

# MONASH UNIVERSITY NEWS

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## Female lawyers more ethical than male colleagues: survey

By FIONA PERRY

**A survey of Monash University law graduates' values has found that female lawyers are more ethically motivated in their professional decisions than their male counterparts.**

Compared with male lawyers, women lawyers placed greater emphasis on access to justice, personal integrity, and friendship and loyalty than on business efficacy, employer loyalty and professional ambition, results showed.

The survey of 700 Monash law graduates, who were enrolled at the university between 1980 and 1998, found that gender was the most important variable in motivating moral choices among them. It also found that 'corporate' aspirations of lawyers affected the moral choices they made and that the values of lawyers who opted for 'corporate' priorities were different from those who pursued alternative legal careers.

Respondents were asked to answer yes or no to 11 hypothetical situations designed to put them in a personally challenging situation. They then had to rate the significance of various motivating factors to their choice.

Monash law faculty researcher Mr Adrian Evans undertook the study to explore the role of values in lawyers' professional decisions and to investigate which values were shared by lawyers in general. Results refuted a long-held assumption in legal education that lawyers' values were basically homogenous and 'moral'.

The responses of more than half of those surveyed indicated that financial security was a higher priority than achieving just outcomes.

Mr Evans said the results confirmed that personal values were integral to lawyers' ethics. "The research demonstrates that it is pointless to teach ethics without getting students to explore their own values first," he said. "When students become aware of their values, their willingness to make choices – to



Mr Adrian Evans. Photo by Greg Ford.

'come out' in a moral sense – based on those values is strengthened."

Mr Evans, who is coordinator at Springvale Legal Service and a member of the State Legal Ombudsman's Reference Group, said the research was partly motivated by his concern at the number of complaints against lawyers he had come across in his

work. "Until now, the whole values issue has been virtually ignored in law schools, and the community and legal profession have suffered as a result," he said. "The Monash Law School is now integrating ethics into its mainstream subjects, and an awareness of personal values will improve this integration."



## Fearless Keith takes it from the top

No stairs or escalators for abseiler Keith Knight. He takes the direct route from the top of the Menzies building during recent Orientation activities at Monash University's Clayton campus. The annual program is aimed at introducing new students to the university's academic and social life. Photo by Greg Ford.

# The story of Monash – how a university was remade

BY DAVID BRUCE

**When 363 students turned up for classes on 13 March 1961 at a windswept and muddy old farm in southeast Melbourne, the story of Monash University had begun.**

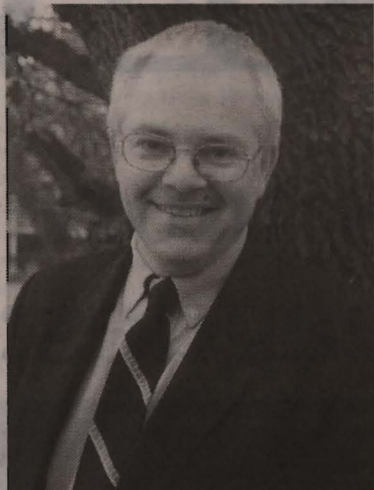
But it was more than 20 years later that Monash really created history by redefining the notion of a modern university. Monash had become the university that other universities watched and imitated, and its impact was felt throughout the broader community.

The decade following 1985 was a period of enormous change in Australian higher education.

A new book, *Monash – Remaking the University*, concentrates on the Monash University of the late 1980s and early 1990s, when it experienced change at a pace not matched by any other university in Australia. In the first five years of that period, Monash more than doubled its size and greatly expanded its role and global reach to become perhaps the best known Australian university throughout Asia.

Author and Monash academic Professor Simon Marginson captures many 'voices' of the Monash of that turbulent decade. *Monash – Remaking the University* is not a dry recounting of official documents and staff lists, but a lively and personal account of the working lives of those credited with playing a role in the remaking.

The period covered by the book coincides largely with the reign of Professor Mal Logan as vice-chancellor and a federal Labor government intent on stamping its imprint on higher education.



Professor Simon Marginson.

"This book is really about two stories," Professor Marginson said. "The massive changes to the national higher education system during that period, and secondly, about how Monash exploited those times more than any other university. Monash handled the times it was in brilliantly. There is no doubt about it – Monash was a winner in the period."

