MASSEY

The magazine for alumni and friends of Massey University • Issue 18 • April 2005

profiling an epidemic

Wild Times Film maker Alison Ballance

Among the Believers Changes in churches

Massey University
www.massey.ac.nz

Seeing our new intake of first-year students for 2005 made me pause for thought. Here they were, average age 19, the generation of 1986. How different their world is from mine at that age. When I was an undergraduate student the Vietnam War was raging, televisions were black and white, and cell phones were presumably phones in jails. Shops shut on weekends. John, Paul, George and Ringo were world famous in Liverpool. Gambling was restricted to on-course betting, and as for drugs, pubs still closed at six o'clock, smoking was glamorous and terribly adult, and very occasionally a whiff of cannabis might drift through the air at student parties.

Today's 19-year-olds inhabit a world that embraces house and hip hop music, raves and dance parties. Video games, music downloads and text messaging are the stuff of their daily lives. For them, the legal drinking age has been 18 for years. They have grown up with a marijuana advocate in Parliament. Then too, there is a new generation of illicit drugs in circulation. Two of these are methamphetamine and ecstasy, both members of the amphetamine-type stimulant (ATS) family of drugs. In 2001 one in ten New Zealanders aged 18 to 29 had used an ATS drug in the last year.

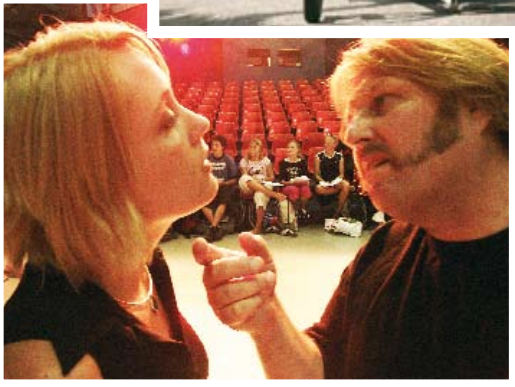
A number of reasons may be put forward for the arrival of ATS drugs on the New Zealand scene. Some have to do with the ease of manufacture and the profits to be had, others with the fit between the drugs and the times. In the 1960s the mantra of the drug counterculture was 'turn on, tune in, drop out'. Today the drugs of choice are 'instrumental': drugs that energise, that help the user work longer or party harder. In this sense some might see energy drinks, legal party pills and methamphetamine as occupying the same spectrum.

Different times, different drugs of choice. Ought we to be worried? Yes, I think so, and particularly about methamphetamine. Media coverage has alerted us to high-profile cases of violence in which use of 'P' ('pure' methamphetamine) has been implicated, but I draw my conviction from a more authoritative source, the report compiled by Dr Chris Wilkins from which that earlier statistic is drawn

In his pursuit of objective measures of the spread of methamphetamine and its effects on New Zealand society, Dr Wilkins has analysed the results of the 2001 National Drug Survey, ventured into police cells to question arrestees and spoken to some of Auckland's frequent methamphetamine users. Something of what he discovered you will find in this magazine.

Dr Wilkins is one of the staff of the Social Health Outcomes Research and Evaluation (SHORE) Centre, which is led by Professor Sally Casswell and based in central Auckland. The Centre employs research staff, statisticians, survey interviewers and supervisors. It commands expertise in fields that include alcohol and other drugs, Māori health research, the effects of place on health, identity, youth mental health, housing, and nutrition and body image. Dr Wilkins's work with ATS drugs is proof of how useful the research carried out by the SHORE Centre can be – characterising the phenomenon of an epidemic, looking at its causes and effects, suggesting possible remedies and gathering the information that will tell us when, as now, we have cause for alarm.

Professor Judith Kinnear
Vice-Chancellor



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The ever-so-slightly different *MASSEY*

Have you ever pondered the reason why A4 paper has the dimensions it has? In the ISO paper size system, the height-to-width ratio of all pages is the square root of two – about 1.4142 – to one. Aside from being oddly pleasing for the mathematically inclined, this means that if you were to cut this A4 magazine in half horizontally – we'd prefer that you didn't – you would end up with two rectangles that when rotated through 90 degrees would again have the same ratio. The magic ratio is a boon when you are photocopying to scale or when, as we are, you want to make the best use of paper. By going A4 – and with the help of our printers – we can make some savings which can be fed back into other aspects of the magazine. This time there are four more pages.

If the format has become more standard, I hope you will find the content anything but. With drugs, religion, classical music and overseas adventures, this issue has a varied mix.

Your thoughts about the magazine are welcomed.

Malcolm Wood, Editor
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Among the believers

Associate Professor Peter Lineham writes

THOUGHTS

Changes in churches

In the space of less than a year religion has gone from being at the bottom of the social agenda to the top! It has been an astonishing rise. And all because of Brian Tamaki and the 'Enough is Enough' march, it seems.

We can give too much credit to Tamaki for this. The media loves to hate Tamaki, just because he is so black and white. It makes a colourful story! But ever since the Twin Towers, religion has been the centre of a great deal of controversy, and the recent United States election has confirmed this.

Mind you, the Destiny story is an interesting one, and I'm surprised that it took the media so long to discover it.

The most obvious aspect of the Destiny phenomenon is its place in the colourful and highly politicised world of fundamentalist Pentecostalism. Pentecostals are not a new group in New Zealand. Pentecostalism has been here since the 1920s, although from early on it was divided into three sectarian denominations. Only in the 1960s did a modern 'Charismatic' form emerge. As the mainstream Protestant churches declined, it became a form of Christianity with a powerful appeal to contemporary people, who wanted a faith which fitted modern lives. It is highly individualised and commodified, yet it is sufficiently counter-cultural to appeal to those who want to be Christians in a very secular society. It has more recently become slicker and more internationalised, using a formula of handsome pastor and glamorous pastor's wife controlling an enterprise, often based in a warehouse, and attracting younger people through loud music and simple exhortation. The Destiny churches are a split from the old Apostolic denomination, which emerged after a power vacuum in their old denomination. Splits and new movements are very common in the Protestant world.

But Destiny is in some ways very different from other Pentecostal churches. The latest Destiny stories have focused on its growing links with Ratana, its presence at Waitangi, its Legacy march down Queen Street and the title of bishop which its founder and leader, Brian Tamaki has taken. The explanation for the title of Bishop is relatively clear. Brian Tamaki has in recent years been deeply influenced by the African American religious tradition. He has spoken at the churches of the Baptist mega church leader, Eddie Long, and Eddie Long calls himself a bishop. Of course Tamaki has made himself ridiculous in the eyes of respectable middle class people who know that there is a little history behind such titles, but I don't suppose this will worry him or his followers.

The development of Destiny over the past few months has focused on political issues, with growing links with the Ratana Church cemented at Waitangi. We must recall that it is Māori at heart, although not tribal Māori. It trains people in Kapa haka (and performed them all too vehemently at Waitangi); it captures the hearts of many Māori women, perhaps appealing particularly to detribalised Māori. And it has a political agenda which places treaty issues high on the agenda.

It reminds me of the beginnings of Ratana in the 1920s. In those early days Ratana was a faith healing movement, and was roundly criticised for this by Pakeha medical practitioners. Its doctrinal views so upset the Church of England that all Ratana followers were excommunicated in 1926. Ratana reverenced their leader, and their appeal was principally to detribalised Māori (the Morehu as they were called).

Why is the Destiny movement venturing into politics? One factor is its Fundamentalism. Pentecostals are in one sense very anti-traditional, but part of their appeal is a widespread fear of trends in modern life that undercut the family and traditional moral values. Since the early 1980s, when Pentecostals protested the adoption of the United Nations Convention for the Elimination of Discrimination against Women, Pentecostals have expressed their noisy brash conviction that God has appointed them to save New Zealand, and they need to identify and attack their enemies. For Destiny the additional element is the way in which politics and religion have always walked hand in hand in Māoridom. New religious movements are common in the Māori world, and they have always gone into politics, because their aim is to rescue the people as a whole.

So what does the future hold for this kind of religion? The Pentecostal strand is becoming more common in religion throughout western society. In some ways it is the form of Christianity which

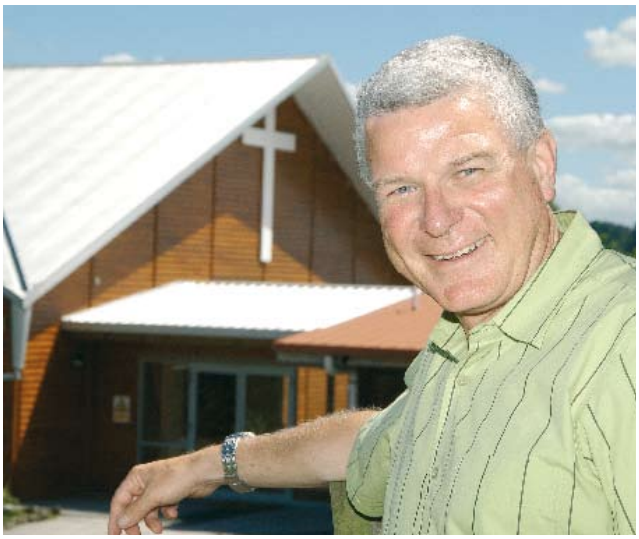
is most truly at home in post-modern society. The phenomenon is very apparent in Australia, where the Hillsong Church achieved some political influence. In some respects Australia is more conservative and less secular than New Zealand. The overall religious and social scene is generally more conservative than New Zealand, and politicians there are more inclined to use conservative rhetoric. John Howard has strongly opposed gay marriage and members of his cabinet have been very vocal on the Christian base for Australian society. But we should not assume that the future is secular. Conservatism is perfectly consistent with a very modern society. Within the United States there are strong conservative electoral and social forces evident in the Bush administration. Everywhere New Age spiritual movements are flourishing.

And I don't think Fundamentalism will go away in the new age. Maybe in very secular societies the alliance of fundamentalism and politics (whether Hindu, Islamic or Christian) is a response to its alienation. There clearly is some appeal in this religious style, with its blend of conservative morals, Black Power intimidation tactics and Pentecostal fervour.

The history of religion in New Zealand has been fairly anaemic in general, but there have been crises in times of national difficulty like World War I and the Depression Era. At such times extremist religions have gained ground over the normal New Zealand style of religion. For example the largest religious group in New Zealand, the Anglican Church seems effete, weak, nice but lacking influence at such times. Anglicanism with its establishment aura is not a particularly transformative or counter-cultural force.

And now we have a growing liberal political tradition which is intensely secular and liberal. The noisy sectarian minority is bound to grow louder.

Religion is in fact a perfect symbol of all the complex social and cultural issues of our society. Let me take you for a drive down Chapel Road in Flatbush in the South Eastern suburbs of Auckland. Here you will find a dramatic illustration of the profound changes in New Zealand religion, and how they reflect the changes in New Zealand society. Flatbush is a very new suburb, although Chapel Road has been there since the early days, and is named after the little Methodist Chapel half way down the road, which was erected in the 1880s



as part of a circuit which also included four other churches in Papakura, Woodside and Mangere. They were farming valleys and preachers would retire to this circuit for a quiet end to their preaching days.

How different it is today! Flatbush has suddenly sprung up in the last five years as an overflow from the huge growth of new housing in the Howick area, primarily accommodating Asian people. The little chapel still stands, now a joint Anglican-Methodist church half way down the road that takes its name from it, but at the other end is the exotic Botany Downs shopping centre, a Truman-Show like phenomenon, looking like it has dropped as a unit from the sky, a whole plastic town centre modelled on traditional towns. The central focus of Chapel Road is the enormous, almost completed Buddhist Temple. On the other side of the road is a new co-educational Catholic School, reflecting a huge boom in Catholic education and in baptisms into the Catholic Church by Asians concerned at the violent tone of New Zealand. Other sites down the road have been purchased by Baptist churches, and doubtless the fine facilities of the new secular high school are rented out to a Pentecostal Church group on Sundays. It is boom time in Flat Bush and religion is booming there as well, but not in the little chapel. There is a plan for Anglicans and Methodists to build a big new church, but they are struggling to find the money. Meanwhile the Presbyterians have made a separate move. Their old Pakuranga congregation, famous for its evangelical and conservative tradition, has rebuilt just around the corner from Chapel Street and have attracted a large congregation including many Asian people with a formula that has something of the Pentecostal flavour mixed in.

Let there be no doubt, there are some deep tensions running through New Zealand society, troubles underneath the optimism, and fundamentally they are cultural differences. Culture and religion walk hand in hand. The issues facing us today involve a deep debate over values. We should never be confident that we know which side will win.

Massey ranked in world top 200

Massey was one of only three New Zealand universities to achieve a place in the recently-released *Times Higher Education Supplement*'s ranking of the world's top 200 universities. Massey was placed 108th, Auckland at 67th and Otago at 114th place.

The ranking was based on a 'whole of institution' approach incorporating:

- peer review (1300 academics in 88 countries were asked to name top universities in areas they felt able to make an informed judgement)
- research impact in terms of citations per faculty member
- faculty to student ratios to indicate a commitment to teaching
- numbers of international students and international academic staff to determine international reputation.

The greatest weight – 50 percent – is given to peer review, which the editors describe as the most trusted method for university comparisons.

A further 20 percent of the score is accounted for by research impact, measured by citations, with the editors noting that citations perform less well for some subjects than for others.

Also at 20 percent is the measure of faculty-to-student ratios. The editors noted: "While institutional practices and international variations in employment law make staff numbers less than completely comparable across the world, this indicator is a simple and robust one that captures a university's commitment to teaching."

The other two measures, of international student numbers and international academic staff, are each weighted at five percent.

Harvard was the highest ranked university, followed by The University of California, Berkeley and the Massachusetts Institute of Technology. Australian universities scoring high rankings were the Australian National University (16), Melbourne University (22) and Monash University (33).

Rare kiwi recovering at Wildlife Ward

A North Island brown kiwi found in poor condition in a paddock near Wanganui by a hunter found near-instant celebrity when he was brought in to the University's specialist Wildlife Ward in Palmerston North. A partial albino, the kiwi has a mass of white feathers around his head, spreading to a scattering on his chest and back. The rarely-seen genetic variation quickly led to him being nicknamed Rod, after that other spiky-blonde, Rod Stewart.

When he was admitted to the ward, Rod was dehydrated, lice infested, covered in scars and had shrunken eyes. Although an attempt to remove a cataract from his left eye had to be abandoned as too difficult, Rod quickly regained his health on a diet of worms supplemented with a special captive menu of mincemeat, vegetables and vitamins and minerals. Rod is now installed in the Otorohanga wildlife park and kiwi house, where it is hoped he will breed.

Warrior's tomb "a poignant welcome back to the homeland"

One of New Zealand's lost sons arrived at his final resting place in the Tomb of the Unknown Warrior at the National War Memorial in Wellington on Armistice Day last year.

The anonymous soldier represented the tens of thousands of New Zealanders who have given their lives in battles overseas,

For those who gathered for the return ceremony – many of whom had lost friends or relatives to war – it was a deeply moving occasion. At its centrepiece was the Tomb itself. Prime Minister Helen Clark praised its dignified simplicity, saying it resonated with a uniquely New Zealand identity.

"It creates both a poignant welcome back to the homeland and a lasting tribute to our lost war heroes and their families," she told the gathering.

It must have been a moment of quiet satisfaction for Kingsley Baird, the senior lecturer in the College of Design, Fine Arts and Music who led the team which arrived at the Tomb's design and who is based in the old Dominion Museum building, immediately alongside the National War Memorial.

Three other members of the team that created the design are also lecturers in the College of Design, Fine Arts and Music: Annette O'Sullivan, Gray Hodgkinson and Peter Fraser. Others in the team included architects, a typographer, engineers, metal fabricators, stonemasons and cultural consultants.

Baird has since presented papers on the themes of memory and the political and social contexts of memorials at conferences in Auckland and Vancouver.

Albany sets up new ecology lab

Acoustic communication among bellbirds, the evolution of dialects among saddlebacks, song development in grey warblers and shining cuckoos, and the dynamics of the little blue penguin as a top predator in the marine ecosystem: these are some of the first topics up for study at Albany's new conservation ecology centre.

The centre will specialise in New Zealand native birds and is headed by Dr Dianne Brunton (pictured), a behavioural ecologist with an established reputation in conservation.

The centre will conduct postgraduate research into behavioural, ecological and conservation issues. Dr Brunton gained her PhD at the University of Michigan and undertook postdoctoral research at Berkeley and Yale Universities. She has been at Auckland University's School of Biological Sciences since 1991, first as a biostatistician and then as a behavioural ecologist.

No rest for sleep researchers

The Sleep/Wake Research Centre's Human Time Isolation Facility was put to its first test in January.

Sleep/Wake researcher Sarah-Jane Paine put three of her colleagues to bed for 18 hours but sleep was definitely off the agenda. So were coffee, tea, alcohol, chocolate and bananas, which are known to interfere with the production of melatonin, a hormone intimately tied to the body's internal clock.

The isolation facility consists of three cubicles in a sound-proofed room, with controlled temperature, humidity and lighting, and an attached bathroom. It is designed to remove any external cues that might influence the circadian body clock, such as daylight, variations in temperature and noise. Television and clocks are also forbidden.

Paine enlisted her three colleagues to trial the protocols for an intended study.

Although the Isolation Facility is designed to remove significant external cues, it can only go so far. A 5.5 earthquake struck during the morning, but didn't last long enough to disrupt the study. "We were relieved it only lasted a few seconds, says Paine.

This is the first such facility in New Zealand.

Researcher Margo van den Berg in the new Human Time Isolation Facility at the Sleep/Wake Research Centre. The electrodes attached to her head and face measure brain activity, eye movement and muscle tone to ascertain her neuro-physiological alertness and sleep state.

Massey PhD graduate takes Hatherton award

It wasn't a bad day. In the morning Paul Gardner was capped in doctoral colours; in the afternoon, he was awarded a Royal Society medal for the best paper from his PhD project.

The Hatherton Award recognises the best paper by a PhD student at a New Zealand university in the physical, earth, mathematical and information sciences.

Dr Gardner and his colleagues at Massey's Allan Wilson Centre and at Uppsala in Sweden looked at one of the conundrums of genetics: Why, when there number of other bases available, does the genetic alphabet used in DNA use just four - adenine (A), thymine (T), cytosine(C) and guanine (G).

The reason, they found, appears to lie well in the past when the blueprints for life were carried not in DNA but in its much-less-stable near relative, RNA. Gardner and his colleagues used Massey's Helix supercomputer to model scenarios in which RNA had two, four, six or eight bases. They found four- or six-base RNA molecules were the most efficient at evolving into DNA, but the four-base molecules were better at dealing with RNA's susceptibility to making mistakes while copying itself.

Dr Gardner and his fellow PhD graduate Lesley Collins are the first doctoral graduates from the Allan Wilson Centre, which officially opened in 2002. Dr Gardner is now a postdoctoral researcher in the Evolution Department of the University of Copenhagen in Denmark.

Supercomputer upgraded

In mid-2003, when the switch was flicked, the parallel computer on the Albany campus became, for a time, the most powerful supercomputer in the country. But time and technology wait for no man, and an upgrade was in order.

The computer christened Helix has become the Double Helix, again seizing the laurels as the country's fastest supercomputer outside the private sector. Parallel computers work by yoking together numbers of processors. The original Helix was built around 32-bit 66 dual Athlon processors. The new configuration has added a cluster of 64-bit AMD Opteron processors. There is a master node with 16Gb of RAM and 19 slave nodes each with 4Gb RAM. Each node has dual processors and two 120Gb hard drives.

