for interrogation.

Last year, about \$100 million was lost to thieves in the 105 stores that constitute Macy's East division and more than 12,000 people moved through their detention rooms. Almost all of them sign confessions and are asked to pay private penalties -- five times the amount of whatever they stole. Only 56 per cent of them were turned over to the police, although the company says that more than 95 per cent confess to shoplifting and quite a few pay the in-store penalty before leaving.

The future of democracy

GAIAN DEMOCRACIES?

The main purpose of western democracies is to satisfy the needs of a global debt-money system through the pursuit of economic growth. UK authors Roy Madron and John Jopling, both with strong backgrounds in working for change, make this claim in their new book *Gaian Democracies: Redefining Globalisation & People-Power*.

They describe the operational and ideological components of the 'Global Monetocracy', which they see as a hugely powerful system imposing social injustice, economic incompetence and ecological damage on the whole of the human family.

Instead, the Gaian Democracy envisioned by Madron and Jopling would be a very different kind of globalisation, with very different aims.

The concepts, insights and tools of this model have already been used to reconfigure many organisations and communities in very tough situations, they say. And they provide the means by which states, communities and people from all walks of life could generate the collective power to overcome the Global Monetocracy, "in order to co-create the just and sustainable societies the human family so desperately needs."

More information: www.schumacher.org.uk

Dissidents are not alone: Ellsberg

US citizens can avert the "real danger" of a police state by using the freedoms they still have, Daniel Ellsberg told members of the MoveOn network in a recent "grassroots interview" on their website, covering recent world events.

"First, let me say that the messages accompanying the questions below, and many of the others, are eloquent, impassioned, and very well-informed despite perplexities that I fully share. I'm grateful to have had the opportunity to read them..... these letters remind me that although those of us who actively oppose this war of aggression and occupation -- and the ominous abridgements of the Bill of Rights that are accompanying it -- are only a small proportion of the American public, we are America, too, and there are a lot of us.

"Are we 'only' 5%, 10%, of the population? Isn't that five to ten million adults? One per cent? A million. More than that were in demonstrations, in this country alone: as part of a far larger global movement, the largest worldwide protest ever seen before or during any war! That's enough activists to

move and change any country in the world, even (with courage) a police state. And we're far from that, yet. We can avert that real danger if we continue using to the fullest all the freedoms we still have."

Ellsberg responded directly to five questions written and ranked by members:

1. Should a special prosecutor investigate charges of racketeering by members of the Bush administration who personally profited from the war on Iraq?
2. Why can't Bush and Cheney be impeached?
3. What do we, as a nation, have to do to stop this type of abuse of power, corruption, conflict of interest, lying, cheating, powermongering and fraudulent behavior?
4. How can the people take a stance against unjust wars when the media and Congress play a complicit role in either keeping the truth from the public or refusing to question supposed "evidence" without demanding proof?
5. How can we best convince the public that they're being deceived?

Ellsberg's responses are at www.moveon.org

A COMPANY OF CITIZENS

Brook Manville and Josiah Ober give new meaning to the adage, "Everything old is new again" in their current collaboration, *A Company of Citizens*, says the Harvard Business School. The authors, both classics scholars, contend that the ancient Athenian model of democracy is an ideal structure for organising people in our current Knowledge Age. The Athenian approach, which stresses self-governing citizenship, individual excellence, and community focus, could not be more relevant for engaging, aligning, and motivating workers in the current global economy. The authors successfully blend the appropriate amount of historical development and political theory with current organisational practice to illustrate that "passionate citizenship" might become the organisational paradigm of the future.

BBC BUILDS PLATFORM FOR CIVIC ENGAGEMENT

The Deliberative Democracy network (www.deliberative-democracy.net) reports that the BBC plans to provide citizens in the UK with tools to investigate issues, organise and engage in the political process through a new website called iCan. A member of the network, quoting *Wired* magazine's recent article on iCan, asks if a US media company could maintain its credibility if it declared plans to "help disenfranchised citizens engage in public life."

10 big global security issues

The shrinking of Russia; the Hindu-Muslim divide; AIDS and African armies; the Tehran-New Delhi axis; the possibility of nuclear attacks against satellites; defence industry goliaths; the great wall of Israel; America's shortage of aircraft carriers; the Indus water fight; and urban warfare are ten major global security issues covered by a variety of writers in a special feature carried by the *Australian Financial Review* (04 07 03).