The decade was dominated by the recurrent themes of institutional mergers and of universities taking their business beyond Australia's shores. When in 1987, the Federal Government began the process that allowed for a rapid expansion of students in higher education and abolished the divide between universities and colleges of advanced education, it set in motion a frenetic round of mergers between institutions, large and small, city and rural. In the ensuing years, Monash signage was erected in Caulfield,

Parkville, on the Mornington Peninsula, in Gippsland, and on a former airfield at Berwick.

"I think the mergers were the hardest thing that Monash has gone through and you could say that it is still not finished. A lot of energy and resources were absorbed in the merger process, and the relationships between all of the campuses are still evolving," Professor Marginson said.

"But it was in globalisation that it was clearly a win-win situation. Monash understood Southeast Asia like no other university because of its links with the Colombo Plan from the early 1960s, where plane-loads of students from Southeast Asian nations were invited to Australia, completed a degree at Monash, and returned to take up senior and influential positions in their home countries as Monash graduates.

"Interestingly, around this time there was a noticeable tension on Monash campuses due to the presence of Asian students, as there was throughout Australian society generally. It lasted right through to the mid-1980s. By the late 1980s, however, it had all but disappeared. Monash had grown up, and eventually so did much of the rest of Australian society.

"I believe the whole higher education system was instrumental in changing Australian attitudes to cultural mixing in our society, and Monash was at the forefront of this change."

*Monash – Remaking the University*, by Simon Marginson, is published by Allen and Unwin (\$45). Monash alumni can take advantage of the discount rate of \$35, plus \$7 for postage and packaging, by emailing [monashalum@adm.monash.edu.au](mailto:monashalum@adm.monash.edu.au)

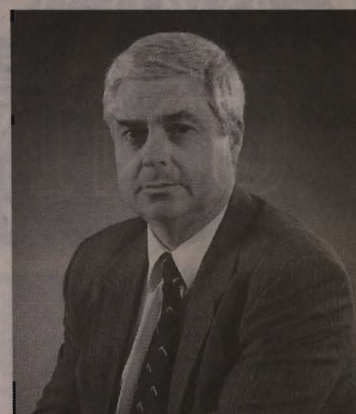
## PVC for South Africa

The director of Monash University's Gippsland and Berwick campuses has been named pro vice-chancellor of the new South Africa campus.

Professor John Anderson will play a key role in overseeing development of the campus at Roodepoort near Johannesburg. Monash South Africa will accept its first students in 2001.

Monash vice-chancellor Professor David Robinson said that among Professor Anderson's many achievements as campus director, he had an excellent track record in establishing relationships with business and the community.

"We need to ensure that Monash University South Africa becomes an integral part of the surrounding community, as well as being a base for

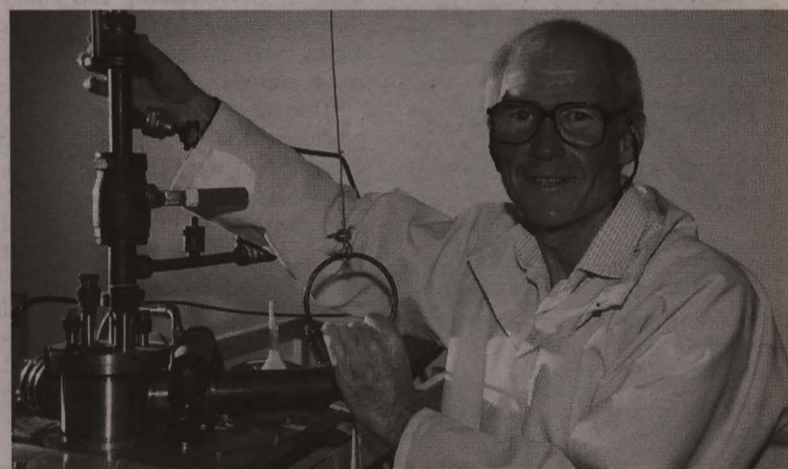


Professor John Anderson.

activities throughout southern Africa," Professor Robinson said.

Professor Anderson took up the position this month and will relocate to South Africa in mid-2000.

## Scientists working to clean up gold mining



Associate Professor John Cashion. Photo by Craig Wetjen.