Part of the reason for upgrading the Helix is the presence on the Albany campus of the world-class theoretical chemist Professor Peter Schwerdtfeger (at left), who has drawn together a group of seven other theoretical and computational chemists and physicists. In collaboration with scientists in Paris, the group is investigating phenomena such as the left and right 'handedness' of molecules, work for which the Double Helix will be indispensable.

Like the Helix before it, the Double Helix will be heavily used by the Allan Wilson Centre for Molecular Ecology and Evolution.

Government appoints three new members to Massey University Council

The Government has appointed three new members to the Massey University Council. They are business academic, Professor Ngatata Love, accountant and company director Alison Paterson, and Wellington lawyer Stephen Kos.

Quality Management thesis wins UK award

Dr Nigel Grigg has been awarded the National Award of the Institute of Quality Assurance in the United Kingdom. The award, worth £1000, was presented at Shakespeare's Globe Theatre in London and recognises the best project or thesis in an area related to quality management.

Dr Grigg, from the Institute of Technology and Engineering, used the context of 'statistical thinking' by food and drinks manufacturers in the United Kingdom and Western Europe to examine the use of statistical processes and improvement techniques in the industry. In particular, the research focused on the bottling of spirits, biscuit manufacture and dairy processing. The project was undertaken in the Department of Management Science at the University of Strathclyde in Glasgow.

Australian contract awarded to College centre

The Centre for Organisational Excellence Research in the College of Business has been awarded a $40,000 contract to review and enhance Australia's business excellence framework.

The framework is one of several worldwide and is used by leading Australian businesses to improve and move towards world-class performance,

Centre Director Dr Robin Mann (pictured) was also elected chairperson of the Global Benchmarking Network at the 10th anniversary of the Network in Berlin, Germany, last year.

The Centre's benchmarking tool, the Business Performance Improvement Resource (BPIR.com), was recently recognised as one of the leading systems in its field, with a three-year contract with the British Quality Foundation. The contract will connect each of the Foundation's 1,500 member organisations with BPIR.com. The BQF is the largest provider of business excellence services in Europe.

Australasian attack on the sheep blowfly

Massey and Melbourne Universities have joined forces to investigate the genome of the Australian sheep blowfly, a pest that costs New Zealand and Australian farmers more than $200 million a year.

Funded by Australian Wool Innovation, the $1.4 million project will map the genome of the fly, fostering a better understanding of its defence systems at a genetic level. The Australasian team is leading an international effort to improve the control of blowflies and flystrike in the sheep industry.

Dr Max Scott is leading the Massey component of the three-year project, with researchers in the University's Centre for Functional Genomics in the Institute of Molecular BioSciences. Leading the University of Melbourne's component is Associate Philip Batterham from the Centre for Environmental Stress and Adaptation Research (CESAR).

Dr Scott says the project is an opportunity to apply the Centre's expertise in genetics to revolutionise insect control. "Initially we will optimise our previously developed methods for making genetically modified sheep blowflies and we will then apply this technology to determine if genes identified by CESAR play critical roles in blowfly defence systems and early development."

The relatively recently introduced Australian sheep blowfly is a major cause of flystrike in New Zealand, which is estimated to cost $40 million annually in lost production and control measures. Chemical insecticides have been the main means of controlling the sheep blowfly for more than fifty years, but increasing resistance to some insecticides and an industry demand for wool with low insecticide residue has created a demand for more effective and environmentally friendly control measures. Dr Scott says this project aims to identify particular genes in the blowfly's genome that will respond to insecticide, leading to a blowfly-specific chemical that is otherwise near harmless.

"There are about 12,000 proteins in the blowfly genome and we only know about a few of them, so there are many more potential proteins to target. But before then we need to know the function of the genes and the proteins they code for," Dr Scott says.

The genomes of the common fruit fly and the malarial mosquito have already been mapped.

Workers exposed to dioxin have higher cancer rates

New research suggests a higher rate of deaths from cancer for workers exposed to dioxin during the manufacture of herbicides at the Ivon Watkins-Dow (IWD) plant in New Plymouth.

The study provides the first information on the effects of workers at the plant, rather than residents in the area. The new research also suggests the rate of death amongst workers may grow.

The study updates earlier research and is part of an international study organized by the World Health Organisation.

In the study, 1025 phenoxy herbicide production workers at the IWD plant, and 703 phenoxy herbicide sprayers were followed up over a thirty year period. A comparison of their mortality with that of the general population showed no increased cancer risk in the sprayers. But there were higher death rates from cancer among the production workers, particularly those in jobs with likely dioxin exposure.

The study was headed by Professor Neil Pearce from the Wellington-based Centre for Public Health Research. "This is a small study" says Professor Pearce, "but the findings are consistent with those of the overall WHO study, which is the biggest and best study that has ever been conducted on this issue. It involves 22,000 workers in 36 plants in 12 countries. The WHO study found that production workers exposed to dioxin had a 29 percent increased risk of cancer. In New Plymouth we found a 24 percent increased risk, which is very similar, particularly when we take into account the small numbers involved.

"Also, this risk was higher for people who had worked in departments which probably involved the highest dioxin exposure: cancer mortality was 24 percent higher overall, but was 69 percent higher in synthesis workers, 64 percent higher in formulation and laboratory workers, and 46 percent higher in maintenance and waste workers".

Professor Pearce stresses that the number of deaths involved was small. "Of the 1025 production workers, 813 had significant exposure to dioxin, and 122 of these have died. However, it is only for cancer that the death rate is higher than the national average. There were 43 deaths from cancer, where we would have expected about 34 or 35 on the basis of national cancer death rates. These eight or nine extra cancer deaths among 813 workers, mean that about one percent of the people who worked at the plant have died from cancer because of their dioxin exposure."

However he says the concern is that if this excess risk continues as the former workers get older, and more susceptible to cancer, then the number of excess cancer deaths due to dioxin exposure will continue to grow. "In the worst case scenario about 10 percent of the most exposed members of the former workforce will eventually die from cancer because of their dioxin exposure. These are deaths over and above those that you would see in people in the general population who have not been exposed to dioxin at the same levels".

Chlorophenoxy herbicides were produced and used extensively in New Zealand from the late 1950s until 1987. During production, 2,4,5-T and its intermediates are contaminated with the highly toxic 2,3,7,8-tetrachlorodibenzo-p-dioxin (TCDD). Recent tests conducted by ESR, on behalf of the Ministry of Health, have shown high levels of dioxin exposure in residents living near the plant, but OSH has not tested levels in the former workers at the plant.

Professor Pearce says although blood tests have not been done on the former workers, their levels of dioxin exposure were probably much higher than those in the community. So any cancer risk in the community would be much lower than in the former workers.

Funding for respiratory disease research

Dr Rodger Pack and Dr Stanislav Tatkov from the Institute of Food, Nutrition and Human Health have received a further $140,000 to investigate factors that improve the lives of patients with Chronic Obstructive Pulmonary Disease (COPD). This is the project's third year. The work is carried out in collaboration with Fisher and Paykel Healthcare. COPD is a progressive disease that cannot be cured. It causes increasing breathlessness. COPD includes two closely related diseases of the respiratory system – chronic bronchitis and emphysema – and is largely associated with smoking. The World Health Organisation estimates that COPD kills more than 2.75 million people worldwide each year, ranking as the fourth leading cause of death. The Institute has been working with sheep trachea, a freezing works waste product, to investigate how temperature and humidity of air affect mucus clearance, a major problem for COPD patients.

Sport Science at Albany builds strength

More staff and equipment are strengthening the discipline of Sport Science on the Albany campus.

All the new staff members are from British universities. First to arrive, in 2003, was Dr Ajmol Ali, from Loughborough University, one of the world's leading sport science institutions. His arrival was followed last year by Dr Andrew Foskett, also from Loughborough, and Helen Ryan from the University of Bath, who will manage the new Sport and Exercise Science Laboratory. The most recent arrival is Dr Stephen Brown from de Montford University in Bedford, who now heads the group.

Pictured is a newly-arrived research treadmill, which is housed in Sport Science's new premises on the Oteha Rohe site along with other research and teaching equipment for exercise physiology and biomechanics.

Barcoding the biosphere

Life is a multifarious thing. Of the estimated 10 million to 100 million species on our planet perhaps around 1.7 million have been formally described. To complicate matters further, often it is difficult to tell different species apart. Some creatures can only be told apart at particular points in their life cycle. Not uncommonly a plant will need to be in flower if it is to be identified.

All of this is not good enough. What has been needed is a relatively straight-forward way of cataloguing life's riches, of identifying one species from another. Is there such as way? There may well be, for at the level of the gene, life incorporates its own bar codes, the sequences of bases coded in DNA.

One particular gene is a key candidate. Cytochrome c oxidase I, or COI, plays a crucial role in metabolism and is present in all animals. But its sequence – the exact order of its chemical bases – varies substantially and is unique for each species. The bar code of one animal might read TACACTGTAT, while another would be TACTCTTTA.

COI opens up the possibility of populating a master database with the 'bar codes' for all of life on earth – and just such an initiative is now under way. As part of the global initiative, Professor Lambert and his colleagues at the Allan Wilson Centre will be sampling genetic bar codes from every New Zealand bird species. Later they intend to sample bar codes from other animals, plants, insects and fungi.

As the database grows it will become easier to identify species. Eventually, portable hand-held gene sequencers are likely to be developed.

The bar codes will be used in health, national border control, conservation management, food safety and environmental monitoring. They could also help foil bioterrorism.

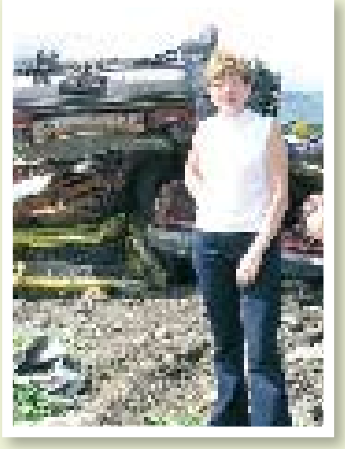
Un-wrecking the environment

More than 25,000 vehicles are abandoned in New Zealand each year, creating an environmental headache and costing ratepayers more than $6 million.

Dr Sue Cassells, a lecturer in the Department of Finance, Banking and Property, studied what happens to end-of-life vehicles (ELVs) for her PhD thesis in applied economics. She found that only about 35 percent of owners of abandoned vehicles are traced and the costs recovered from them. Ratepayers bear the greatest part of the cost of abandoned vehicle disposal. Some cars dumped in rough terrain are never retrieved. The cars are an eyesore and often leak hazardous gases and fluids.

"One in five vehicles being deregistered is dumped" says Dr Cassells. "It is too easy for owners of old vehicles to abandon them without penalty."

Even vehicles brought in for recycling pose an environmental risk, Dr Cassells found, and some current industry practices are a cause for concern. "There is no record of the number of vehicles being recycled and the standards and practices for removal of hazardous fluids, gases, and components are variable, so not all ELVs being recycled undergo depollution."



Dr Cassell suggests a number of remedies. One would be to insist that vehicles be licensed irrespective of whether or not they are on the road. Another would be to mandate the licensing of automotive dismantlers from within the industry, setting standards for depollution and environmentally acceptable practice. A third would be to accept ELVs into the recycling system free-of-charge, removing the incentive to abandon vehicles. Instead, Dr Cassell suggests, the cost might be covered by an up-front disposal charge added to the registration of vehicles coming in to New Zealand.

The study was funded by Toyota New Zealand Limited.

meth

It is a wet, grey morning in the Wairarapa. In the back seat of the old white Lada, the two children – the boy aged eight, his sister aged six – sit bundled in their wet-weather clothing on their way to school. Rain rattles on the roof, the windscreen wipers beat out an insistent rhythm The car stops in the school car park and the boy scurries out of the car for shelter. The girl baulks. Can't she go home? She has a present there for Harold, the Life Education giraffe mascot, who is visiting the school that day.

The driver, the children's stepfather, leans over into the back seat. Earlier that morning he has made them breakfast and helped them prepare for school. Now he loses it. Leaning into the back of the car he hits the girl; hits her, and hits her again.

The girl, whose elfin face will become so familiar to the public over the coming weeks – as the search is mounted, her body found and charges laid – is Coral Burrows. The driver is Stephen Williams. He has a methamphetamine habit, and on that rainy morning has just emerged from a four-day binge during which he has hardly eaten or slept.

While taking methamphetamine Williams would have felt a rush of intense euphoria as the neurons in his brain released the neurotransmitters dopamine and norepinephrine. He would have felt alert, confident, invincible.

But methamphetamine is known for its demon, a condition called methamphetamine psychosis, characterised by confusion, delirium, panic, hallucinations, and an intense paranoia which may manifest itself in aggressive behaviour or violence. Indeed, the psychosis most closely resembles a type of schizophrenia known as paranoid schizophrenia.

William Bell, who beat three people to death with the butt of a shotgun during a robbery, had binged on 'P' ('pure' amphetamine) just hours before. Ese Faleali'i , who shot two people during a rampage, was reportedly using P at the time. As this magazine went to print, Antonie Dixon was on trial for attempted murder, and murder in connection with sword and shooting attacks in 2003. Again, P figures.

Crimes like these – violent, senseless, sometimes bizarre – help shape our views of methamphetamine. To read the accounts you might think the use of methamphetamine is the exclusive province of the unemployed and the uneducated, of no-hopers, of habitual criminals, of people, in other words, generally quite unlike you and me. All of them 'ticking time bombs', crimes waiting to happen.

You would be wrong. A recent study of the socio-economic impact in New Zealand of amphetamine-type stimulants – a category of drugs that includes amphetamine, methamphetamine and MDMA/ecstasy, among others – conducted by Dr Chris Wilkins and his team at the Centre for Social and Health Outcomes Research and Evaluation (SHORE), located at Massey University in Auckland, has provided a broader and more comprehensive understanding of this new drug trend. The New Zealand Police have funded the research to inform its own and other agencies' response to methamphetamine. They recognise that beyond reacting to single incidents there is a need for an evidence-based approach

That illicit drug use is difficult to measure is almost a matter of definition. No one is keen to admit to a criminal activity, and because the traffic in illicit drugs is invisible to agencies like the IRD, most evidence is either anecdotal or indirect.

The exception to this is the National Drug Survey, the results of which are the best measure we have. In 2001 the National Drug Survey interviewed 5,800 people aged 13 to 45 nationwide. The survey found that 12 percent of New Zealanders aged 13 to 45 years had tried amphetamines and five percent had used amphetamines in the last year. It showed that the users of ATS were more ordinary than not. They had high levels of full-time employment, came from a range of occupational backgrounds (including professionals), earned mid-level incomes and had high levels of educational achievement.

Drugs like methamphetamine and MDMA/ecstasy are not new, and neither is their use as recreational drugs. But in New Zealand there has never been anything approaching the current explosion in their use.

Dr Chris Wilkins puts the timing of the shift at some time between the mid to late 1990s, when he was finishing a PhD thesis on the economics of cannabis markets, and 2000, when he returned to New Zealand after a stint in Britain to join SHORE's predecessor (the then Alcohol and Public Health Research Unit).

His PhD thesis involved developing a model of how cannabis markets work and then validating it using interviews with cannabis users and dealers. The interviews were also revealing of other facets of the drug scene.

Methamphetamine was around then, he says, "but it wasn't big and there was nothing like today's level of awareness". MDMA/ecstasy was present, too, a part of the dance scene, though interdiction at New Zealand's borders had made it far harder to get hold of and much more expensive than in Europe.

But two years later, when Wilkins returned from working in Britain, it was very apparent to him that "something seemed to have happened".

Something had happened – and it was continuing to happen. In 1996 1.3 kilograms of ATS drugs were seized. In 2001 the figure was 76.9 kilograms. In each year since the indices for ATS drug use – laboratories busted, drugs intercepted, arrests made – have lurched upwards.

In May 2003 mounting concern led the New Zealand Police (on behalf of other government agencies) to contract the SHORE Centre to conduct a study of the socio-economic impact of the increased use of amphetamine-type stimulants, and in particular, methamphetamine.

Dr Chris Wilkins would lead the team.

That year Wilkins set out to interview a sample of high-frequency methamphetamine users in Auckland. Coming in the wake of a number of high-profile homicides, the proposal caused some consternation in the University Ethics Committee, which helped formulate and approve a set of sensible protocols. "There was a concern that we might come across psychotic and violent users and that there would be risk to interviewers and the public," says Wilkins.

In Australia the community sampling of illicit drug users had been going on since the early '90s, says Wilkins. Those surveyed were generally heroin users, but there were also methamphetamine users, "and when you looked through those studies at the sample characteristics, the participants tended to be intravenous drug users and to have really high rates of unemployment – something like 90 percent of the sample – with all of the problems associated with that."

Wilkins's sample, which he arrived at using a mix of community advertising and referrals from those interviewed, had a quite different profile. It included students, mothers and business people. "We were interviewing people you wouldn't associate with methamphetamine."

But they were often involved in the wider drug economy. One-third of the methamphetamine users had sold methamphetamine, and about one in five had manufactured methamphetamine or exchanged it for stolen property at some time.

The correlation between methamphetamine and crime was given some credence in Wilkins's next major study, which took him to the holding cells at the Papakura police station to interview arrestees about their drug use. Over a period of three weeks in mid-2004 Wilkins and a team of interviewers were based in the cell block. Again there was some trepidation.

"I had to employ interviewers over three shifts, one of them from midnight to 6.00 in the morning. I was concerned that once I explained what was involved in the study to the prospective interviewers I would lose them," says Wilkins, whose fears were unrealised.

The arrestees – assured of anonymity – were

profiling an epidemic

interviewed away from the presence of the police and were asked to supply a urine sample for drug testing. Forty-one percent had used amphetamines and a quarter of those who had recently used amphetamines considered that their use had played a major part in the activities for which they were subsequently arrested.

Amphetamines are now also significant drugs of addiction. National surveys conducted by the National Addiction Centre in Christchurch show one in five patients now citing amphetamine, alone or in combination with other drugs, as their main substance abuse problem.

Why these particular drugs and why now? Wilkins can provide some explanation. Amphetamines fit well with current socio-cultural norms which place a high value on productivity and achievement – both at work and socially.

"I think one of the really dangerous things about methamphetamine and the amphetamines in general is that they are very instrumental drugs," says Wilkins. "If you take heroin you sit there in a semi-conscious stupor, and likewise cannabis impairs work effectiveness and social attentiveness. But amphetamine is a type of performance enhancer – you can do lots of productive things – and it's a social drug, you become very talkative and very confident and this is part of amphetamine's allure."

Studies overseas, he says, have shown methamphetamine is often used to enhance social confidence or to get mundane or challenging tasks done in short time frames. This is not 'being wasted' in the old sense. Methamphetamine can help you do the chores, work longer hours and go on to party into the small hours. "The paradox of amphetamine use is that as the negative mental and physical effects of use accumulate, they eventually substantially damage the user's ability to work, perform and socialise. Addicted users find their work performance impaired, relationships damaged and their desire to seek out others' company curtailed."

Society's views on taking drugs – legal and illegal – have changed too. This is an age when drugs are increasingly accepted as a means of enhancing life as well as treating ills. There are pills to make you happier, to boost sexual performance, to avoid hair loss. There are pills offering so-called legal highs. Why not add a few others to the personal pharmacopoeia?

Wilkins also sees the phenomenon of a society that is refusing to age expressing itself in today's patterns of drug use. "Ecstasy use by men goes all the way up to 40 or 45," says Wilkins. "You are young all the way up to 35 or so. People are marrying later and having children later."