...and the future of food...

Growing concern about the safety of food is inviting new scrutiny from authorities in the US and Europe.

The European Commission's alert system -- which requires all participating countries to recall or withdraw tainted food from their markets -- reported 97 alerts in 1999; 133 in 2000; 302 in 2001 and 434 in 2002. Most active member country for issuing alerts last year was Germany, with 155 compared with the Netherlands (44), Britain (38), France (35) and Italy (30).

The Commission has set up a Food Safety Authority in Brussels and has enacted dozens of new laws. It is also working on stricter labelling, giving consumers nutritional information and facts about additives, as well as information allowing food

inspectors to trace foodstuffs back to their source when a problem arises. And it says there is still a lot to be done.

Reports of salmonella in chicken in both British and American supermarkets have shown a high incidence of contamination, with one recent study identifying salmonella in one-fifth of the samples checked. Worse, it found that 85 per cent of those pathogens were resistant to at least one kind of antibiotic.

The Centre for Disease Control in Atlanta estimates that food-related illnesses kill 5,000 Americans each year. It says 76 million Americans a year get some form of food poisoning, 325,000 of them badly enough to need hospital treatment.

Biggest food category to cause problems was fish and shellfish (26%), next was meat and meat products (23%), and fruit, vegetables and nuts (19%).

But it's not just the food: a recent survey of restaurants and cafes in Britain recently found that 9 out of 10 dishcloths were contaminated with potentially harmful microbes.

No ID for cloned steaks

Consumers in the US will probably not know when they buy hamburgers, bacon and milk products from cloned animals, which could be available by next year, says a Reuters report. The US Food and Drug Administration has said it will not require labels on cloned animal products if they were considered as safe as traditional food. "If we find no problems with the products we have no legal basis to require labels or have companies differentiate between them," a spokesman told an industry conference. The agency is expected to release its risk assessment concerning the new technology within a few months. That report will be the foundation for new FDA guidelines, which could allow these products to be available by next year.

MEAT TO PLEASE YOU

McDonald's will soon require its meat suppliers to stop using antibiotics as growth promoters and to significantly reduce antibiotic use as preventive agents in healthy animals.

"Make no mistake, when implemented this is likely to have large, long-term international health benefits," said Peter Collignon, director of the Infectious Diseases Unit and Microbiology Department at the Canberra Hospital.

"It will decrease what is a huge and ever increasing reservoir of antibiotic resistant bacteria, including "super bugs" such as vancomycin resistant enterococcus (VRE). In Europe, VRE resulted from the use of an antibiotic called avoparcin, which was eventually banned when the problem finally became clear to politicians (after years of misinformation by many in the pharmaceutical industry).

Dr Collignon goes on to describe the alarming consequences of antibiotic overuse in Australia (for example, a *Choice* magazine survey last year showed that in Brisbane and Sydney, 11 to 14 per cent of supermarket chickens had VRE) and notes that there are still 12 antibiotics that can be used as growth promoters here.

"More than 500,000 kilograms of antibiotics are used each year in animals in Australia, mostly added to feed," he wrote in an article for the *Sydney Morning Herald* (23 06 03). While controls are being introduced -- too slowly -- in the west, the problem is much worse in developing countries where powerful antibiotics are used routinely in feed.

And to make the whole issue still more grotesque, new evidence shows that following the widespread misuse of antibiotics, they probably no longer work anyway -- a fact that has already been acknowledged by the regulator in Australia, the Australian Pesticides and Veterinary Medicines Authority in its review of one product.

Dr Collignon suggests that Australia could have a competitive advantage if we followed the leadership role on this issue from McDonald's.

"If other big meat buyers (e.g., Coles and Woolworths) adopt the same standards we will quickly move forward," he concluded.

GOOD NEWS OR BAD? YES!

Aggressive, interactive video games can sharply improve visual attention skills.

Experienced players of games that require them to strike first to kill or maim enemies that suddenly appear on screen are 30 to 50 per cent better than non-players at taking in everything that happens around them, according to the respected journal, *Nature*. They identify objects in their peripheral vision, perceiving numerous objects without having to count them, switch attention rapidly and track many items at once.