BY KAY ANSELL

**Monash University scientists have discovered new methods of gold extraction that could one day ensure that cyanide – with all its environmental risks – need never be used.**

Conventional gold extraction using cyanide leaves no room for accidents, as evidenced by the recent spill from a tailings dam in Romania. And the economic impact of the poisoned rivers is being felt close to home, since the venture was part-owned by an Australian company.

If chloride had been used instead of cyanide, the impact would have been relatively benign, says Associate Professor John Cashion, head of the Department of Physics at Monash.

"In the quantities used, if such a spill occurred, it's possible not a single fish would be killed," he says. "It's not that chloride is not toxic but it's not deadly in small quantities the way cyanide is."

So why isn't chloride already being used? The answer lies in the extraction process. After the gold ore has been crushed, to extract the gold, the pulp is washed in cyanide solution – the cyanide binds to the gold as a gold-cyanide ion. Activated carbon, made by heat-treating charcoal to increase its porosity, is used to 'soak up' the ions.

The gold is then stripped off the carbon, in a process which may also use cyanide.

If chloride is used instead of cyanide, when the gold-chloride ion contacts the carbon, it changes to metal and extracting the pure gold becomes difficult and costly. The carbon is destroyed in the process and can't be reused.

Working with Dr Bill Jay, of Monash's Department of Chemical Engineering, Dr Cashion has identified two types of activated carbon which do not destroy the gold-chloride ion and can be stripped without destroying the carbon. As well, the use of polyurethane foams instead of carbons is showing great potential, he says.

Gold mining is usually only a little above a break-even proposition, he says, and any advance that can boost the amount of gold extracted is a bonus – which makes their latest work even more exciting.

With honours student Ms Tamar Greaves, they have developed an iron-loaded carbon which significantly reduces the loss of gold due to abrading of the carbon pellets. This prototype carbon could be used with either cyanide or chloride.

The use of chloride would make gold extraction a lot safer and reduce the potential for environmental damage, says Dr Cashion, while the iron-rich carbon could make the process more efficient.

## Monash does its bit to help the environmental cause

BY FIONA PERRY

**The air above Monash University's campuses is about to become a little cleaner and the grounds a little greener, thanks to a new sponsorship deal between Monash and non-profit environmental organisation Greenfleet.**

Under Greenfleet's corporate Carbon Busters program, 7650 trees, or 17 trees for each of Monash's 450 vehicles, will be planted in a bid to reduce the impact of carbon emissions from the university's transport fleet. Monash has donated \$10,000, or \$23 per car, to Greenfleet in 2000.

Some of the native trees will be planted on the Gippsland, Peninsula and Clayton campuses, with the rest donated by Monash to the Strzelecki Ranges revegetation scheme.

Trees will be planted on campus this autumn in consultation with the university's grounds manager, Mr Johan de Bree, and Monash Student Association's environment project officer, Mr Elya Tagar.

With 450 cars, Monash is Carbon Buster's largest sponsor, and joins other environmentally aware corporate supporters of the program such as Tattersalls, VicRoads, the City of Melbourne, Australia Post, the Environmental Protection Authority and the Body Shop.

Monash services manager Mr Joe Verheijen said the university was proud to be part of the scheme and doing its bit to help the environment.



Mr Joe Verheijen (left) and Greenfleet's Mr Reg Mason. Photo by Greg Ford.

"Monash's contribution to Carbon Busters will ensure that the 2000 tonnes of carbon dioxide emissions produced by university vehicles annually will be absorbed by trees and converted into fresh air instead of contributing to global warming," he said. "We're happy to be part of such an environmentally responsible program."

Greenfleet spokesperson Mr Reg Mason said he was delighted to have Monash on board as Carbon Busters'

largest sponsor and said he hoped Monash's student body would also get involved.

"Monash's support for Carbon Busters means it is clearly a leader in environmental awareness in the community. It would be terrific if Monash's student population signed their cars up for the program as well," Mr Mason said.

For more information on Greenfleet and the Carbon Busters program, contact Mr Mason on (03) 5625 4352 or check out [www.greenfleet.com.au](http://www.greenfleet.com.au).