Australia and New Zealand – two countries closely linked geographically and culturally – make an interesting contrast. New Zealand has a lower use of heroin and cocaine than Australia, but a higher use of LSD.

The likely explanation is the success with which drugs are intercepted coming into New Zealand and the effectiveness of internal drug enforcement. Being a small and remote nation with no land borders has some advantages. LSD, the argument goes, became popular because it is a comparatively easy drug to conceal and smuggle.

Those advantages remain. In 2003 a record 266,000 MDMA tablets and 830,000 capsules of ephedrine and pseudoephedrine – the precursor drugs used in the manufacture of methamphetamine – were seized by Customs officers, as well as 748 g of methamphetamine itself. In 2004 a remarkable 17.5 kg of crystal methamphetamine were seized at New Zealand's borders.

Even if the seizure rate is unlikely to approach the quantities of drugs making it into New Zealand – Wilkins has estimated the rate for amphetamine in 2001 to be two to seven percent and the rate for MDMA/ecstasy to be five to 17 percent – these successes and the associated prosecutions are still a significant deterrent to traffickers.

As a further discouragement, in 2004 ephedrine and pseudoephedrine were elevated to the status of Class C controlled drugs to provide the Police and Customs Service with more powers to respond. People illegally importing these substances now face up to seven years in prison.

New Zealand pharmacists maintain a register of people who buy over-the-counter medications containing pseudoephedrine (a decongestant) and restrict the number of the tablets they will sell. More generally, a national Methamphetamine Action Plan is in place setting out how agencies should work together.

Policing methamphetamine brings particular challenges. This is a highly clandestine market. The survey of arrestees at Papakura police station showed that about half of the amphetamine sellers contacted their buyers by mobile phone and texting, and all of the amphetamine sellers reported selling only to close friends and family members.

New Zealand motorcycle gangs with affiliations to criminal networks overseas are thought to have played a leading role in establishing the domestic manufacture of methamphetamine in New Zealand, and although they may no longer hold a monopoly, they remain dominant suppliers.

The revenues from methamphetamine may be a major source of funding for organised crime. Wilkins estimates the retail market for amphetamine at $122.5 million in 2001, with a further $45.8 million spent on MDMA/ecstasy. These sums of money flowing into organised crime are part of the justification for the Government's plans to strengthen the existing Proceeds of Crime Act with a broader 'civil forfeiture' regime.

Wilkins believes – and the evidence would seem to support him – that law enforcement is getting better at stopping methamphetamine manufacture and MDMA/ecstasy smuggling. "Agencies have gone through a learning curve identifying methamphetamine labs and precursor sources, and they now have teams dedicated to that task. My feeling is that the law enforcement effort against methamphetamine has steadily become more effective over the last two or three years. This is a tribute to the efforts of individual officers and the seriousness with which the Police as an organisation have taken this problem," says Wilkins.

In the end, however, enforcement and other measures may only do so much, says Wilkins. "Trends in drugs tend to be powered by the macro forces of youth culture and they are difficult things to impact."

"A lot of drug trends just happen. The ability of the authorities to stop a drug trend using enforcement,

PLEASE TURN TO PAGE 14

The methamphetamine high

5–30 minutes
- Initial rush
- Racing heart rate and elevated blood pressure

4–24 hours
- Sense of well being
- Feeling of intelligence
- Aggressive state may lead to violent behaviour
- Loss of appetite

3– 15 days
- Hyperactivity
- Can remain awake for days

Binging

User may become violent, delusional or paranoid as high wears off. Eventually higher doses of meth are required to achieve the desired high. User may take methamphetamine every two or three hours for several days.

A single dose of methamphetamine lasts for 6 to 8 hours.

A single dose of cocaine lasts only 8 to 20 minutes.

the statistics

The Socio-Economic Impact of Amphetamine Type Stimulants (ATS) in New Zealand

In May 2003 the Police contracted Massey's SHORE Centre (the Centre for Social and Health Outcomes Research and Evaluation) to conduct a study of the socio-economic impact of the increased use of amphetamine-type stimulants and in particular methamphetamine. The team was led by Dr Chris Wilkins.

In the course of the study Dr Wilkins and his team:

- reanalysed the results of the 2001 National Drug Survey
- surveyed frequent methamphetamine users in Auckland
- conducted key informant surveys of drug enforcement officers, drug treatment workers and regular methamphetamine users outside of treatment
- piloted a New Zealand Arrestee Drug Abuse Monitoring System at the Papakura Police Station, over a period of three weeks interviewing and drug testing 62 arrestees
- interviewed key informants from drug treatment, drug enforcement and frequent methamphetamine users
- drew on the results of the annual survey of an alcohol and drug treatment workers survey conducted by the National Addiction Centre in Christchurch. (The survey asks workers about the two most recent patients they have seen.)

The report was published in September 2004. This and other publications are available for download from www.shore.ac.nz

Dr Chris Wilkins at the SHORE Centre in central Auckland

Global ATS abuse

In 2003 the United Nation's Office on Drugs and Crime estimated the production of ATS (Amphetamine Type Stimulant) drugs at 500 tons a year, with more than 40 million people having used them in the past 12 months. In the decade from 1990/91 to 2000/2001 seizures of ATS drugs rose from about four tons to just less than 40 tons. Seizures of precursors rose by 12 times. The pattern and prevalence of ATS drug use varies considerably from nation to nation. In Europe, in particular, the place of methamphetamine is taken by its less powerful relative amphetamine. In 2001, Australia – the neighbour against which New Zealand often compares itself – had the highest level of ecstasy abuse worldwide and was second only to Thailand in methamphetamine abuse.

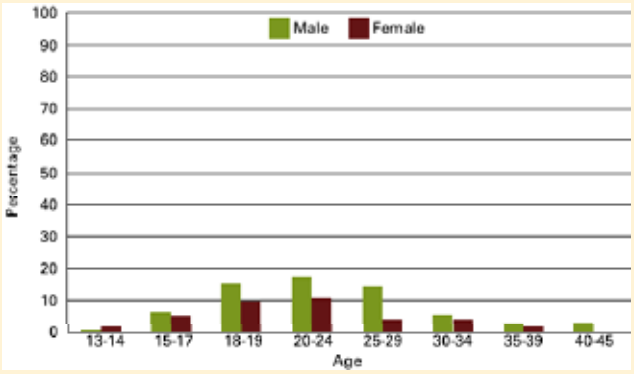
Ranking
(1 = most prevalent drug)

- 1
- 2
- 3
- 4 - 6
- 7 or more

Ecstasy and Amphetamines: Global Survey 2003
United Nations Office on Drugs and Crime (2003)

The prevalence of use

Among the New Zealand population in 2001:
A comparison between the level of last year use of ATS in New Zealand and Australia in 2001 indicates that New Zealand generally had lower levels of use. This was particularly so of ecstasy. But the levels of amphetamine use are much closer, and in one group – men aged 15 to 19 – the New Zealand use of amphetamine appears to be higher. (This is, unfortunately, the period during which drug use is mostly likely to disrupt education and damage future life prospects.) In total, one in ten New Zealanders aged 18 to 29 had used an ATS drug in the last year.



ATS use by age and sex

Disproportionately more ATS users lived in urban settings, in the upper half of the North Island and in Auckland.

Northern Region
Proportion of all people 13 – 45 36%
Proportion of ATS users 47%

Midland Region
Proportion of all people 13 – 45 17%
Proportion of ATS users 12%

Central Region
Proportion of all people 13 – 45 24%
Proportion of ATS users 24%

Southern Region
Proportion of all people 13 – 45 24%
Proportion of ATS users 17%

The scale of the market

Dollar value of the ATS market 2001			
	Amphetamine	Ecstasy	Cannabis
Annual individual expenditure*	$1,000	$600	$450
Annual total market value (million)	$123	$46	$169

**For users of these drugs.*

Patterns of use

Among frequent methamphetamine users:
65 percent reported binging in the last six months. The average frequency of binging was approximately once a fortnight.
20 percent thought their methamphetamine use was 'often' or 'always' out of control.
One in five had injected methamphetamine in the last six months.

Among arrestees:
The typical dollar amount spent on amphetamines was $350, as against $20 for cannabis.

Damage to health

Among frequent methamphetamine users
Most reported harms from methamphetamine use

Physical Problems	% sample
Poor appetite	83
Trouble sleeping	77
Loss of energy	57
Skin problems	51
Poor concentration	51
Heart palpitations	51

Most reported psychological problems from methamphetamine use

Psychological Problems	% sample
Anxiety	70
Mood swings	66
Short temper	62
Paranoia	60
Depression	60

Addiction

Among patients receiving treatment for addiction:
One in five cite amphetamine, alone or in combination with other drugs, as their main substance abuse problem.

Among frequent methamphetamine users:
Eight percent described giving up methamphetamine as 'very difficult or impossible'.

The clandestine market

Among arrestees:
Whereas about half of arrestees purchasing cannabis did so through public 'tinny' houses, only five percent of arrestees purchasing amphetamine did so through 'tinny' houses.

Among frequent methamphetamine users:
All of the amphetamine sellers interviewed reported selling only to close friends and family members. About half of amphetamine buyers contacted their buyers by mobile phone or texting.

New user groups

Among key informants:
About 50 percent of user key informants, 60 percent of enforcement key informants and 33 percent of treatment key informants had noticed new groups of people using methamphetamine in the last six months. The new user groups most commonly reported by all three key informant groups were 'teenage users' and 'business people'. User key informants also noted more 'young women', 'lower socio-economic' and 'Māori/Polynesian' users. Treatment key informants commonly noted more 'young women'.
47 percent of user key informants and and 24 percent of drug enforcement key informants reported the repackaging of methamphetamine into smaller weights and lower prices.

Crime and social harm

There are a number of ways in which methamphetamine use is associated with serious and particularly violent offending. The first is where an offence takes place because someone is under the influence methamphetamine; the second where someone engages in crime to obtain the money for drugs; the third, where violence is employed as part of the process of carrying out business in the drug market.

Among arrestees:
63 percent had used cannabis in the last year
49 percent had used amphetamine in the last year
11 percent had used ice (crystal methamphetamine) in the last year
7 percent had used ecstasy in the last year.
21 percent had used amphetamines in the last month.
9 percent had used amphetamines just before committing an offence.
About a quarter of those who had recently used amphetamines considered that their use of these drugs had played a major part in the activities for which they had been arrested. Three quarters perceived the market for amphetamine to be very violent.

Reported effect of drug on the likelihood of getting angry

Drug type	Much less likely	Less likely	No effect	More likely	Much more likely
Alcohol	32	15	28	16	9
Cannabis	46	29	18	1	6
Amphetamine/Methamphetamine	18	16	33	8	24
Ice (crystal methamphetamine)	0	19	30	51	0
Ecstasy	77	0	23	0	0
Hallucinogens	34	29	37	0	0

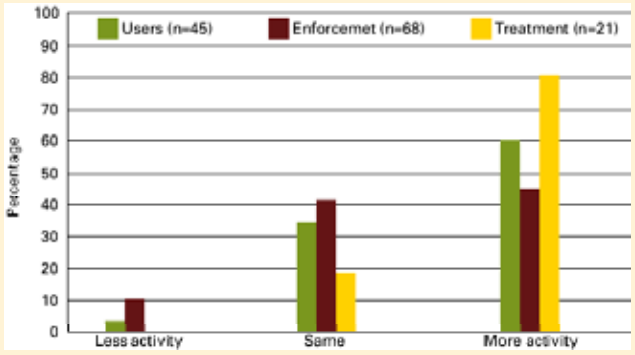
Among frequent methamphetamine users:
One third were often involved in other illegal activities such as drug dealing and drug manufacture. One third had sold methamphetamine and one in five had manufactured it or exchanged it for stolen property. The average amount earned from illegal activities was $24,000.

Among key informants:
About one third of user and treatment key informants indictated that there had been changes in the type of crime committed by methamphetamine users. All three groups of key informants were most likely to report increased 'violent crime' and increased 'property crime'.

Law enforcement

The highly clandestine methamphetamine market presents special challenges for law enforcement.

Among frequent methamphetamine users:
Sixty percent noted more law enforcement activity directed against methamphetamine in last six months.
A third reported more arrests of other users they knew.
Eight percent thought that increased law enforcement had made it more difficult to get methamphetamine in the last six months.



Change in level of law enforcement activity noted by key informants

Among key informants:
51 percent of user key informants rated the availability of methamphetamine as 'very easy'.

Among arrestees:
About one half described purchasing ecstasy, amphetamine or heroin as 'very risky'.

Anatomy of a designer drug

Virtually all psychoactive drugs work by interfering with the normal workings of the brain's neurotransmitters - the chemicals that pass messages between neurons. The amphetamines closely resemble two prominent neurotransmitters: dopamine and norepinephrine.

Amphetamines have their effect by releasing these neurotransmitters into the gap between nerve endings. The alerting, stimulating effect comes from the norepinephrine. The accompanying schizophrenia psychosis is associated with the abnormal release of dopamine.

Norepinephrine is a single chemical step away from epinephrine, the neurotransmitter better known as adrenaline. Epinephrine is a part of your body's fight or flight response. It serves to raise your heart rate, increase muscle strength and dilate the bronchial tree, helping you breathe more quickly and deeply. This last effect makes epinephrine an effective treatment for asthma, but only when delivered by injection because it is rapidly broken down if swallowed.

The Chinese herbal remedy, ma huang, or *Ephedra vulgaris*, has been used to treat respiratory disorders for centuries. In 1887 Japanese chemist Nagayoshi Nagai extracted the active ingredient from the plant. This proved to be ephedrine, which is chemically similar to epinephrine. This was also the year in which a German chemist, L. Edeleano, first synthesised amphetamine, the 'parent' of the family of alkaloids of which ephedrine is a member. But amphetamine's pharmacological potential was missed, and the molecule lapsed into obscurity until 1927, when it was resynthesised by Gordon Alles, one of a group of chemists looking for an ephedrine substitute.

Alles also prepared amphetamine in a volatile form. Soon, under the brand name Benzedrine, amphetamine inhalers were widely sold over the counter – and the contents were widely used for purposes other than the treatment of respiratory disorders.

Methamphetamine, which is more potent than amphetamine and easier to make, was first synthesised in Japan in 1919 . From the Second World War on amphetamines were used by the armed forces of many nations to combat fatigue. The world's first major amphetamine epidemic took place in Japan in the wake of the War as companies marketed their methamphetamine stockpiles for 'elimination of drowsiness and repletion of spirit'.

Manufacturing methamphetamine is not – as a chemist might see it – a particularly sophisticated process, according to Associate Professor Trevor Kitson, who now must establish his bona fides before he is able to restock some common reagents and whose lesson plans now skirt certain areas. It is, however, in the absence of such equipment as fume hoods, risky.

The most common method of 'cooking' methamphetamine in New Zealand employs a range of toxic, corrosive and flammable chemicals. These include hydrochloric acid, caustic soda, and solvents such as ethanol, acetone and ether. Associate Professor Kitson would also be extremely wary of consuming any product that had emerged from a home laboratory, even if he himself were the chemist. "There simply isn't the control of purity."

Ecstasy (the street name for MDMA or 3,4-methylenedioxymethamphetamine) releases norepinephrine but much less dopamine than amphetamine. Consequently it does not have amphetamine's association with aggression and paranoia, and in fact it is sometimes termed an 'empathogen'.

Nonetheless, a set of consumer warnings do apply: there have been deaths (usually, but not exclusively, from hyperthermia, or overheating), and, as the UN report puts it, "the risk for ecstasy users suffering the effects of early decline in

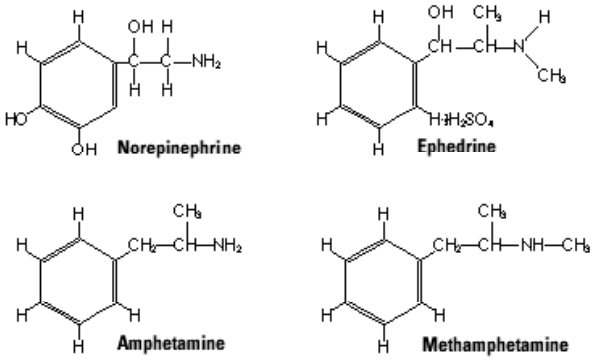
methamphetamine, a.k.a. speed, meth, chalk, ice, crystal, crank, glass, crystal tea

mental function and memory, or Alzheimer's-type symptoms, is real." Then, too, there is no assurance that what is sold as MDMA/ecstasy actually is MDMA. It may well be a mix of other drugs and adulterants, or, as Associate Professor Kitson points out, it may be MDMA mixed with a brew of by-products.

For his part, Wilkins urges extreme caution. "It is hard to generalize health risk for different substances. Different people react differently to the same substance and the risk of use is influenced by the experience a person may have had with a drug and the social setting of use."

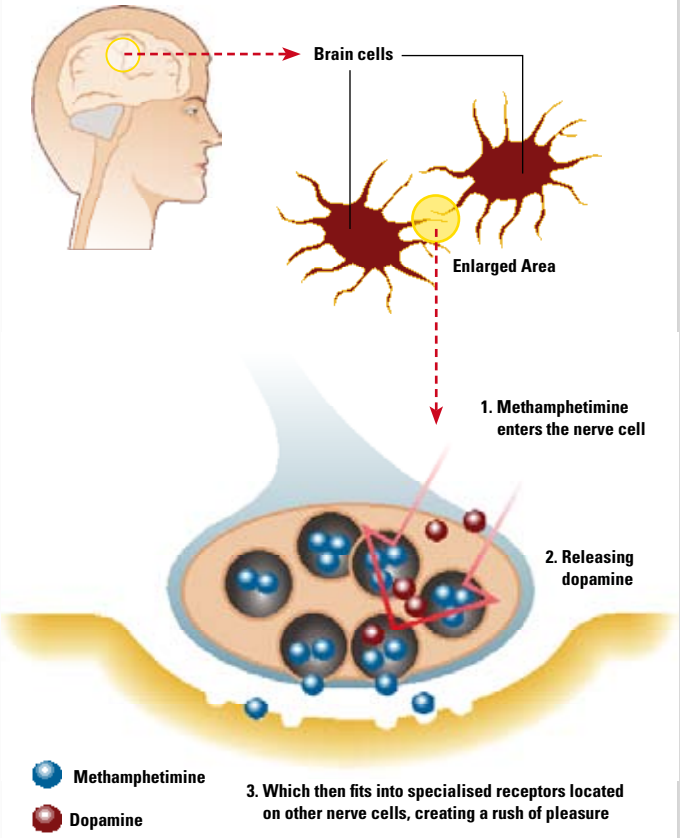
Associate Professor Trevor Kitson has a particular expertise in the interaction of organic reagents with various enzymes. He is also known as an engaging teacher, winning a Distinguished Teacher Award from the Institute of Fundatmental Science in 1998 and 2001. He regards methamphetamine as an 'interesting' molecule, and sometimes uses its structure (though not its manufacture) in his first-year classes.

Chemical structure



The structure of the ATS drugs resembles that of the body's natural molecules adrenaline (a.k.a. epinephrine) and dopamine, which are involved in a variety of physiological responses such as 'fight-or-flight' and feelings of pleasure. All of these compounds include an amino group (nitrogen atom) and a benzene ring separated from each other by a chain of two carbon atoms.

How methamphetamine works



Methods of absorption

Snorting
Methamphetamine is inhaled through the nose. Methamphetamine travels from the lungs into the bloodstream and to the brain.
Drug effect takes 3-5 minutes.
User experiences a long-term euphoria that can last from 8-24 hours

Smoking
Odorless vapor inhaled through a glass pipe. Methamphetamine travels from the lungs into the bloodstream and to the brain.
User experiences an intense rush or flash that lasts for a few minutes (extremely pleasurable).