The study also made it clear that it wasn't just a matter of speed. These "first-person-action" games increase the brain's capacity to spread attention over a wide range of events. Other types of action games, including those that focus on strategy or role playing, do not produce the same effect. However the researchers emphasised that the improved visual attention skills did not translate to improvement in reading, writing or mathematics. Nor is it clear that they lead to higher IQ scores, although visual attention and reaction time are important components of many tests.

The singularity is coming. Or not.

Technological progress and the amount of complexity it produces may be approaching a "singularity", when old models of reality will need to be thrown out and new rules invented, says environment writer John James Bell. Physicist and strategic analyst Theodore Modis, disagrees. He says that although technology and complexity have increased at an exponential rate, they may soon slow down naturally, just as natural competition slows down the proliferation of rabbits in a fenced meadow.

The Futurist

May-June 2003

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Is the polypill a good idea?

Take five familiar drugs and one vitamin. Mix them into a single pill and give it to everyone over 55. Watch deaths from heart attacks and strokes drop by an amazing 80%. Sounds like Utopia – but is it, really, a good idea?

New Scientist

5 July 2003

1136

US seen as a danger to world peace: BBC survey

A BBC survey of public opinion about America paints a picture of an arrogant superpower with an enviable economy which is a greater danger to world peace than North Korea. 58% of those polled said they had an unfavourable view of George W. Bush; 56% said the US was wrong to attack Iraq. Only 25 per cent, excluding Americans, said US military might was making the world a safer place. A majority in every country, including the US, said America is arrogant. The poll interviewed 11,000 people in Australia, Brazil, Britain, Canada, France, Indonesia, Israel, Jordan, South Korea, Russia and the US.

Khaleej Times, Dubai

19 June 2003

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Vote of trust in bin Laden

A global survey by the Pew Foundation reported a strong vote of confidence in Osama bin Laden among Muslims. The poll asked respondents how much confidence they had in each of 10 political leaders "to do the right thing regarding world affairs". It found: Americans have great confidence in George W. Bush but more in the UK's Tony Blair. The French had more confidence in the German Chancellor than their own president, Jacques Chirac, while the Germans trust Chirac, Russian President Putin and UN secretary-general Kofi Annan more than Chancellor Schroeder. Osama bin Laden was chosen as one of the three men most trusted by the people of Indonesia, Jordan, Morocco, Pakistan and the Palestinian Authority. Overall, Kofi Annan and Jacques Chirac received the highest "trust" ratings.

International Herald Tribune

4 June 2003

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25 key trends

Thanks to member Rodney Gray for this list of "25 trends that will change the way you do business". It was published in *Workforce* June 2003 (pp 43-56) and is available at <http://www.workforce.com/section/09/feature/23/45/53/index.html>

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Signals in the noise

MIND OVER MATTERS

Cognitive Behavioural Therapy debated

While many psychologists and psychiatrists agree that CBT can make a big difference to patients with depression and anxiety, others argue that the treatment is over-rated. Proponents say that as well as its curative effects on a range of disorders including anorexia, chronic fatigue and even perfectionism, CBT can be used to improve personal performance, overcoming low self-esteem, shyness, guilt and sadness. However an article in the May issue of the *American Journal of Psychiatry* concludes that the process "has probably been oversold".

Sydney Morning Herald

03 07 03

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Counselling can add to trauma

A comprehensive review of "single-session debriefings" offered to victims straight after an incident concludes that the counselling routinely offered to people seldom protects them from post-traumatic stress. And it can even delay recovery. The British research team says "we should question the whole notion of debriefing".

Sensitivity to pain all in the mind

Brain scans of people exposed to identical sources of pain have provided the first proof that some people find pain harder to endure than others. Subjective reports from volunteers were followed by MRI brain scans which matched their reported experiences and revealed stark differences.

New ideas on sleep

A new generation of sleep function theories have emerged that relegate REM sleep to the background and say that non-REM is what sleep is all about. In these theories, the function of REM sleep is to give the brain a break from, or perhaps even test and modify, the really crucial activity that is going on during non-REM sleep.

New Scientist

28 June 2003

1141