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# Atom probe reveals secrets of inner space

BY DAVID BRUCE

**The arrival of a three-dimensional atom probe at Monash University's Faculty of Engineering will allow researchers to probe the inner space of a range of structural materials.**

Just as medical science delivers on-screen virtual tours of the brain and the heart, Monash materials engineers can now travel inside alloys and other materials and evaluate their composition.

A \$1.2 million three-dimensional atom probe – or 3DAP – is the latest addition to Monash's growing engineering microscopy and microanalysis facility. It was opened last month by the Minister for Manufacturing Industry, Mr Rob

Hulls. Later this year, 3DAP will be joined by a high-resolution transmission electron microscope as part of a joint research program with RMIT, Deakin, Melbourne, Wollongong, Sydney and New South Wales universities.

The 3DAP is the only one of its kind in the southern hemisphere and one of only a few in the world. It has been jointly funded by Monash, RMIT, Wollongong, Sydney, New South Wales, Western Australia and Queensland universities, the CSIRO and the Australian Research Council under the RIEF program.

According to Dr Simon Ringer, a senior lecturer in the Department of Materials Engineering and director of engineering microscopy and micro-

analysis at Monash, the probe can render a three-dimensional view of the microstructures of materials at the atomic level.

"It allows us to look at the 'anatomy' of engineering materials," Dr Ringer explained. "It literally pulls apart the material atom by atom and then very carefully reconstructs it with sophisticated detection systems and computer software."

The three-dimensional reconstructions provide detailed information on the distribution of different atoms. When engineers refer to the increasing sophistication of materials design, they are really referring to the increasingly fine scale of the design. Materials engineers are making devices which

involve the control of nanoscale design features; the 3DAP provides an insight into how these materials behave the way do.

"For materials engineers and scientists, this offers a profound insight," Dr Ringer said. "We can now take a virtual tour inside these materials. We can design new materials and devices and further improve our understanding of existing materials by relating their atomic level structure and chemistry to their function and properties."

The 3DAP will be used for research into light alloys, structural, electrical, electronic and magnetic materials and as a tool in the development of new technologies that require new materials such as in fuel cells, electronics and aerospace.



Manufacturing Industry minister Mr Rob Hulls with the new atom probe. Photo by Greg Ford.

## Researchers probe who will take over family businesses

BY SANDRA BUCOVAZ

**In a landmark study, family-owned businesses throughout Australia are being quizzed on their attitudes towards succession and planning strategies.**

It has been estimated that these operations account for about 80 per cent of businesses in Australia, and represent \$1.2 trillion in terms of wealth. Their future viability is fundamental to Australia's economic prosperity.

To encourage planning for effective succession, the AXA Family Business Research Unit at Monash University, in partnership with the Australian Society of Certified Practising Accountants, has surveyed 2000 family-owned businesses selected at random throughout Australia. The turnover of participants ranges from \$1 million to more than \$100 million.

The survey is the first of its kind addressing succession issues across a number of different players in a family, according to Professor Claudio Romano, foundation director of the AXA Family Business Research Unit.

"Most studies often focus on a particular person – usually the owner," said Professor Romano. "In this study, we have asked the owner, spouse and an adult child involved in the business to

participate. Initial responses have indicated a marked difference in attitudes."

The survey contained about 100 questions covering areas such as business background, business planning, family functioning and more specific succession issues such as who was likely to take over and on what basis.

Professor Romano noted that a founder of a business may have worked his way up through the ranks and believed that a 'hands-on' technical background was far more important than a formal education. However, an adult child might have a different perspective.

**"If you don't plan properly for this type of movement, the business could collapse."**

It is hoped the survey findings will prompt greater communication between family members involved in a family-owned business and encourage them to consider the wider issues involved in who will take over the operation in future years.

Professor Romano stressed the significance of family-owned businesses to the Australian economy in terms of wealth and also the fact that they were great innovators.

He said a national survey of private and family businesses in 1997 by the AXA Family Business Research Unit found that about 80 per cent of businesses in Australia were family-owned.

"Family-owned businesses represent \$1.2 trillion in terms of wealth in Australia – three times the value of the Australian stock exchange," noted Professor Romano, adding that the figure would probably continue to grow as more people were becoming self-employed.

The 1997 survey revealed that about 60 per cent of the chief executive officers planned to leave the business within 10 years.