Injecting
A solution of water and methamphetamine is injected directly into the bloodstream and travels to the brain.
User experiences an intense rush or flash that lasts for a few minutes similar to smoking.

Ingesting
Methamphetamine enters the bloodstream through digestive system.
Drug effect takes 15-20 minutes. User experiences a long term euphoria that can last from 8-24 hours.

Infographic sources: HonoluluAdvertiser.com, National Institute on Drug Abuse

Massey States of the Nation

The economics of illicit drug markets

In a kind of convenient shorthand, people often refer to Dr Chris Wilkins as an illicit-drug researcher. This is true, as far as it goes, but a more adequate description would be that he is a New Institutional Economist with a particular interest in stateless economic systems such as illicit drug markets.

New Institutional Economics (NIE) is an economic school which studies the role institutions play in economic behavior and performance. These include formal institutions such as the law and the state, and informal institutions such as social custom, norms of behavior and ideology.

"NIE looks at the institutional context of economic behaviour," explains Wilkins. "It looks beyond the workings of demand, supply and pricing to examine how institutions, property rights, social convention and transaction and information costs affect the decision-making of economic actors and the performance of economic systems."

New Institutional Economics is particularly suited to the study of 'stateless economies': economies where there is no state to enforce contracts or property rights, and this includes illicit drug markets.

In his PhD thesis Wilkins looked at the workings of cannabis markets, where, in the absence of legal enforcement and remedies, cheating might be expected to be widespread. But Wilkins found these markets were typified by generally reliable transacting between buyers and sellers. The reason, says Wilkins, lies in the search and information costs associated with these exchanges.

"In the legal economy exchange is generally impersonal; in the supermarket you don't know the person at the till and you may not even deal with cash. In the cannabis black market the buyer typically knows the seller, can inspect the product, and hands over cash. It is very personal, very face-to-face."

"In the legal economy exchange is generally impersonal. In the supermarket you don't know the person at the till and you may not even deal with cash. In the cannabis black market the buyer typically knows the seller, can inspect the product, and hands over cash. It is very personal, very face-to-face."

"In the clandestine illicit drug market it can be quite difficult for buyers and sellers to find one another. Legal commodities are advertised, and there are public retail outlets. In the cannabis market it is difficult to obtain information about the location of sellers, and the quality and prices of products. It takes some effort even for experienced buyers to assess the options available in the market. This means that in cannabis markets both the buyer and the seller make a significant time investment in the exchange relationship, and that constrains cheating to some extent. If a cannabis seller cheats a customer, then that customer won't return, and that's potentially a big loss."

In a recent paper, Wilkins and Professor Sally Casswell explored the role gangs play in outdoor cannabis cultivation in New Zealand. The analysis in the paper suggests that gangs are unlikely to have complete monopoly control of cannabis cultivation – cannabis is too easy to cultivate and rival cannabis cultivators and cannabis crops too hard to deter and detect – though Wilkins is quick to say this does not mean the gangs do not have persuasive advantages elsewhere in the cannabis market, or when it comes to other drugs.

In their paper Wilkins and Caswell set out the conditions under which an illicit drug market most favours the involvement of organised crime. These occur where there are cost advantages from larger-scale production, where there is a need for specialised skills, capital equipment or large amounts of start-up capital, and where there are visible targets for violence aimed at discouraging competition.

While a few seeds, some potting mix and a secluded patch of ground are all that is required to cultivate cannabis, manufacturing methamphetamine is a much more technical and sophisticated process , says Wilkins. "You need to have access to the appropriate precursor chemicals and have the knowledge and equipment required for manufacture."

Anecdotally, 'cooks' – the amateur chemists who manufacture methamphetamine – have became much sought after. Highly skilled, they can command premiums, and such is the demand that kidnappings are not unknown.

Stories have circulated that gangs traditionally at odds are co-operating in the methamphetamine market. "Working together may be a rational way of gaining access to rare precursor chemicals and to exchange manufacture techniques."

One of the flow-on effects of the rise in the use of methamphetamine may be to extend the power and influence of New Zealand's gangs, in much the same way that Prohibition once strengthened the hand of the Mafia in America. If this is happening then it will mirror trends that have been seen internationally. A report by the United Nations Office of Drugs and Crime has noted a shift away from "a loose network of independent laboratory operators towards larger organisations able to produce more and better drugs at lower costs. The larger groups are more flexible, and are able to identify and exploit any lucrative business opportunity, as well as any flaws in law enforcement efforts. They assist each other to more efficiently produce, market and distribute their products."

Wilkins is the current recipient of a Fast Start grant from the Marsden fund to investigate which illicit drug markets nurture the development of organised crime.

METH CONTINUED FROM PAGE 9

"A lot of drug trends just happen. The ability of the authorities to stop a drug trend using enforcement, education and supply-side or demand-side policies is more limited than some people may suppose. But good policy and timely response can significantly limit the damage and the duration of the trend."

Eruptions of drug use, such as that of methamphetamine usually follow a predictable pattern, says Wilkins.

"Young people discover a 'new' drug which may fit the prevailing music or lifestyle trend. The cool part of the demographic try it, enjoy it, they tell all their friends and they tell theirs. Then some of the originators become heavy users and experience ill effects – like psychosis, mental breakdowns, violence and addiction– the bad things about the drug become more widely known, and eventually use falls away as new recruits decline in numbers. So the use of a drug can spread very quickly until a social or group understanding of the downsides develops within the youth population."

Crack cocaine, a drug in many ways similar to methamphetamine, was just such a phenomenon. In the early to late '80s crack was a big problem in the United States, says Wilkins.

"But in the late '90s and into this century use has greatly declined. It is no longer as widely used. The users that remain are often the older addicted users from the original spread of use. The decline in crack has happened not only through dedicated law enforcement or increased productivity in intercepting cocaine coming into the country. Part of the explanation appears to be that people have simply become tired of crack. Young people have seen their older brothers and sisters waste their lives on the drug. A social consciousness has emerged that crack is a bad drug to get involved in and not a cool thing."

So sooner or later the methamphetamine epidemic, like epidemics before it, will peak and begin to decline. In this sense the stories like that of Steve Williams and Coral Burrows, deeply appalling though they are, will do some good by hastening a shift in cultural perception.

The next update on what is happening with methamphetamine in New Zealand will come from the analysis of the Ministry of Health funded 2003 Health Behaviours Survey – Drugs (which has replaced the previous National Drug Surveys), on which Wilkins is currently at work.

(Further Reading)

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Wild Times

We meet natural history filmmaker Alison Ballance.

Another magical day on Campbell Island. *Ballance collection*

Editor Malcolm Wood writes

The first time I see Alison Ballance she is looking slightly furtive. I have arranged to meet her at Natural History New Zealand's premises. So it is that at 9.30 on a grey, cold Dunedin morning I see a woman ducking into the NHNZ entrance. The sculpted lion and unicorn in the royal coat of arms above the portal of what was once Dunedin's police barracks gaze down in imperial disapproval.

Although I don't know Ballance yet, I have heard her speak. On an earlier Saturday, on Kim Hill's programme on National Radio, Ballance gave an account of how she spent the last two months, filming first on the Galapagos Islands, off the coast of Ecuador, and then on the uninhabited Pacific coral atoll of Palmyra, for what will be an episode in a six-part documentary series *Equator*.

The Galapagos and Palmyra make for an instructive contrast, she tells Kim. Palmyra is an island oasis in desert ocean; the Galapagos, bathed by the cold, nutrient-rich waters of the Cromwell and Humboldt currents, is a desert archipelago in a fertile ocean.

They are also great camera fodder: places of pure spectacle, with engaging, photogenic and unwary wildlife, and magnificent landscapes.

Palmyra has coral reefs, abundant sealife, and seabird colonies. And, weighing in at up to 13 kilograms, it has the world's largest land invertebrate, the robber crab – a creature for which Ballance developed some affection. "I had a waterbottle from Honolulu with a picture of a voluptuous Hawaiian maiden on it," she tells me when we meet. "And there was one robber crab in particular that was always be wrestling with the bottle, trying to steal it. I don't know if it wanted the water – or the picture."

The Galapagos, a naturalist's mecca, have land tortoises of great age, a number of finch species (whose adaptations helped inform Darwin's thoughts on evolution), flightless shags (which Darwin missed seeing), and aquatic iguanas, which graze on seaweed and rid themselves of excess salt by sneezing, and "look like they have terrible sunburn". It has seals, sealions, penguins and seabird colonies.

The Galapagos, it is true, are much filmed, but Ballance and her team had a point of difference. Along with two Panasonic high definition video cameras (worth around $150,000 apiece, and purchased for the *Equator* series) they took a light-weight jib, or crane, and a tracking dolly, allowing them to 'fly' over their unfazed and largely immobile subjects. "Our style for this show is slow and lyrical," says Ballance. "Hi def video lets you see fabulous detail in the pictures, so we thought, let's take time looking at the pictures, and let's give the production a theatrical pace rather than a music-video pace."

Now for her pains, all those 12-hour days filming under the broiling sun on barren slopes of the Galapagos, Ballance has been sentenced to six weeks before a video screen. Seventy hours of video must be meticulously logged into her laptop. Every clip has to be described. They overshot, Ballance owns up, "but our librarian will be able to sell that footage forever."

Her only time out will be the underwater footage. "Jeanie Ackley, the show's assistant producer, will do the underwater stuff; she's a marine biologist. I can say I like a particular shot, but she can tell me, "That's an *abudefduf* – which really is a genus of fish – or whatever."

Faced with 70 hours of sitting before a screen, is it any wonder that Ballance sometimes drifts in a bit later in the morning? It has become her custom to leap into her car in the mornings and breakfast at a local surf beach frequented by yellow-eyed penguins, sealions and sometimes the odd leopard seal calling by from Antarctica.

Now there's a reason to live in Dunedin: wild beaches on your doorstep. "I am the only person there, and yet I can still drive to work in 20 minutes."

If in the mainstream world of film, New Zealand is internationally known for Miramar Studios, Peter Jackson and Wellington, then in the world of natural history filmmaking the equivalents must be Natural History New Zealand, Michael Stedman and Dunedin.

From its premises in that Victorian barracks – now grafted internally onto the building alongside – NHNZ has a number of film crews operating world wide at any one time. NHNZ now employs around 120 people: a mix of full-time and freelance. It is a profitable enterprise for its owners, and it has critical acclaim. Pass beneath the lion and unicorn and into the foyer of NHNZ and you will find yourself in a gloating room, with a wall of framed certificates and a glass cabinet of trophies, including the Emmy won by Ian McGee (another Massey alumnus) for an episode of *Twisted Tales*.

But you have to ask yourself – as you fly in by noisy turboprop from Christchurch – how did it come to be here? Cut it how you may, Dunedin remains a small, remote southern university city with a bracing climate.

Happenstance is the answer. Natural History New Zealand had its beginnings back in the days of that somewhat fusty state monopoly, the New Zealand Broadcasting Corporation. In Dunedin the NZBC maintained a production studio – where programmes like *Play School* and *Spot On* were produced – and a local television station. So when populations of kakapo were found in Fiordland in the 1970s it was Dunedin staff who

were called on: news reporter Neil Harraway, news cameraman Robert Brown, and sound operator Adrian Kubala. (Harroway and Kubala remain NHNZ employees; Brown does freelance work for the company.)

Five minute news items about wildlife became 15-minute specials. Then Neil Harraway visited the BBC Natural History Unit and said, "Hey we could do that here." Soon Dunedin was turning out full-blown documentaries under the aegis of natural history unit of its own.

Success bred success, and by the 1990s – the point at which Ballance joined it – the Natural History Unit was celebrated for making the documentary series *Wild South*, had won a clutch of awards . . . and was owned by a state broadcaster whose principal interest had become dismembering itself.

"As a part of Television New Zealand the Natural History Unit had begun making shows for overseas sale, but at that point TVNZ wasn't interested in having an in-house production facility," explains Ballance. "Our future needed to be somewhere else. Michael Stedman, our Managing Director, realised this before anyone else and spent a year looking for someone to buy us."

That someone was Fox Television Studios, which purchased 80 percent of what we now know as Natural History New Zealand in 1997 and the remaining 20 percent a little later. Michael Stedman remains NHNZ's Managing Director.

You should blame Jacques Cousteau, if anyone, for what Ballance has become. Ballance may never have had a childhood ambition to make documentaries, but she thinks Jacques Cousteau – who left an entire generation of young women yearning to be marine biologists – might be implicated in her decision to pursue natural history and to enrol, first off, at Auckland University, which runs a marine laboratory at Leigh on the east coast north of Auckland.

But Auckland University's zoology department felt large and impersonal, and when it came to her masterate Ballance picked Massey, where she had heard there was more of a community feeling.

Quite what she would do her masterate eluded her. Land snails – New Zealand has a multitude of species – interested her, but she could see certain drawbacks: "I wanted to do the little ones, incredibly small and complicated. None of them had names. They had shorthand titles like *punctid n. sp. 31*, and I realised I was going to have to spend all my time peering down a microscope wondering what the hell these things were."

Then, after talking with Professor Brian Springett, Ballance fell under the sway of Mike Rudge, of DSIR Ecology Division. Rudge's particular fascination was the feral sheep of the remote and bitterly cold Campbell Island. Ballance had no particular feelings about feral sheep, but she was eager for the adventure of Campbell Island.

If you were to take that turboprop aircraft from Christchurch to Dunedin and persuade the pilot to keep flying roughly south, in another hour or so you would look down onto the grey-green scrub-covered peat of unpeopled Campbell Island. Situated 600 kilometres from New Zealand, Campbell covers 11 square kilometres, with a western coastline fringed by sheer cliffs and promontories.

Sheep had been introduced to Campbell Island in 1895, and it was farmed up until 1931 and then abandoned, together with its 4,000 sheep and 20 cattle. By 1960 the sheep numbers had declined to around 1,000, but then the population began to grow. In 1970, in answer to concerns about the damage the sheep were doing to the island ecology, a fence was erected across the waist of the island and most of the sheep to the north were shot. By the early 1980s the numbers of sheep on the southern half of the island were burgeoning, and another cull was planned.

Mike Rudge was interested in the growth and age structure of the sheep population. How had the population changed in response to selection pressures? What had happened that the population should be growing so rapidly after having declined for so long? He wanted a suitable master's student to find out.

Professor Springett remembers Ballance preparing thoroughly and then "effectively disappearing off the face of the earth. Our contact was a once-weekly radio sched to discuss her progress."

Ballance wintered over on the island (when the late John Skipworth, one of Ballance's thesis supervisors turned up after a rough boat trip to be shown her progress the island was deep under snow), her time on the island coinciding with the cull on the southern half of the island.

Which she remembers as a time of dead sheep and more dead sheep: dead sheep she would have to dissect. Dead sheep from which she would have to take the jawbones, which, boiled and cleaned, would, through their tooth eruption and tooth wear, be used to measure the age of the sheep when she got back to New Zealand. "It got very macabre. There were carcasses everywhere. It was cold on Campbell Island, and my hands were always wet. It got to the point where I'd look forward to having my hands in a fresh carcass to warm them up. Or I'd be having lunch and realise I was leaning on a dead sheep."

Previous page. Alison Ballance with waved albatross, Espanola Island in the Galapagos. *Photo by John Madunich*

Left. Camera operator Sophie Buck and producer Alison Ballance with herder family, winter, Mongolia. Copyright: NHNZ

Below. The 1947 Antonov biplane used for tracking radio-collared tigers in the Russian Far East. *Photo by Stacey Hertnon*

Bottom. Alison Ballance and marine iguanas, Fernandina Island in the Galapagos *Photo by John Madunich*

Then there was the cleaning of the jawbones. Ballance shared quarters with the staff of the island's meteorological station. "The smell of boiling mutton is foul. Everyone else would leave the weather station when I was boiling jawbones. Then the cook would go, it's roast mutton for dinner tonight, and I would say, 'Well I don't think so.'"

The experience would be the trigger that turned Ballance vegetarian. It would also turn her into a published writer. On her return to New Zealand Ballance wrote up her experiences as a story for Air New Zealand's in-flight magazine.

For a while, after her return to New Zealand, Ballance's career trajectory looked a little wobbly: dribs and drabs of contract work followed by periods of unemployment. "You don't just walk straight into a job as an ecologist," says Ballance matter-of-factly. But she also set about gaining the hands-on, practical experience she lacked. Working for the Wildlife Service she walked transects through South Westland forests, logging the birds she encountered. As a volunteer she helped in the search for the South Island kokako rumoured to exist on Stewart Island, and she helped trap ferrets and cats in the Mackenzie country. Eventually a job found her.

Ballance had applied for a job as field technician with DSIR's Ecology Division. "They looked at me and said we don't think you are field technician material." Instead, on the strength of her masterate, that published article, good English grades from school, and the endorsement of Mike Rudge, Ecology Division created a position for Ballance as an information officer. There she stayed for four-and-half years, during which, she says, "I also collaborated in some field research to keep me sane, mostly on wetas and rock wrens."

Soon after handing in her thesis Ballance had been interviewed for a position with the Natural History Unit. "Peter Hayden [another Massey alumnus and a contemporary of writer, cartoonist and playwright Tom Scott] interviewed me and I didn't get the job, but I said to myself there's this place called the TVNZ Natural History Unit and they make documentaries. In fact they make *Wild South* documentaries. I thought 'I'd like to do that'." Three years later the NHU came calling: would she be interested in a job as a researcher? "But at that point I was about to go backpacking in South America for four months." When the circumstances finally fitted, it was five years on from her first interview: five useful years during which she had come to know almost everybody working in ecology and conservation. "Someone would say, I think I might like to film wetas and I'd say this is who you need to talk to, where you need to go and this is the time of year, and time of day," she says.

About filmmaking, she knew little. "When I started, 'producer' and 'director' were Hollywood terms." But she soon came to understand that she wanted to direct. "Directors have this creative freedom."

Ballance's first documentary as director and writer was *Invaders of Paradise*, a compilation from the NHNZ library covering the many exotic species – deer, possums, rats and suchlike – that now, "through a series of bad decisions," says Ballance, make New Zealand their home. Her first documentary as producer, director and writer – this time Ballance had a camera crew at her command – was about wetas, *Return of the*

Demon Grasshopper.

"And then I did a show, which took three years to film, on kakapo: one year on Little Barrier Island and two years on Codfish Island."

Ballance had acquired a reputation for hardihood: "I have a tolerance for hard field work that most people at work don't share. You can put me on an island for six months and I am quite happy to live in a tent and carry heavy packs."

Her first overseas break was the *Deserts* episode of the *Wild Asia* series. "They asked 'Do you want to do the desert show?' and I said yes, but I changed it to desert and high grasslands, because dry grasslands are such a major ecosystem in Asia. I also knew how hard it would be to make an entire show about the desert."

In 1998, seven years after the fall of the Soviet Union, Ballance and a crew were in Mongolia following the migration of the demoiselle crane and filming the Przewalski horses, or takhi, as they are known locally. For several months the six Mongolians and three New Zealanders traversed the country, passengers in a rundown jeep and a very rundown van. With designs based on World War II jeeps these could run on 76 octane petrol that would have been the death of a Japanese vehicle.

"The parts were completely interchangable. The drivers just had a big tin of nuts and bolts and screws and if anything broke they'd fix it. We once did a complete head gasket change in a paddock," says Ballance.

"I used to despair that we broke down so often. Our Mongolian fixer, on the other hand, would say how great it was that our drivers were such good mechanics."

One of Mongolia's other peculiarities is the local cuisine, heavily centred around mutton.

"Someone must have thought 'If there is one place in the world where they eat boiled mutton and only boiled mutton and they eat it three times a day, then that'll be Mongolia'," says Ballance. "'So why not send Alison there?' The nice thing was my camerawoman was also a vegetarian and we did have our own cook. I lost a lot of weight, and I when I got back to New Zealand I was fond of saying, 'If anyone offers me boiled rice and tomato soup I will throw it at them.'"

While the animals themselves haven't taken to demanding salaries or residuals, keeping a camera team in the field is expensive. *Wild Asia* was a blue chip series of documentaries; blue chip meaning shot in the grand manner, of high moral intent and big budget. To film her single episode of *Wild Asia*, Ballance spent three-and-a-half months in Mongolia and three weeks in Nepal, and her assistant producer spent two months in India. *Equator* – though smaller budget – is also blue chip.

For prestigious ventures like these NHNZ must stitch together partnerships (unlike its state-funded rival the BBC, which need not bother with such details).

For *Wild Asia* that meant teaming up with NHK (Japan's BBC equivalent) and Discovery Channel. For *Equator* the co-production partners are NHK, Discovery HD, and France 5.

Ballance has established a particular relationship with NHK: she is often asked to edit and repurpose NHK's documentaries for the international market. "The Japanese appetite for nature programming is incredible. They revere nature and the small things in the world, like butterflies, flowers and birds."

Every week NHK will run a new natural history documentary of between one and two hours in length.

"To a New Zealand way of thinking these are very slow and full of detail. The Japanese want to know what every animal is. If you show something and don't mention it in the script, they will caption it in the subtitles."

The European sensibility is similar. "They like wildlife shows. They like information. If you try making a 'whizzy-bangy' show for the Germans they'll send it back and say we need it slower, partly because it takes a long time to say anything in German."

Alison Ballance and praying mantis, Balahala Reserve, southern Thailand. ***Photo by Joseph Pontecorvo***

The American market, on the other hand, has an appetite for the fast-moving shows, where the wildlife on display is 'weird', 'whacky' or titivatingly life-threatening. "Don't even bother pitching a show on birds to the Americans. They'll just say, 'We don't do birds'," Ballance says, whose assignment before Equator was *Animal Face Off* for Discovery Channel.

"The idea was to pit two big charismatic animals against one another and see who would win in a virtual fight to the death," explains Ballance. Saltwater crocodile took on great white shark. Hippopotamus took on bull shark. Lion took on Nile crocodile.

Animal Face Off drew on NHNZ's vast library of stock footage, supplementing this with models and computer animation.

"We had a team of fabulous model makers in Auckland called Glasshammer, the people who made the animated whales for *Whalerider*. They made life-size aluminium skulls of all of our animals and mounted these on stripped-down diggers powered by a massive hydraulic system. Then we'd get in a couple of experts, one for each contender, and we'd run a series of tests."

"Bite Force Tests," overenunciates Ballance.

"For the croc and the shark they built a huge water tank and they'd take them into the water and would have them attacking things like canoes."

All of which is fun, but not really her calling.

"I will work on a show like *Animal Face Off*, but it's not where my satisfaction lies. This *Equator* series is a chance to work on a show I really believe in."

Animal Face Off is a long way from *The Undersea World of Jacques Cousteau*, (1967–76).

The sixties and the seventies were the days, as many a baby boomer will attest. Jacques with his hat, his nasal-but-charming French accent, and that of-a-time John Denver theme song. Marlon Perkins in *Wild Kingdom* (1963–71) travelling the world in search of adventure, exotic wildlife, and the occasional bout of mud wrestling with crocodiles. Walt Disney giving mom, dad and the kids their fill of heavily anthropomorphised animals, whether in documentary narratives or as the characters in animal stories.

In the 1980s ecology and saving the planet became more recurrent themes, and a series of technological advances began to change the nature of what a natural history documentary might set out to achieve.

Natural history documentaries were always an improvement on reality: an animal's life and behaviours viewed in close-up reduced to 50 minutes of footage as seen through a telephoto lens. But with microphotography, macrophotography, infra-red photography and computer graphics people were able to experience the natural world in ways unavailable to even the most privileged observer. Audiences could now fly with migrating geese, take in an insect's view of the world, or eventually visit the simulation of a bygone world in the BBC's *Walking with Dinosaurs* (1999).

The 1980s was also the decade that cable TV entered the market with the launch of Discovery Channel in 1985.

Discovery Channel's first programme to air was *Iceberg Alley*, its first original programme, *Ivory Wars*. In June 96 it launched Animal Planet, the first of

Alison Ballance (right) with sound operator Stacey Hertnon and camera operator Joe Pontecorvo with "tiger 59", a six-month old Siberian tiger cub whose mother was killed by poachers in the Russian Far East. ***Photo by John Goodrich***

In praise of foleys

Of all of the many studios in NHNZ, it is the foley room – a quirky cupboard-like space lined with sound insulation and containing a desk, chair and microphone – that Ballance reveals with the most glee. Do I know what a foley artist is? she asks. Henceforth I must be sure to watch for the foley references when film credits roll.

A foley, it turns out, is a sound you create to substitute for the sound you need. Often it is difficult to capture the sound in the field: the animal may be too far away, there is no sound operator, or, if you are capturing video – which has synchronised sound recording – what you hear is people cursing, passing instructions and bumping the mike.

So the sound track is created back in the studio, partly from sound archives – for that particular bird call – partly with the ingenuity of the foley operator. Ballance takes a tray of white sugar and piece of polystyrene. Want to hear the sound of a kea walking across freshly fallen snow? The sound of polystyrene in sugar is a dead ringer.

"The most challenging foley I have had to do was trying to be a limp lettuce leaf that a kea had pulled out of a tip," says Ballance. "My most gory one was for a kea digging through the flesh of a sheep's back. I used a teaspoon and a kiwifruit for that one. In fact it was so gruesome we had to mix it out. It was too realistic."

what would become a portfolio of channels, which now includes Discovery Travel & Adventure, Discover Health, and the Science Channel.

Discovery is now hooked up to 85 million homes in the United States and to 126 million homes in 70 other countries around the world. (Indeed the Discovery Channel's market penetration and documentaries it screens are one reason public broadcasters give for failing to screen documentaries themselves.)

Like the Discovery Channel, NHNZ has also broadened its offerings, which now encompass nature, science, adventure, health and people. And its blue chip offerings are balanced by cheaper content, often tailored to the timing of the ten-minute ad break. Peter Haydon welcomes the expansion content: "I don't regret the natural history has been so popular over the years, but I wish science had had more of a go over the years. There are incredible stories out there to be told."

A tour through the warren of passageways and studios reveals something of the variety of work going on.

In one studio, post-production work is being done on *Up Close and Dangerous*, a programme for Animal Planet featuring wildlife camera operators getting *very* close to their subjects. A series of screens flicker as footage is digitised.

In another, work is being done on the soundtrack of *The Diva Mummy*, which features forensic scientists investigating 2000-year-old Han dynasty mummies from China. "Lords and ladies lived in up in luxury," intones the narrator, dwelling on the alliteration, while a soundtrack of cymbals and synthesisers builds unease, and the lurid green titling floats above the flickering, scratched sepia film footage.

"We call this eye candy," says Ballance.

In the vaults are thousands of hours of wildlife footage that can be turned to all manner of uses, from high-end documentary to product advertising.

Ballance is not alone in admitting to being influenced by the natural history documentaries she saw in her formative years. A generation of environmental activists would say the same. And theirs were the pre-computer, pre-cable TV years. How much more important has the role and form of the natural history documentary become when we are so much more citified and disconnected from the natural environment?

Professor Brian Springett is fond of beginning his first-year lectures with a cartoon of a character transfixed by the glory of a sunrise on his television screen while the real thing is visible out his window.

Natural history documentaries inevitably construct and frame particular points of view. In filming the *Deserts* episode of *Wild Asia* Ballance and her team tried valiantly to avoid filming people and their intrusions into the landscape. Nature unadulterated has been a natural history documentary convention.

"But you couldn't do that. The nomads are as much part of the grasslands as anything else and they have been for thousands of years. People on their horses kept riding past the demoiselle cranes as we were filming them. We got very few shots of people, but that was what everyone wanted to see when we got back."

Natural history documentaries can't be too pessimistic; audiences prefer uplift. But by giving audiences what they want you may create false perceptions. "You run the risk of showing everything is okay when it isn't," says Ballance.

"But people do gain appreciation and understanding and you don't have any desire to save things until you have some understanding and can form a bond."

(The most famous example of a natural history documentary creating reality is Disney's 1958 *White Wilderness*. In a deplorable piece of nature fakery, they took lemmings to a precipice above a river and herded them off, making them, quite unfairly, a byword for acting on a self-destructive urge.)

Are nature documentaries good for the environment? Can watching one change your world view or alter your behaviour? Perhaps.

A survey conducted in the United States found, as you might expect, that environmental concern was a good predictor of wildlife documentary viewing, but also that watching television nature documentaries to a slight extent:

> ... contribute[d] in unique positive ways to pro-enviromental behaviours, above and beyond the influence of a host of demographic, contextual and various television use variables, as well as the attitudinal measure of environmental concern.*

So are we seeing the documentaries made by NHNZ? Generally not. NHNZ professes to having great difficulty in getting TVNZ to screen its documentaries, and those that are screened often end up in graveyard slots.

Professor Springett believes the popular heyday of the nature documentary fell in the '70s and '80s.

By 1990 – the year in which *Moa's Ark*, a four-part documentary fronted by botanist David Bellamy, was screened – documentary fatigue was setting in, though whether this was among viewers or programmers and advertisers he is less certain.

NHNZ are, of course, at a remove from the ratings game that determines what runs when, but natural history documentaries have been known to rate well and to bring in a slightly older male demographic that is tough to reach.

Wild Asia, which did manage to get a prime-time slot – TV3 on Wednesday at 7.30 pm against *Coronation Street* on TV One – gained a respectable 17 percent of those aged 18 to 49.

Public television is awash with 'reality' series:

*** Holbert R.L., Kwak N. and Shah D.V. (2003). Environmental Concern, Patterns of Television Viewing, and Pro-Environmental Behaviours: Integrating Models of Media Consumption and Effects.**
***Journal of Broadcasting & Electronic Media, 47(2)* 177-196**

Peter Hayden

"He's got that sort of Bill Clinton, rubbery face, broken nosed look ... a huge collection of flaws that make up quite an attractive face," Tom Scott told the *Southland Times* in 2003. Scott, the satirist and playwright was casting the Dunedin showing of *Daylight Atheist*, his one-man play about his alcoholic father.

Who could better for the role than his friend the talented Peter Hayden, the Head of Special Projects at NHNZ? "He was the first actor I thought of."

The friendship dates back to the 1960s when Scott, Hayden and Rob Robinson, the current Commissioner of Police, were bench mates in physiology.

It was at Massey University that Hayden – the boy from Hawkes Bay who wanted to become a country vet – discovered the stage. He joined the Drama Society, took part in capping shows and saw his first professional theatre production at Manawatu Little Theatre, "which probably turned my head a little".

Hayden graduated with a BSc, but his aspirations had shifted. He headed to Wellington to drama school, and to acting gigs with Circa and Downstage. He joined television, becoming "the token male" in the all-female cast of *Today at One*. Sharon Crosbie, the programme host taught him his chops as a script writer. "She has the quickest wit of anyone I know. She is the master."

The move to Dunedin came in 1980. "I was brought down for six months to write a couple of scripts. Michael Stedman [NHNZ Managing Director] asked me to give them a bit of a hand with the first series of *Wild South*, and I forgot to leave."

This was a time, he says, when New Zealanders knew little about the natural history of their country. Hayden himself was not atypical: "The animals I knew were enclosed in fences." A wellspring of curiosity was there to be tapped.

At the Natural History Unit, Hayden teamed up with photographer and naturalist Rod Morris, who had started work on the same day he had. Their first collaboration was producing a documentary about the saving of the black robin, which was then on the brink or extinction. The story told by the footage they had was, on the face of it, straightforward: "Staunch guys in shorts racing up and down cliffs, saving these little black powder puff birds and transferring them to another forest that wasn't falling down".

But Morris and Hayden could see that the footage also contained another more titillating narrative. Of the five robins in existence, three were males and two were females, only one of which was laying. To minimise risk, the first bird to be transferred was a male. The following day a pair were transferred.

"But when the new male arrived, he looked around, thought where am I, and went up to the top of the nearest tree to announce himself as the territory owner. The little single guy who had been there from the night before, snuck in, courtship-fed the female, and basically stole her. The same thing happened the next day: the new male of the second pair went up to the top of the tree and the new loner male came in and stole the female. So you had a wife-swapping situation. The birds became characters. I think that was our first break-through story, using the footage to tell some good science, but also to take you into the personalities of the animals involved."

The 1990 television documentary series *Moa's Ark,* fronted by David Bellamy and in large part engineered by Hayden and his fellow alumnus Ian McGee, was a high point. But then came a decade during which TVNZ took very little from NHNZ, "though not for want of our trying," says Hayden, who now has hopes the TVNZ Charter will lead to more NHNZ work being seen locally. He would particularly like to see more science documentaries: "I wish science had had more of a go over the years. There are incredible stories out there to be told."

His early nature documentaries are now the stuff of folk memory. "A lot of people have a great memory and loyalty for the shows they have seen, enjoyed and grown up with. People come up to you at university and say the reason they are there is because of it. It feels like you made a difference at a time when you could make a difference."

houses are renovated, gardens remade, celebrities sent to play games with one another on tropical islands. But do we get to see reality series that matter? Will New Zealand audiences see *Equator*?

"If the public broadcaster feeds us a diet of pap, then the problem is that it then takes an enormous effort to get hold of real information. I find it very depressing to think that we might only get the dumbed-down version," says Professor Springett.

Although there are some measures which show the world's ecological situation to be improving, generally things look grim. We are, ecologists tell us, living in the time of environmental degradation and mass extinction.

Ballance sees hope for places like the Galapagos and Palmyra.

In the Galapagos tourism is tightly regimented, based on boats, and time ashore is restricted to certain trails and certain hours, and is strictly supervised. Palmyra is uninhabited (except for conservation staff) and difficult to get to.

These places still have their problems. In the Galapagos the fishing community engages in shark-finning and is lobbying for longline fishing, a notorious cause of seabird deaths. Palmyra is infested with rats and a recently arrived scale insect is killing the island's stands of *Pisonia* trees.

But the problems are fixable.

Ballance is less sanguine about the ecological prospects of some of the other places she's been.

In 2003 Ballance filmed *Tigers: Fighting Back*, visiting three Wildlife Conservation Society projects – one in India, one in Thailand and one in the Russian far east.

"There's no one-fit answer. What you have to do in India to save tigers is completely different to what you have to do in Thailand which is completely different to what you have to do in Russia. You are dealing with a predator that requires a huge range and is going to come into conflict with people and their livestock."

"In India, they say you have to put them in a national park and remove the people. In Russia, the home range that a tiger requires is so vast you have to come up with solutions that allow people and tigers to live alongside each another. The Sikhote-Alin Biosphere Reserve where we were filming is only big enough for 25 tigers – and even those spend most of their time outside the reserve."

In Thailand the problem lies in managing a tiger population with no regard for territorial boundaries. "You aren't dealing with one country, but maybe two or three," says Ballance.

In their darker moments, she says, scientists see little hope of tigers surviving in the wild.

Her own favourite place is an environmental success story – and it's not that far distant from Dunedin. Cleared of possums and rats in the 1990s, Codfish Island, offshore from Stewart Island, is a sanctuary for a small-but-growing population of kakapo. As a documentary maker Ballance knows them well, though she still has unfinished business: she hasn't yet managed to film kakapo mating, something no one has ever seen. While on the island she, like the kakapo, lives nocturnally.

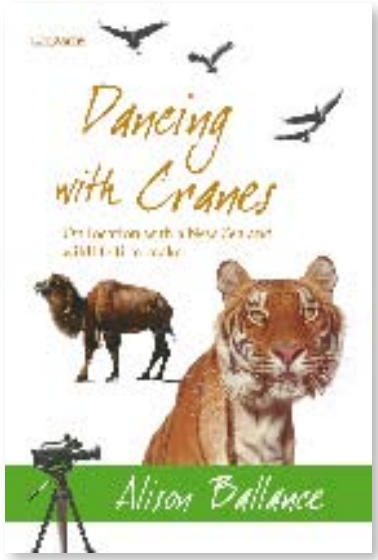
" It is an amazing experience to lie on the ground, look up at the stars, and listen to all the seabirds flying in and the kakapo booming. This is what New Zealand used to be like before we mucked things up."

If ever there was a case of a person fitting their job, then Ballance fits hers. She gets to be creative and to work with other creative people whom she admires. She gets to spend time in places few of us will get to. "And they pay me!" she says, in mock astonishment.

She likes getting home to Dunedin, but when she leaves for Ecuador in a few months to film in the high Andes and revive her rusty Spanish there will be a spring in her step.

"It used to be more complicated when I had a cat and chickens, but I don't have them any more," she says.

"I just walk out of my house and shut the door."



As this issue of *MASSEY* goes to press, in another corner of New Zealand another publication due out in April is also in final production. The following is excerpted from the publisher's prepublicity.

Dancing with Cranes

Alison Ballance

(Longacre Press $29.95)

"…someone passed me a large metal basin full of boiled sheep innards. If it was offal, it was in there. I smiled politely, declined and passed it along. Oh the joys of being vegetarian in the land of boiled mutton."

Wildlife film-maker Alison Ballance has driven across Mongolia in search of wild horses and dancing cranes. She's spent nearly nine months working on remote New Zealand islands to film the nocturnal, rare kakapo. She's travelled through steamy jungles in Thailand, and across the frozen forest of the Russian Far East in search of the Siberian tiger.

Ballance's job as producer for TV company Natural History NZ has had her track rare and wild animals in some of the most remote places on earth. The stories behind the films are extraordinary; being on location with Ballance is an adventure, frequently into the unknown.

Her experiences range from the uncomfortable to the absurd, though she's had more than her fair share of dust and frustration, this book also captures the joy and elation of discovery. Whether she's nose to beak with a kakapo, riding a Bactrian camel in the Gobi, or tracking tigers in Russia's winter snows, travels with this winsome wildlife film-maker are seldom glamorous but always captivating and exhilarating.

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18TH CENTURY *Notes*

Dr Allan Badley, Director of the Centre for Eighteenth-Century Music, is one of the world's leading authorities on music of the late 18th-century. He has edited and published over 250 works by major contemporaries of Haydn, Mozart and Beethoven, and the publishing house he co-founded in 1995 with Klaus Heymann of Naxos is widely regarded as the most important specialist publisher in the field. Recordings based on Dr Badley's editions have won a number of major international awards. He holds the Silver Medal of the Internationale Ignaz Joseph Pleyel Gesellschaft in recognition of his contribution to Pleyel scholarship.

Are you from a musical family?

My maternal grandmother was the most important early musical influence on my sister and me. She was a very fine pianist who had studied at the Sydney Conservatorium shortly after the First World War and on returning to New Zealand she taught privately for many years as well as often working as an accompanist. This is how she met my grandfather, a keen amateur singer in his younger days. My grandfather's second cousin, Peter Dawson, was one of the most popular singers and recording artists of the 1920s and 1930s. My sister is a very accomplished musician and is currently the head of the music department at St Matthews School in Masterton.

Did you set out to become a scholar or a musician?

Although I always enjoyed playing, I never felt drawn to the idea of playing professionally, probably because, as a pianist, I could see nothing ahead but a lifetime of private teaching. While still at school I discovered a mysterious discipline called musicology, which seemed to combine so many of my burgeoning interests: music, history, literature, archaeology and even detective work. By the time I arrived at university I was already an 18th-century buff; within five years I had progressed to the point of wild-eyed fanaticism.

What path did you follow to get to where you are now?

Having completed my MMus at the University of Auckland and, along the way, settled on a PhD topic, I set to work doing the preliminary source work for my thesis on the concertos of Leopold Hofmann (an important but obscure Viennese contemporary of Haydn). I headed off overseas in 1981, first to Canada where I had been awarded an Open Doctoral Fellowship at the University of Toronto, and then on to Vienna. At this stage I intended to spend six months or so in Vienna and then return to Toronto to take up my Fellowship. However, like many before me, once there I stayed. The opportunity to work with original source material proved irresistible. Almost every day I seemed to be making important new discoveries in church and cathedral archives, private palaces, monasteries and state libraries. I worked in Germany and around Austria; I even worked in archives in Budapest, Prague and Brno seeing myself as a kind of musicological Cold War warrior. It was pretty heady stuff and hardly surprising that I deferred my return to Toronto for another year. While in Vienna I also met some of my musicological heroes – foremost among them HC Robbins Landon, the great Haydn scholar – and they showed a flattering interest in my research. The experience of discussing knotty, technical problems with scholars like Landon, Otto Biba and Daniel Heartz soon convinced me that going back to Toronto would be a mistake. The material was all here, and my thesis could be written anywhere. I decided to stay in Vienna as long as I could – I'd also met my future wife by this time – return to Auckland, submit my thesis, and then return to Vienna to begin my real life's work. We returned to New Zealand in 1985 (Satomi had just graduated from the Musikhochschule in Vienna) and, after I duly finished my thesis and received my PhD, we flew back to Vienna, where I resumed my research work and started the long and frightening search for gainful employment. Over the next few years we moved around a good deal, including a short spell in Ireland, where I taught briefly at University College, Dublin. An offer of a Postdoctoral Fellowship at Otago brought us back to New Zealand in 1988, and we moved to Wellington the following year when Satomi joined the New Zealand Symphony Orchestra. In the early 1990s I taught part-time at Victoria University (and, very briefly, at the Conservatorium of Music) and managed the New Zealand Chamber Orchestra. My research work on Hofmann

> *I was already an 18th-century buff; within five years I had progressed to the point of wild-eyed fanaticism.*

Allan Badley is currently engaged on three major research projects for the Centre: an edition of the complete chamber music of Joseph Boulogne Chevalier de Saint-Georges; an edition of the complete piano sonatas of Ferdinand Ries; and, together with the Austrian scholar Dr Heinz Anderle, an edition of Ignaz Pleyel's 1785 opera *Ifigenia*.
All three composers have interested Badley for years and he has played an important role in reviving international interest in their works. Pleyel and Ries were considered very important figures in their day.

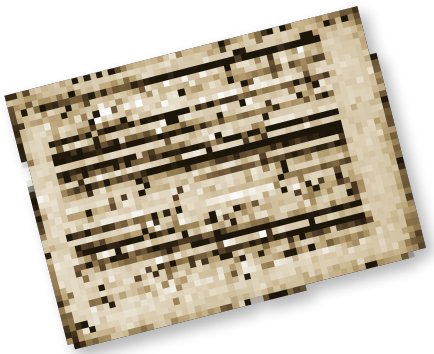
Ferdinand Ries (1747–1838)

Ferdinand Ries was not only a pianist of formidable power and an unusually gifted composer, but he also remained (with odd intervening periods of hostility) one of Beethoven's most trusted friends right up until the older composer's death in 1827. Ries composed successfully in most genres and his piano concertos and sonatas are of particular interest given his connections with Beethoven. Allan Badley's edition of the complete works for piano and orchestra promises to be a major musical landmark. Two of the eight concertos are to be recorded in February by Christopher Hinterhuber, winner of the Beethoven Competition, with the NZSO conducted by Uwe Grodd. The edition of the complete sonatas begins with the Sonatas Op.1, which were completed in 1804 and dedicated by Ries to his teacher Beethoven. The works received a lengthy and generally favourable review in the *Allgemeine Musikalische Zeitung* and doubtless Beethoven pored over the works suspiciously before allowing the dedication to proceed. Perhaps as a mark of his approval Beethoven allowed Ries to make his début in Vienna as a soloist with a performance of one of his own major works, the Piano Concerto in c minor, Op. 37. Although Ries studied piano with Beethoven rather than composition (a nice touch, since Beethoven's most important keyboard teacher was Ries's father), there is little question of the influence he exerted on Ries's development as a composer. Strangely enough, Ries's keyboard writing quickly moved away from Beethoven's own style towards that of Hummel and the early Romantics. His keyboard sonatas – like the concertos – represent one of the most important series of works composed in Beethoven's lifetime. The modern premières of these works will all take place at Massey University under the auspices of the Centre for Eighteenth-Century Music.

continued, and I worked a good deal with a chamber orchestra in Vienna, who were performing and recording some fairly rare and exotic repertoire. I had always been interested in editing works for performance – indeed, I conducted the first-ever modern performance of a Hofmann symphony while a student at Auckland and an all-Hofmann programme with the Dunedin Sinfonia in 1988 to mark the 250th Anniversary of the composer's birth – so these activities dictated to a certain extent the thrust of my research work at the time. In 1995 I founded the publishing house Artaria Editions with Klaus Heymann of Naxos to begin a systematic and large-scale exploration of music of the late 18th century. The project was – and remains – unique in the musical world not only for its sheer scale (we have now published over 400 works) but also in its integration of research, publishing, performing and recording. Our work has had an enormous impact on the wider perception of music of the late18th century. An indication of this is the success our recordings have enjoyed on the world stage: we have won 'Best 18th-century Orchestral Recording' category at the prestigious Cannes Classical Awards on three occasions and, significantly, with composers many would consider to be hopelessly obscure. These successes – and the performances which flow from them – have vindicated our work in bringing the composers back from the brink of extinction and provided for the first time the means upon which to build a more detailed and accurate evaluation of the music of the period. The same principles are being applied to our work at the new Centre for Eighteenth-Century Music: rigorous research with practical outcomes in mind– publications, performances and recordings of international significance.

How do you go about your work?
Much of my work time is spent alone at my desk or at the keyboard (either my trusty synthesiser or more-favoured piano), but in the lead-up to performances and recordings I work as closely as possible with the artists. When works are recorded in New Zealand it is a good deal easier for me to be directly involved in the process than at other times, but it is amazing how many ideas can be conveyed via e-mail or lengthy telephone calls. The phone calls are the most fun as they almost invariably end up with me listening to the orchestra via the conductor's cell phone and then sending critical comments back down the line concerning possible variant readings, nuances in interpretation and so forth. These calls might come from anywhere – Sweden, Germany, Hungary, Canada, Portugal – but the process is always the same: listen, approve/argue, propose an alternative (sing it!), listen again. Not as much fun as being there, of course, but supremely invigorating nonetheless! Working with other musicologists on editions is a good deal less frantic but no less stimulating as so many new and exciting ideas tend to emerge from the process. These can range from a re-evaluation of a tricky editorial problem to the discovery of otherwise unknown works. The scholars I work with on an almost daily basis are not only undisputed leaders in the field but are also a uniquely pleasant group of individuals.

How much is technology changing things?
Improvements in technology over the past decade – and in particular, the development of sophisticated and flexible music notation software – have made a big impact on the kind of work I do. Projects which even 20 years ago would have been completely unviable – an edition of the complete Wanhal symphonies, for example – are now perfectly feasible. The interface between computer and synthesiser adds a new dimension to the process of editing and proofing. The ability to play through works in all voices through the synthesiser is enormously helpful in planning performances and recordings. It is possible to experiment with different tempi and even focus on problems relating to individual parts or sections of the orchestra. All this can be done using one's musical imagination, of course, but the use of such technology is extraordinarily useful. Streaming music via broadband also promises to have a major impact on our work since I believe that an increasing number of recordings of highly specialised repertoire will be made primarily with this market in mind. The reduced production costs will allow an even greater number of recording projects to be undertaken. Although technology is playing an important role in source research and the processes of publication, recording and dissemination of music, the most challenging problems in editing call for creative, musical solutions. The technology helps – a synthesiser is like a captive (unmusical) orchestra – but ultimately the solutions are arrived at by very traditional means and a thorough understanding of contemporary compositional and performance practices.



Where you can't establish the provenance of a piece through documentary evidence, how do you determine the composer?

Establishing authenticity is one of the biggest problems in 18th-century music given the paucity of autograph material and authentic copies. Scholars are generally agreed upon how best to proceed in terms of establishing a hierarchy of reliability of sources, and yet all too often we find that a work – often an important work – survives in a single copy of unknown provenance in spite of our best efforts to identify contemporary professional copyists and paper types. Once one is reduced to deciding a work's authenticity on stylistic grounds (i.e. on internal evidence), the picture becomes even more confused. The American scholar James Webster once pointed out that to decide a work's authenticity on stylistic grounds means having to prove that no other composer could possibly have written it. This is a tough ask, particularly when dealing with secondary figures about whom we know comparatively little. To illustrate how problematic this can be, we need only consider the case of the Haydn D major Cello Concerto. For many years it was believed that this work may have been composed by Haydn's principal cellist, Anton Kraft. Examined from every stylistic point imaginable the work just didn't seem to be convincing as Haydn ... until one day Haydn's signed-and-dated autograph score was discovered in the cellars of the Austrian National Library! Very often, though, there is no alternative but to make a judgement call based on style, and one relies almost as much on gut instinct as on a detailed knowledge of the composer's style. Most scholars have made mistakes, and as we learn more I dare say more of these mistakes will come to light. It is very frustrating, though, to see works still being performed under the wrong composer's name after the question of authenticity has been settled. One of Leopold Hofmann's Flute Concertos is still frequently offered as a Haydn work over 70 years after the misattribution was first discovered.

Nonetheless, as the secondary figures begin to emerge from the shadows I think many of these problems will disappear, except, perhaps, where the original mistake is in itself hallowed: Brahms's 'Variations on a Theme by Haydn' will forever conceal Pleyel's authorship of the theme in question.

You must have cause to ruminate on the nature of fame and reputation. Just how arbitrarily do you think reputation is assigned? Why is a composer acclaimed during his or her day and then forgotten?

The selections made by history generally have been pretty much on the mark. However, the obscurity of many 18th- and early 19th-century composers is undeserved. A number of these figures were composers of enormous vitality and imagination and their later obscurity owes much to the fact that there was no conception of a classical canon until comparatively recently. It is only in the past few decades that any serious work has been done on the so-called secondary figures (Haydn's symphonies – one of the cornerstones of the classical repertory – were not published in their entirety until the 1960s). Only now – and as a consequence of the kind of work I have been doing for so long – are we beginning to realise the extraordinary riches to be found in this missing tradition, and with this comes a curious paradox: Haydn, Mozart and Beethoven emerge as less original than first thought and yet at the same time incomparably greater since the music of their most talented contemporaries was so good. Nothing we discover will upset the essential rightness of placing these composers at the top of the heap, but context will change everything. I'm also convinced that the day is not too far off when it will not be heretical to say that a good symphony by Wanhal is better than a weak symphony by Haydn and that Joseph Martin Kraus wrote far more interesting sonatas than Mozart. As a result, the classical canon and all of our musical lives will be enriched and the current ossification of classical music may be reversed.

What do you listen to outside of your musical specialisation?

Cricket!

Joseph Boulogne Chevalier de Saint-Georges (1745-1799)

Joseph Boulogne Chevalier de Saint-Georges was one of the most remarkable men of the 18th century. Born in Guadeloupe to an aristocratic French planter and a beautiful Senegalese slave, Saint-Georges was educated at a prestigious military school in Paris, where he excelled in every physical pursuit from swimming to dancing. By his early 20s he was regarded by connoisseurs of fencing as perhaps the finest swordsman in Europe. If that were not enough, Saint-Georges was also a violin virtuoso of the first rank and a composer of extraordinary ability. He combined the careers of athlete and artist with great success and continued to fight exhibition matches even when his musical career was at its zenith. Saint-Georges formed and led a Black Militia during the revolutionary period and suffered a period of imprisonment during the Terror. After a brief and disillusioning visit to Haiti in the late 1790s, Saint-Georges returned to Paris, where he died in 1799.

This remarkable man has attracted a great deal of interest over the years and considerable number of his works have been published (the majority edited by Badley) and recorded. Saint-Georges's chamber music, however, remains largely unexplored and Badley's complete edition, being prepared under the auspices of the Centre for Eighteenth-Century Music, promises to shed important light on this aspect of the composer's work. The first volume, Three Sonatas for Violin & Fortepiano, Op. (b), was published last year and the works recorded (along with the Sonatas Op. Post, No.1) in Germany by the Japanese violinist Takako Nishizaki.

Ignaz Joseph Pleyel (1757–1831)

More editions of Pleyel's music were printed in the late 18th and early 19th centuries than of any other composer – including his teacher Joseph Haydn – and for a time at least he was easily the most famous and popular composer in Europe. Such was his reputation that a society devoted to the performance and promotion of his music was founded in the whaling port of Nantucket in the early years of the 19th century. This remarkable man also established a highly successful music publishing house, and a piano manufacturing business which is still thriving in Paris today. Pleyel wrote only two works for the stage – the charming marionette opera *Die Fee Urgèle*, composed at the age of 19, and the opera seria *Iphigenie*, written for the Teatro San Carlo in Naples in 1785. *Iphigenie* is particularly interesting because it combines both local (Neapolitan) traditions, particularly in its treatment of the voice, with the fully fledged and complex symphonic style of the composer's mature symphonies. The edition being prepared by Badley and Heinz Anderle for the Centre for Eighteenth-Century Music will be used for the modern première of the work in Austria this year. The Centre will also publish *Die Fee Urgèle* in 2006.

To be an extramural student is to contend with challenges. Sometimes these can seem almost overwhelming. Take the case of Jamie Parkin, whose disability prevents him from reading, or of one of Donovan Storey's students, who is amassing papers towards his masterate in Development Studies while caught up in the midst of a Maoist insurrection in Nepal. These are extraordinary individuals who command our respect. But every student has obstacles to surmount. There are the competing priorities of work, family and leisure, and the various crises that life throws at us unexpectedly. Even the most enthusiastic student must have times when study feels like a long, lonely slog.

Some of these are factors that Massey can do nothing about. What we can do is make sure that your experience of extramural study is no more difficult than it has to be. We want to ensure you have the best education, and the best experience of education possible. So (as of late February) what do we have planned? In March we will introduce an online pre-reading service. This will help you with the structure and language of your assignments, letting you know sooner rather than later if you are on the right track. We intend to have a response time of within three days for each submission we receive electronically. In April we launch the Online Connection, a service offering after-hours personal contact with people in our Learning Centre and Student Services. You will also find us introducing more tailored support for specific communities, such as our Pacific Island students and for permanent residents who do not have English as their first language. We will also be boosting the support already given to our Māori students. For more than 40 years Massey has been New Zealand's pre-eminent provider of extramural education. It is not a position we have reached by resting on our laurels.

Professor Ian Warrington, Deputy Vice-Chancellor responsible for extramural students

An education against odds

Jamie Parkin is disabled and living in Blenheim, but with the help of a support worker and a software programme called JAWS he hasn't let that stop him from notching up university papers.

Ansuné Lombard is reading aloud the opening chapters of *The Oxford Book of the Crusades* to disabled student Jamie Parkin. The last book she read him was 300 pages long and took three weeks to finish. This one breaks 400 pages.

The pair have an obvious rapport. They joke as they learn about the exploits of some of the characters involved in the crusades, recalling the fate of some they have already encountered in the previous book. Last year the Vikings held them similarly enthralled. Then, from the nearby bookshelf, a talking clock announces it is one o'clock. Study is over for another day.

It's only mid-February but Ansuné and Jamie have been getting a head start on the texts he needs to read for the three extramural papers he has enrolled for this year. The reading is the toughest aspect of Jamie's study. The 24-year-old has Laurence Moon-Biedl syndrome, a rare genetic condition that severely affects both his eyesight and speech. One of the key ways Jamie accesses the reading material for his courses is by having people read them aloud.

His study guides, on the other hand, are scanned by Massey using Optical Character Recognition (OCR), so that Jamie's computer can read them to him. Some of his texts are also processed this way; others come on audio tapes, usually sourced via the Foundation for the Blind on interloan from overseas, though only a few texts are available as interloaned tapes, and then only for three months.

Ansuné has been Jamie's eyes for the past three years, and she often acts as his translator - only those familiar with his speech can understand him consistently enough to hold a conversation, and even then there are times when he'll have to spell out a word that those closest to him have struggled to grasp.

Ansuné, who is originally from South Africa, is employed by the University as a support person for Jamie. She comes to his Blenheim home – two doors away from hers – for three hours each weekday. "It would be very difficult for me to study without her," he explains.

When Jamie's mother, Beth, asked what help the University could offer her son, she was told to advertise for a support person that Massey would then fund. Beth says around 20 people applied, but it was Ansuné's "aptitude and attitude" that easily won her the job. "They work so well together because they both enjoy learning," explains Beth, "but he does drive his own learning. He'll pick his essay topics early and they'll talk about the focus of his essays so Ansuné is guided to the pre-reading and the texts he wants to source."

Jamie has already passed 13 papers toward a bachelor's degree in history. The first four he gained in his last two years at Marlborough Boys' College,

In 2004 1529 people with disabilities were enrolled at Massey University: 190 in Albany, 184 in Wellington and 230 in Palmerston North. Another 925 were on the extramural roll.
Massey employs 18 casual support staff in Albany, 10 in Wellington and 55 through Disability Services in Palmerston North.
The support is funded jointly by the Tertiary Education Commission and the University.

which he attended until he was 21. Teachers there encouraged his interest in enrolling as an extramural student. A former teacher, Brian McNamara, sometimes helps at exam time when Jamie needs an amanuensis. In answer to a newspaper request for help, retired teacher Trevor Taylor volunteers an hour of his time twice a week to read to Jamie.

And then there is JAWS (Job Access With Speech), the snappily titled software programme on Jamie's laptop. Using a computer-synthesised voice JAWS reads the content of Jamie's computer screen, deadpanning out the scanned material sent from the Foundation, tracts from the essays he is writing, or e-mails. JAWS can read back individual letters as they are typed, as well as completed sentences.

When he was young, Jamie wore glasses and used devices such as screen enlargers. But in his teens his eyesight started to deteriorate further; and at 14 the glasses no longer helped. He learned to touch-type and acquired JAWS using funding from the Royal New Zealand Foundation of the Blind (RNZFB) and Workbridge.

Reading isn't really a chore for Jamie. He's a passionate learner and when he doesn't have anyone to read to him he has audio books to draw on, many of them coming through the interloan service of the RNZFB. His bookshelf groans under the weight of the works (on tape) of Shakespeare, Dan Brown and JK Rowling. Alongside these is a large collection of music CDs and DVDs.

Jamie tries to get to Christchurch at least once or twice a year to go to a concert. And though his eyesight has now almost gone, he still goes once a week or fortnight to a movie, which he says are usually quite easy to follow from just the sound track. The most recent one he saw was *Ray*.

Asked which papers he enjoyed most, Jamie says high on the list would be Modern New Zealand Politics. Among the most difficult were Introductory Latin and Greek Mythology. In the latter case Jamie didn't realise 50 per cent of the course was related to visual artwork, which Ansuné was unable to help him with. The University came to their aid by converting the visual requirement to a written one specifically for Jamie.

However, in the case of the Latin things became almost comical, says Ansuné. "It's a very visual language. We were quite good at translating from Latin to English but the other way round was quite tricky because Jamie couldn't see the letters. We had to phone the Latin lecturer and he just laughed. He couldn't believe that here was a person with a heavy South African accent who was working on Latin translation with a blind person!"

Nonetheless it was a subject Jamie had long wanted to study. Lecturer Stuart Lawrence sent down extra assignments and was always willing to help over the phone. Jamie managed a restricted pass.

Jamie has twice travelled to the Palmerston North campus to attend block courses and hopes to go again this year. He says he likes to meet the lecturers and the experience gives him a stronger sense of being a university student. But it's not easy. Massey is willing to help fund a support person, says Beth, but she still has to take time off work. "The problem is that he needs someone with him who can understand him and help with his personal care outside of Massey." Ansuné is unable to go for that length of time.

However, getting around Massey's Palmerston North campus poses no problems. Jamie describes it as reasonably user-friendly for him. He says he'd probably cope quite well as a regular student if he lived nearby. He would just need someone to show him around initially; he has a cane and could tape his lectures.

Though Jamie wants his course work judged on its own merit, he says he does sometimes wonder if all his lecturers are aware of his disability. One had written on an assignment that he needed to read more. "If only they knew!" says Ansuné.

In development

John Entwistle and the Danish Red Cross are making a difference in Laos, as editor Malcolm Wood reports.

Danish Red Cross

The pictures tell only so much. The taped interview is more evocative. A year on, back in Wellington as I listen and take notes, I am transported back to the languor of Luang Prabang, the old royal capital of Laos. I can hear the tinging of the bell rung by of the man selling home-made water ices from a hand cart, the chatter of a caged parrot, the nasal revving of small motorbikes – the family vehicle of choice – and the polyglot conversations of backpackers in the café.

It is hard not to fall for the charms of Luang Prabang: the patinaed French colonial buildings; the golden wats and temples; the street markets; the lines of saffron-robed monks, bowls in hand walking barefoot through the early morning mist, accepting the gifts of food proffered by householders. Many a tourist must fantasise, as I do, about pulling a Gauguin; going native under the palm trees by the banks of the slow-flowing Mekong and considering the world well lost.

Sitting in the café, I am curious to meet John Entwistle; to put a face to the e-mails. It is a rare thing for a Massey staff member to actually sight Entwistle. The close-on a decade of study that went towards his Master of Philosophy in Development Studies was all extramural.

And here is a Danish Red Cross white four-wheel drive coming by the café frontage, and here is Entwistle: in his late thirties, shaven-headed – not so remarkable in a land of monks – and displaying an engaging smile. To be in Luang Prabang is a treat for him, too. He and his Danish Red Cross co-workers are attending an organisational development conference in a nearby hotel.

I can't imagine how Luang Prabang looks to him. My views of the place are shaped by its exoticism; for Entwistle this is known territory.

He and his family are highly cosmopolitan, true members of the global village. Entwistle grew up in Pakistan, where his New Zealand parents worked for the church in a small settlement on the edge of the Thar desert. Of Entwistle's three children, the first was born in Pakistan, the second in New Zealand, and the third in Thailand. All speak Lao fluently.

Entwistle recalls Ruby, the youngest, wandering off when they were last in New Zealand. "We were at Punakaiki and we found her running along the road, saying, 'I am going back to Laos, I am going back to Laos'."

Entwistle, who has a degree in nursing and a diploma in public health, first came to Laos with his wife to job-share for VSA in a rural development project outside Vientiane, the current capital of Laos. He followed this with two years working for a private development consultancy, stationed in Xam Nua, a remote town in the far north, chancing his luck flying in and out through the ranges. (On one occasion he watched the pilot choosing when it was best to come down through cloud cover by consulting a wrist watch and the fuel gauge.) But the profit-driven aid work was not to his taste, he says dryly: "I did my two-year contract and left." Then came work for AusAid and, at last, his current employer, the Danish Red Cross.

VSA, AusAID, the Danish Red Cross… aid organisations are well represented in Laos. It is easy to see why. Away from centres like Luang Prabang, touched by Western affluence, Laos is a land of bare dirt and bamboo villages. Small, mountainous, lacking arable land and devastated by the Vietnam War, it remains desperately poor. The statistics are unequivocal: average GDP, US$1,700; population below the poverty line, 40 percent; life expectancy at birth, 55 years; infant mortality rate, 87 deaths per 1,000.

Entwistle's employer, the Danish Red Cross, is working with the Laos Red Cross in running an

integrated primary healthcare project in three of Laos's poorest provinces. "We train village health volunteers and traditional birth attendants, and do 'watsan' (water and sanitation): gravity-fed water systems and latrines," Entwistle explains.

The Danish Red Cross and its Laos partner have also set up medicine revolving funds (where the purchase of drugs pays for the supply to be replenished), constructed and equipped schools, trained teachers, and set up literacy programmes and credit and savings groups for women. Eventually the work will be done by the Laos Red Cross alone, says Entwistle. "Ideally in another couple of years my position will be redundant."

Oddly enough, money alone is often not the limiting resource. "The problem we have is that the capacity to absorb the money and to spend it is limited. Development work can be very slow. There are the barriers of culture, language, experience and skill."

Where does Entwistle believe interventions are most effective? "There is a clear link between education, health and economics. If you have poor health you can't go to school, and you can't earn money. Though if you had to choose, my own theory would be that to make the greatest difference you should focus on governance and education."

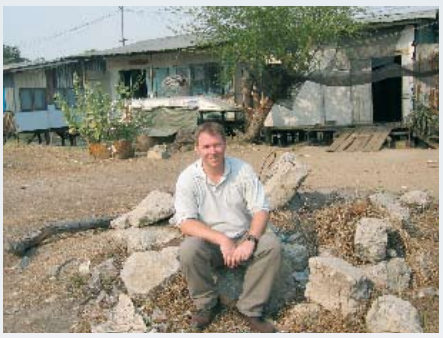
Throughout most of Entwistle's aid career he has also been a student, accumulating points at the rate of one 25-point paper each year, first towards his Diploma in Development Studies and then his Master of Philosophy in Development Studies, which he graduated with in 2004.

Much of his study was in the days before ubiquitous e-mail access. Mail, phone and fax were the staples. "[Professor] Anton Meister taught cost-benefit analysis and I am more into the arts side of things, So I'd go down to the public fax office and I'd send screeds of material off, and he'd send all these figures back, and I'd say,'But what do I do with them?'" he remembers.

Entwistle describes Development Studies as the ideal extramural offering. "You can take papers anywhere in the world and you can relate what you do to your work."

"Nike had a good tagline: there is no finish line. Education is like that," he says. "Are you a better, nicer person for it? Not necessarily. But it opens your mind."

The lecturer's tale



Donovan Storey during a field work trip to an urban-poor community in Bangkok

Malcolm Wood talks to Dr Donovan Storey

If I have been curious to see what John Entwistle looks like, then Development Studies lecturer Dr Donovan Storey is even more so. Entwistle, like many of his current and former students, is someone Storey feels he knows well, even though he has never set eyes on him. He'd love to see a photo.

As a Development Studies lecturer, Dr Storey has become accustomed to phone calls and e-mails from all over the world, some personal and chatty, often from people he has never met in person. Many he regards as friends.

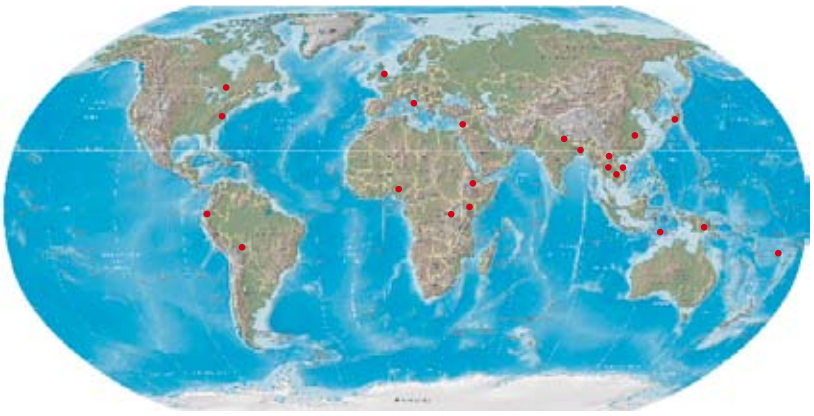
Most of Dr Storey's extramural students are enrolled in the master's degrees or the postgraduate diploma. Generally they are already knowledgeable within a speciality – Entwistle is a qualified health worker – and they are pursuing Development Studies both as a means of career development and to give themselves a theoretical context for the work they are doing.

A veteran of development work himself, Storey understands their circumstances: that technology is fallible, that study must compete with work, that to be an aid worker is at the very least to be prey to Third World conditions, not to mention such things as disease, famine and war.

"I have a student in Nepal who has been chipping away at a masterate for three years through the Maoist insurgency," he says.

The exigencies of his students' lives also impose demands on Dr Storey. "Sometimes contact is sporadic, and then you get a flurry of e-mails. You've really got to get on to it straight away," he says. The compensations? "We learn as much from our students as they do from us. It is a circular learning process."

Most of his students will use their own work in their case studies, and in published work this can require some sensitivity. "All Development Studies work is to some extent political," says Dr Storey.



Massey development studies students can be found the world over. Each red dot represents one or more students.

Writing for Columbine

The April anniversary of the Columbine High School massacre will be remembered vividly by a former student of the University's School of Journalism who was part of the newspaper team that won a Pulitzer Prize for its breaking news coverage of the tragedy.

Dr Alison McCulloch, currently a deputy chief subeditor at the *New York Times* – the American title is "backfield editor" – won newspapers' highest accolade for coverage of the 1999 Columbine High School shootings when working as a copy editor (American for subeditor) at the *Denver Post*.

America's Pulitzer Prizes were begun by 19th century newspaper magnate Joseph Pulitzer "as an incentive to excellence". Rewarding works in journalism, letters, and music, they are regarded as being among the most prestigious honours possible in literature: past winners range from Ernest Hemingway to John Kennedy.

In the tragedy of 20 April, 1999, Eric Harris and Dylan Klebold murdered 12 of their classmates as well as a teacher, and wounded more than 20 others. The winning *Denver Post* coverage began with the dramatic breaking news: "Two students, cloaked in black trench coats and armed with guns and bombs, opened fire Tuesday at Columbine High School, killing as many as 25 people and wounding at least 22 others in the worst school shooting in U.S. history."

It also included evocative reportage of the carnage through the eyes of the participants and the witnesses. One piece began: "Fanned out across the Denver metro area at work and in their cars, they heard the first sketchy rumors. Trouble at Columbine. Gunshots. Suddenly, existence boiled down to what matters most. And strange kids in trench coats were threatening to yank it away. The result was the most intense moments that some 4000 Colorado parents have ever known. They screamed. Cried. Hyperventilated. Prayed…"

Alison is quick to emphasise the award was for a writing team. "It was not to me personally. Yeah, I got a plaque, but I was merely one of the many editors involved. That one got improved in the telling, which is a little embarrassing and now means I'll never be able to come home again!"

A graduate of journalism's class of 1982 when it was part of the old Wellington Polytechnic, Alison has had a distinguished career in journalism. After graduating alongside home-grown notables including television personality Kerre Woodham and *Investigate* magazine editor Ian Wishart, she began real life as a rural reporter for Radio New Zealand.

> **"We learned a lot of useful practical stuff, photography, developing pictures – okay, I guess that's all been superseded by digital – typing, shorthand and newspaper production from go to whoa. I loved all that stuff!"**

She subsequently worked as a reporter and Gallery reporter for *The Dominion* newspaper, where she covered, among other things, the first Māori challenges over fisheries and other resources that began when the Labour Government started its state-owned enterprises policy.

In 1990 she joined the new Rainbow Warrior on its trip to Mururoa investigating and protesting French nuclear testing, her reports carried in *The Dominion* and the *New Zealand Listener*. On moving to Washington State, she completed an MA in philosophy. After moving to Denver she started a PhD, which she completed in New York in 2003. "It's about Kant," Alison says. "Not at all journalism related, but I love philosophy, and I'm still trying to work out a way to combine the two. There has to be a way, don't you think?"

As a backfield editor on the Foreign Desk at the *New York Times*, Alison works alongside nine others – "maybe four to five on at any one time" – under the foreign editor and deputy foreign editor. "Backfielding is one step up the editing food chain from the copy editors," she says. "You work pretty closely with the reporters. Given that it's the foreign desk, they're from all over the world, and I haven't actually met half of them.

"How much writing, rewriting, etc., of stories depends on things like what the story is – hard news, feature, analysis – the reporter, the demands from above, etc. It's a great job, though I find it more stressful than I'm used to."

Alison has fond memories of her time at the School of Journalism. "We put out the [now defunct community newspaper] *Mt Cook Messenger* a few issues a year – I think we even delivered it. Notable in my sketchy memory were the trips out of town. I went to Taumarunui to work on the local paper there, and there was also a trip to Carterton - or was it Greytown, or Masterton? Hmmm, I can't remember: it was somewhere in the Wairarapa.

"We learned a lot of useful practical stuff, photography, developing pictures – okay, I guess that's all been superseded by digital – typing, shorthand and newspaper production from go to whoa. I loved all that stuff!"

Massey University Foundation

Projects that support and promote excellence in teaching and research at Massey are to get a boost from the Massey University Foundation.

Established as a charitable trust, and launched last November, the Foundation is raising and investing money to fund projects of merit identified by the University and its supporters.

The first project funded by the Foundation is 'Massey Masters' which will bring distinguished overseas-based alumni back home on visiting fellowships to share their knowledge and experience with current students, graduates, staff, and with industry.

The Massey Masters in 2005 are Professor Wayne Mcllwraith and Mr Grant Davidson.

Professor Wayne McIlwraith

Professor Mcllwraith is Professor of Equine Surgery at Colorado State University and a past president of the American College of Veterinary Surgeons. Professor McIllwraith graduated from Massey in 1973.

Mr Grant Davidson

Mr Grant Davidson is the Director of Marketing at Philips International in the Netherlands at Eindhoven and an internationally-respected leader in industrial design. Mr Davidson graduated from Massey in 1977.

Professor Mcllwraith's fellowship with the Institute of Veterinary, Animal and Biological Sciences runs from 20 April to 18 May. Mr Davidson will be working with the Department of Three Dimensional Design from June 23 to July 7. Both will deliver lectures and workshops.

The Foundation's Board of Trustees is made up of alumni and friends of the University who are generously donating their time and effort. They are committed to Massey's future and are experienced in managing projects and funds.

- Dr Larsen was appointed the Foundation's chairman in February. A dairy industry leader, Dr Larsen was awarded an Honorary Doctorate in Science last year in recognition of his contribution to agriculture.
- Dr Peter Hubscher has recently retired as the Chairman of Montana Wines. Dr Hubscher has a degree in Food Technology and an Honorary Doctorate in Science from Massey University.
- Mr Peter Lough is the chairman of New Zealand Trade and Enterprise.
- Mr Jim Scotland is the Deputy Chairman of AgriQuality New Zealand. Mr Scotland is also a board member of HortResearch and holds a Bachelor of Science from Massey.
- Professor Judith Kinnear is the the Vice-Chancellor of Massey University.
- Mr Trevor Sew-Hoy is the Director of Finance Operations of Massey University.
- Mr Mike Freeman is the Director of Development and Alumni of Massey University and the Foundation Secretary

Every donation made to the Foundation will be spent directly on the purposes specified by the contributor. The University has vested the Foundation with over $4 million and will meet all of its administrative costs.

Mr Freeman says the Foundation works closely with Massey's supporters to ensure that all contributions are appropriately recognised, that any conditions applying to a contribution are honoured, and that the contributor is involved – to the extent that they wish – in the continuing life of the University.

"In addition to existing projects, 'untagged support' for the general purposes of the University is most welcome. This enables us to target other unmet needs – and to further enable excellence."

Newly appointed Foundation Chairman Dr Warren Larsen

THE MASSEY UNIVERSITY FOUNDATION APPEAL

MASSEY UNIVERSITY FOUNDATION

ENABLING EXCELLENCE

MESSAGE FROM THE VICE-CHANCELLOR PROFESSOR JUDITH KINNEAR

Many of the world's leading universities have established trusts to gather support and income from their wider communities to help meet the costs of providing the highest level of research and research-informed teaching.

The Massey University Foundation has been established to support the achievement of our researchers and students and, at the same time, to contribute to national growth.

Because the University meets all the administrative costs of the Foundation, all funds received through the Foundation are used for the purposes specified.

I commend the Foundation to you and encourage you to become involved with the achievements of staff and students of Massey University.

THE MASSEY UNIVERSITY FOUNDATION APPEAL

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Reviewers: Di Billing, Rowan Clark, Dr Martin Sullivan, Alan Millar, Patrick Morgan, Malcolm Wood.

Biography

Kippenberger: An Inspired New Zealand Commander

Christine Cheyne, Mike O'Brien, Michael Belgrave (HarperCollins*Publishers* Press, $34.99)

In his introduction Glyn Harper sets out the questions this biography will attempt to answer: "Was Kippenberger a successful military commander? If so, what were the elements of his success? What was Kippenberger's command style?"

Over the next 270 meticulously researched pages he succeeds in arriving at conclusions that fairly answer all three. In the process he tells the fascinating life story of a remarkable New Zealander, a man who despite affecting the destiny of his country and the lives of tens of thousands of his countrymen at a critical juncture is largely unknown to New Zealanders under the age of 40.

Kippenberger's early life was in many respects typical of his times. Born in 1897, a third generation New Zealander, Kippenberger disliked the monotony of farming life and lied about his age to volunteer for World War I, becoming cannon fodder in the British Empire's war against the German Kaiser. He fought bravely in France as an ordinary soldier. He then spent the interwar period living an ordinary, small town, middle class, professional family life. While doing so he endlessly studied military history – to a remarkable depth for his time and location – and took a very active part in the Territorial Army. He was convinced there would be another war with Germany and that he should be ready to play a part in it as a professionally competent officer. The rest, as they say, is history – and this history in particular.

In following the personal history of Kippenberger and his role in World War II, Harper gives a lucid and concise account of the New Zealand army's participation in the Greek, Crete, African and Italian campaigns. He shows Kippenberger interacting with his leader, the highly personable General Freyberg, and he gives 'warts and all' pen portraits of some of the other significant personalities. He skilfully conveys the role of the New Zealand Division within the wider military politics of the day.

Every significant action involving the New Zealanders is covered and in a manner that allows a lay readership to understand the events and appreciate their tactical and strategic significance.

Harper's viewpoint is that of professional historian and professional soldier. He is also unashamedly a New Zealander. His account has no vestige of 'colonial cringe' or timid deference to the professional officer corps of the British army, though equally he never hesitates to admit and to illustrate any shortcomings among his countrymen. Unlike World War I, where New Zealanders fought in regiments as part of the British army under British generals, in World War II they fought under a leader appointed by the New Zealand Government who was instructed not to place his troops under any other command but to maintain them as a separate operational unit at all times. In World War II New Zealand participated as an independent nation conscious of its own political needs. New Zealanders fought for clear democratic objectives, not as obedient followers of King and Empire. Kippenberger neither glorified nor condemned war. He saw it as a reality, and thought that it should be fought and won competently, professionally and pragmatically, at the least possible cost in life and limb.

The generally accepted view is that New Zealand found its national identity in the blood and slaughter on the beaches and hills of Gallipoli. After reading this biography I have come to believe otherwise. I think Harper – whether he intendeds to do so or not – makes a sound case for New Zealand's national identity being founded not in Turkey but in the barren deserts of North Africa. We should remember these battles and celebrate these victories, fought as they were by this country's independently created, trained and led citizen army. I hope Harper's biography of Kippenberger, once one of the most deservedly respected of New Zealanders, will do something the redress the balance.

I recommend it to every student of twentieth century New Zealand history.

AM

Guidebooks

crafty girls' road trip

Ann Packer

(Random House New Zealand, $24.95)

If you are a connoisseur of "textile treats" you will certainly want to own this book. And even if crochet makes you crotchety, if you find dolls dull, and bears unbearable – yes, Virginia, there are such sadsacks – you may still want to keep a copy of *crafty girls road trip*, handy. In this guidebook to craft outlets and other like enterprises from Kaukapakapa to Invercargill, Author Ann Packer proves a most amiable and informative companion, not just pointing out the best of local craft shops, but also steering you in the direction of the local hot pools, of the odd interesting walk, and, without fail, towards somewhere for a good coffee. It is an idiosyncratic selection of attractions, but it's all highly civilised and told with understated charm. Warning to the partners of crafty girls: if you want to get to your destination without diversion or delay, hide this book.

Ann is a Massey alumna (BA, 1968) and her daughter, Genevieve Packer, graduated with a BDes Hons in 2001.

MW

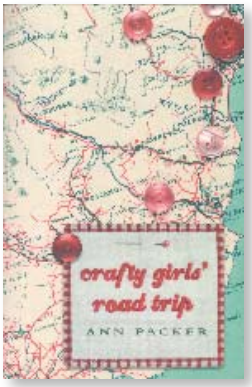
Children's illustrated books

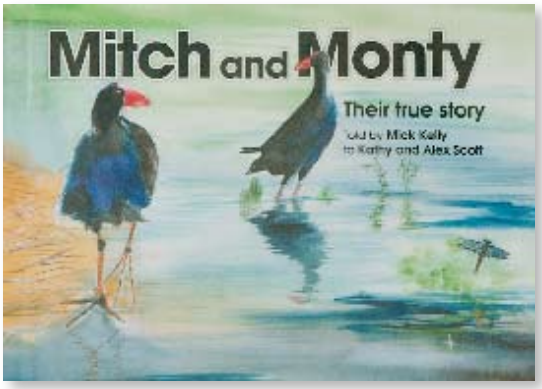
Mitch and Monty: Their true story

Stalking the roadside ditches, resplendent with their indigo plumage, scarlet beak and red legs, and with an air at once dignified and absurd, pukeko are one of our iconic bird species. Now two of them, Mitch and Monty, are the stars of a children's book by Kathy and Alex Scott. Kathy, a Massey alumna, wrote the text, and Alex painted the illustrations, drawing on the true story of Mick Kelly, who raised Mitch and Monty from eggs. It is an engaging tale, and Kathy has a good ear for what will appeal to children when read aloud.

Kathy Scott completed papers in Japanese in the 1960s before heading to Japan where she lived for three years. In the early 1990s she returned to Massey to 'brush up on her Japanese', emerging, at the age of 56 with a degree. Today she works alongside Alex in the couple's pharmacy and volunteers for Diabetes Manawatu Inc. Mitch and Monty is self-published. It is Alex's eighth book.

MW





Autobiography

Dick Scott: A Radical Writer's Life

Dick Scott
(Reed Books, $39.99)

Not quite a household name, Dick Scott will nonetheless be familiar to many older New Zealanders reared in working class households. His first book, *151 Days*, took pride of place on many an otherwise sparsely populated bookcase.

151 Days was an insider's story of the 1951 waterfront dispute, published cheaply, widely read and trusted, a year after the dispute ended. For decades it remained the only publication on the dispute.

Scott also broke new ground with a second pamphlet issued a year later. *The Parihaka Story* documented the Māori campaign of passive resistance to land confiscation at Parihaka Village in Taranaki in 1881. Largely unremarked and unheralded on publication, its reputation grew during the following decades as a seminal work on Māori resistance to government land purchase tactics. He was, it has been said, at least 20 years ahead of his time in spotting the significance of the village's invasion by colonial troops. The pamphlet was updated and upgraded to a book in 1975 when it was published as *Ask That Mountain*.

Dick Scot's most recent work is an autobiography, *A Radical Writer's Life*. On the softer side of radical, he was, however, versatile and frequently in the right place at the right time, for a committed writer. "Looking back at my last Wellington years," he writes, "if there was toil and trouble I was often there."

In his various incarnations, Scott has been or is: a left wing journalist, union organsier, Communist pamphleteer, wine buff and critic, journalist, editor and historian. The biography is his seventh publication. So it is with slight surprise that we learn, early in *A Radical Writer's Life*, that he graduated from the then Massey College with a Diploma in Agriculture in 1943, driven by a farming father and despite differences with some of the botany lecturers and the College Principal Professor Geoffry Peren.

"In two years as a student I heard him speak only once – to hear him tell me that expulsion would surely follow if the Buick's spinning wheels (it was a mating display at an end-of-term dance) ever again showered his prize lawns with gravel."

Scott settles a few others scores (he did not admire Colin McCahon's Parihaka paintings) as he documents a lifetime of pioneering work and partisan engagement in journalism and history. His contributions include the first books on New Zealand's blossoming wine industry, beginning with a biography of Assid Abraham Corban and including the ground-breaking *Winemakers of New Zealand*. Later he turned to Pacific history with *Years of the Pooh-Bah* and *Would A Good Man Die?*

Scott is now 83: He ends his biography with a suggestion that the book may be a round-up but not necessarily a round-off. "And so a historical sequence, more down to earth than most, goes on being recorded."

DB

How-to texts

Persuasive Ways
'Tricks of the trade' to get your ideas across

Geoffrey Moss
(Moss Associates Limited, $29.95)

In 184 pages Geoffrey Moss has set out to cover a great deal of ground. Whether you are setting out to deliver a presentation, write a report, set up a display, handle an interview or hold a meeting – to mention just a few of the topics covered – you may well find *Persuasive Ways* helpful. Will it be all you need to know? Probably not. To cover all of these topics to any depth would require not a single book but a bookshelf's-worth, and I'd recommend you assemble a reading list if you are at all serious about learning the craft of writing, say, or making the best use of the Web (something hardly touched on) or e-mail. Nonetheless, Moss's combination of succinct common-sense advice and the extensive use of check lists should keep you from most the most embarassing of gaffes – those ones you remember for ever after – or glaring of omissions.

Moss ought to know what he is writing about. The director of Moss Associates, he has trained managers for over a decade and he estimates over 2,300 people have attended his workshops. Moss is both a Massey alumnus – he graduated with a BAgSc in 1957 – and is a former staff member.

MW

Academic

Social Policy in Aotearoa New Zealand: A Critical Introduction

Christine Cheyne, Mike O'Brien, Michael Belgrave
(Oxford University Press, $55)

Three Massey social policy academics, Dr Christine Cheyne in the School of Sociology, Social Policy and Social Work at Palmerston North, and Associate Professors Mike O'Brien and Michael Belgrave in the School of Social and Cultural Studies at the Albany campus, have recently authored a third edition of their successful text *Social Policy in Aotearoa New Zealand: A Critical Introduction*. The text sets out to provide a context for understanding and assessing the changing nature of social policy, and the direction of future policy development. The first edition gave particular attention to the changes of the late 1980s and early 1990s. The second edition (January 2000) examined the impact of the move to coalition government and anticipated the change of policy direction following the election of a Labour-led government at the end of 1999. It addressed new developments, such as increasing interest in 'third-way' politics, social cohesion, social inclusion and social exclusion, and the importance of gender analysis and Treaty analysis in the New Zealand context.

The third edition (2005) examines and critiques the social policy framework of the last five years with new material on the changing response to the Treaty of Waitangi, the growing political interest in sustainable development and the emphasis on 'managing for outcomes'. The book's three editions retain the same basic structure of chapters (the history of social policy, theoretical perspectives and conceptual bases of social policy, along with chapters on key areas of social policy). *Social Policy in Aotearoa New Zealand: A Critical Introduction* has proved to be an essential and accessible resource for students of social policy and in related disciplines, and is invaluable for those seeking informed debate about the direction of social policy in New Zealand.

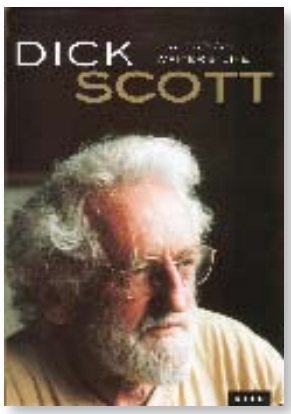
MS

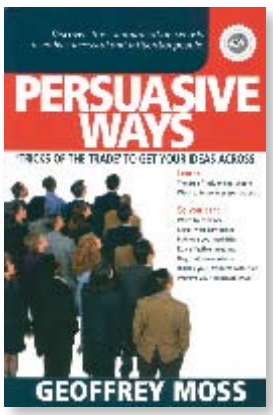
Academic

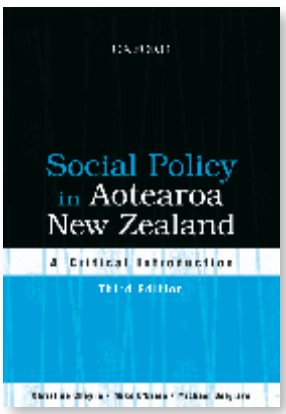
Globalization and Culture at Work: Exploring Their Combined Glocality

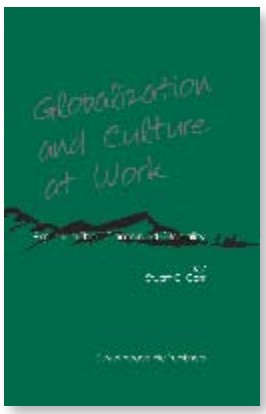
(Kluwer Academic Publishers, 2004)

They are called portmanteau words. Smog, a blend of smoke and fog, is one. Motel, a blend of motor and









hotel is another. These two have lasted. Will 'glocality'? Perhaps not, but the phenomena it describes – the often-competing influences of localisation and globalisation – certainly will.

A review of Dr Carr's book in the Harvard Business School's *International Newsletter for Business Leaders* puts it this way:

Concepts such as power, pay, and achievement all have a local perspective that can disrupt global influences. Consider the concept of equitable pay. Workers in a local company may aspire to higher pay, but are satisfied with their earnings. However in order to compete in the global community, the company decides to employ expatriates to work with the locals. Since strong incentives are required to attract the expatriate to the assignment, salaries disproportionately larger than those given to local workers may be awarded. As a result, this can contribute to feelings of resentment by locals towards expats and therefore reduce productivity.

There are, says Dr Carr, two schools of thought: that 'one size fits all' – you can transplant a working model from one place to another and it will still work; or that 'one size only fits some'.

Both concepts have their place, he says. "But you only have to travel to see how often things fall over when a model from one place won't work in another. The question is, how do we get smart about this?"

An organisational psychologist, Dr Stuart Carr is based on the Albany campus.

MW

Magazines and websites

Lumière

Bachelor of Design graduate Tim Wong, 23, founded Lumière Industries in 2003 as an outlet for his passion for graphic design and film. Beginning as a magazine dedicated to film criticism and review, Lumière was extended in 2004 to a website, which Wong describes as an independently published open forum for the written and visual discussion of movies, local film events and initiatives, and the wider cinematic discourse.

"Lumière is now a collective producing art, design, film and new media projects," Wong says. "Based in Wellington, we specialise in the publication of graphic design, illustration, photography and new writing by emerging local talent. Our core design team and contributing artists are all graduates or students from Massey's College of Design, Fine Arts and Music."

Wong says, "I started it for fun, as a side project on top of my Bachelor of Design studies. It combines my interests in graphic design and film."

"I don't know how I found time for it. I'd always been craving to do something like this."

A fan of Asian Cinema, Wong says the New Zealand film industry is still fairly conservative. "There are a lot of talented filmmakers out there who aren't getting their films made."

"Since starting Lumière, I've learned heaps of business skills – making business contacts, handling GST, getting out there and putting Lumière forward, and partnering with other ventures. It's easy to branch out if you're creative."

Lumière is online at http://www.lumiere.net.nz

PM

CDs

jazztones

New Zealand jazz aficionados know jazz lecturer Johnny Lippiett as a master saxophonist who takes no musical prisoners. He has the ability to take any jazz standard and imbue it with a tidal wave of sound and emotion, leading his audience on a journey through jazz sax history.

His latest album, *jazztones*, reveals Johnny's strengths as a composer with eight very different Lippiett originals, both rocking grooves and straight-ahead jazz. With the opener, "A Thousand Shivolars", Johnny explores harmonic and melodic ideas relating to Arabic music, with the grooves coming from South America. "Intraflection" employs Johnny's soulful blowing with Vaughan Roberts adding counterpoint lines to great effect.

Johnny tops off a wonderful album by letting loose with with "Harry and Jim" (a nod to his 2003 release, *Backbeat Project)*, which features rapper MCSoul9 and some solid grooves from Lance Sua on guitar.

RC

Meeting face-to-face with approximately 1000 alumni and friends in the second half of last year was quite an inspiring experience. When I took up this position a year ago, I remember being struck by the high level of grass-roots enthusiasm for maintaining a connection with Massey University. As Mike, Karen and I traversed the country with senior University staff, addressing gatherings of alumni and friends, that view has only been reinforced.

As the establishment of the infrastructure moves towards completion, we are confident of forming a very active network of Alumni and Friends Chapters, both here and overseas. (For the latest on how work on the chapters is progressing, see the article Alumni and Friends Chapter News in these pages.)

An exciting spin-off from the gatherings we addressed is that more alumni and friends have come forward offering a benefit or service to the Massey community. We are currently negotiating a benefit with a photography business in Auckland and also with a national insurance broking business. We are also working towards having special benefits or programs in place for you at the Sports and Recreation Centres on each campus. I trust that many of you took advantage of the Duty Free New Zealand Stores benefit over the Christmas holiday break! For the latest information on the Benefits and Services on offer, visit our website at http://alumni.massey.ac.nz

With great social events and other opportunities planned for you to engage in the dynamic, exciting community that is Massey University, 2005 stretches ahead of us full of promise.

Paula Taylor
Manager
Alumni Relations

Alumni and Friends Calendar to June 2005

13 – 16 April	Auckland Graduation
4 May	Publication of Alumni and Friends' Electronic Newsletter
9 -13 May	Palmerston North Graduation
10 May	Palmerston North Alumni and Friends Graduation Breakfast
26 May	Wellington Graduation
27-29 May	Class of '79 Diploma in Agriculture Reunion
16 June	Mystery Creek Field Days Alumni and Friends Function

Please note these details are provisional and should be confirmed with the Office of Development and Alumni Relations. Contact alumni@massey.ac.nz or visit our website at http://alumni.massey.ac.nz.

Please contact us too, if you wish to have a reunion or Alumni and Friends event you are organising published in this calendar.

Alumni and Friends Chapter News

2004 saw six gatherings take place where the possibility of developing Chapters of Massey University Alumni and Friends was discussed. With strong responses at all meetings, 2005 is set for the establishment of official Chapters in Wellington, Auckland, Palmerston North, Hawkes Bay, Christchurch and Brisbane. Contact has also been made with alumni in Melbourne, Malaysia, Britain and the United States and preliminary work in those regions continues.

Many of the alumni attending the gatherings have indicated their interest in participating in activities organised through chapters such as mentoring and providing work experience for students, hosting staff and students from other areas, attending Massey University events and providing benefits for Massey's alumni and friends. Many respondents (25 percent) have also expressed an interest in further study at Massey.

Two electronic newsletters, one national and one international are currently being developed. These will serve as the line of communication between alumni and the Office of Development and Alumni Relations. Not only will they keep you abreast of the latest happenings, but they will also give you the opportunity

At the Deputy Vice-Chancellor's gathering, December 2004

Stephen Kos, then Chair of the Massey Foundation (now Council member), Margaret Reiger and Paul Reiger.

Ms Kimberley Hoggard (BAppSci), Kane Crewther (BSc) and Huata Nicholson.

Andy Mannering and Jo Rayner.

Chancellor Nigel Gould, at right, thanks Paul Reiger for his time on the University Council.

Colonel Lofty Hayward from the NZ Army Base at Linton, and Major General Piers Reid, Director of the Centre for Defence Studies.

to provide input and feedback. So, if we don't have your current email address, contact us on alumni@massey.ac.nz and we will make sure you stay informed.

The alumni website will also be a source of information about the chapters. It is anticipated that the updated website will be made live during first semester. If you are interested in becoming involved in a Chapter, please contact us at alumni@massey.ac.nz or visit the Chapter section of our website.

Fired up after the initial meeting, a group of Massey expats in Brisbane shared a pre-Christmas dinner at Indus Restaurant.

Professor Ken Milne with Brian Mackintosh (MAgSc 1974), lucky winner of the business card draw at the Hawkes Bay gathering.

Dr Jinny Willis (BSc Hons 1984), Professor Rob Anderson, Dr Len Restall (MEd 1995) at the Christchurch alumni and friends gathering.

Talkfest

The "first fifteen (years)" get together

Late in January, around twenty-five B Tech graduates, mostly from the first fifteen years of Massey University's (then) faculty of Food Science and Technology, gathered to dine with Dr Mary and Professor Dick Earle. They gathered to hear about Dick's and Mary's Fellowship programme and also to have a talkfest.

Many of those present hadn't seen each other for years. A tacit agreement not to add-up just how many years seemed to be in force. The graduation years spanned 1967 (Gordon Cameron) to 1988 (Debbie Hawkes). Yes, that covers more than fifteen years but the tag is too good to ignore.

The biggest group finished their degrees between 1973 and 1978, several had progressed to Masters degrees and Hester Cooper had completed her PhD in Food Technology in 1981.

The group enjoyed reminiscing and rekindling old friendships.

Most of the group are still actively engaged in the food industry, though their occupations vary from web designer (Chris Newey), to financial advisor (Stuart Scott) to magazine editor (Anne Scott), to (among other things) part-time property developer (Dave Pooch), to insect repellent company director (Nigel McClisky). Dr Mary expressed her and Dick's gratification that many of those present were owners of their own companies, "We aimed to train young people in technology, to fit them for business success." she said. "Dick and I are pleased to see where your careers have taken you all."

The general consensus was that the group will now hold regular get togethers. One jokester suggested a 'seniors' branch of NZIFST but was howled down, baby boomers refuse to admit they are getting older, or so the popular press tells them.

Anne Scott, Editor of Food New Zealand, *journal of NZIFST*

Chris Newey

Anne Ward (née McKenzie) and Gordon Cameron

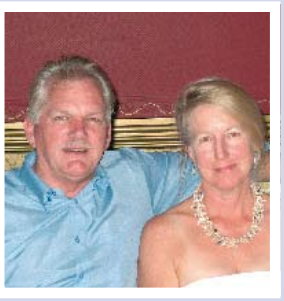
Paul Harrison and Elizabeth McMaster

Gerald Hall, Hester Cooper and Marion Cumming

Paul Harrison, Dr Mary Earle and Peter McCracken

Professor Dick Earle

Jenny Grainger and Robert Gibson



Nigel McLisky and Mrs McLisky