Professor Romano said this represented about \$600 billion of wealth that would be changing hands. "If you don't plan properly for this type of movement, the business could collapse," he said.

The results of the succession survey are due to be released in late March or early April.



Professor Claudio Romano. Photo by Andrew Barcham.

## Monitoring success of emergency plan



In the First Responder Program, both ambulance officers and firefighters are being sent to the most critical medical emergencies, including cardiac arrest.

BY DAVID BRUCE

**Melbourne firefighters are responding along with ambulance officers to suspected heart attack victims in a program being monitored by researchers in Monash University's Faculty of Medicine.**

From early February, firefighters have been sent to the most critical medical emergencies, including cardiac arrest, at the same time as ambulances.

Under the First Responder Program, the emergency dispatch operators, Intergraph, are sending both an ambulance and a fire truck to 'priority zero' emergencies. If the firefighters arrive first, they give the patient emergency treatment until ambulance officers appear.

What began as a pilot program in southeastern Melbourne last year

has now been expanded to the entire metropolitan region of Melbourne and is being monitored by researchers in Monash University's Department of Epidemiology and Preventive Medicine. The head of the department, Professor John McNeil, is being assisted by PhD student Ms Karen Smith in monitoring the program's success rate.

Professor McNeil said earlier studies had shown that delays in summoning emergency services to collapsed patients were relatively common.

"Early access to emergency care is critical," he said. "A cardiac arrest victim stops breathing and loses consciousness very quickly. From this time on, every passing second increases the likelihood of death."

Ms Smith said the First Responder Program was a first for Australia and a challenge for our emergency services.

"In Australia, firefighters rarely respond to these types of emergencies, so it is a big change in their job description to provide them with the training and the necessary equipment," she said.

The firefighters have been trained to carry out first aid on patients with suspected cardiac arrests. They have also been equipped with and trained to use oxygen therapy and automatic defibrillators, which deliver a shock to the heart.

"In the pilot program, we saw a significant decrease in the response times of the emergency services and an improvement in the survival rates of victims," Ms Smith said. "But now we really need to monitor the program over all of Melbourne to see how successful it is."

## Schools



### 'At Monash' seminars

The 'At Monash' seminar series for senior secondary students will run during May. The seminars give students an overview of course and career options in broad interest areas.

Speakers include academic staff, current students and graduates. Schools will be sent booking forms for all seminars in May.

#### Thursday 4 May

Arts and Law

7.30-9 pm

Robert Blackwood Concert Hall  
Clayton campus

#### Monday 8 May

Business and Economics

1-2.30 pm

Robert Blackwood Concert Hall  
Clayton campus

#### Thursday 11 May

Science, Pharmacy and Medicine

10 am - 12 noon

Robert Blackwood Concert Hall  
Clayton campus

#### Thursday 11 May

Information Technology and  
Engineering

1-2.30 pm

Robert Blackwood Concert Hall  
Clayton campus

#### Tuesday 16 May

Nursing and Education

1-2.30 pm

E2.09, School of Nursing  
Peninsula campus

For more information, contact  
the Prospective Students Office  
on (03) 9905 4164.

### 'Explore Monash'

The 'Explore Monash' school holiday program is specifically designed for regional and inter-state families.

Students can choose between a visit to the Clayton campus, which includes an optional visit to Berwick, Peninsula, Parkville or Caulfield in the afternoon, or an afternoon visit to the Caulfield campus. Activities include an introduction to Monash, a tour of the campus, visits to academic areas of the students' interest, and a look at student accommodation.

The first 'Explore Monash' program for 2000 will be held on 17 April, starting at 10.30 am.

For more information, contact the Prospective Students Office on (03) 9905 4164.

### Course info out

The 2001 Undergraduate Course Guide will be available from the end of the month.

Schools will be sent several copies, with the option of ordering as many copies as they need.

# Researcher probes the sandy depths of damaged waterways

BY JOSIE GIBSON

**New Monash research into the impacts of excess sediment in rivers and streams could play a crucial role in efforts to rehabilitate waterways damaged by erosion and mining.**

The research by Ms Rebecca Bartley, a doctoral student in the Cooperative Research Centre for Catchment Hydrology, is part of a wider project examining the role of sedimentation in the degradation of Australia's waterways.

Ms Bartley is focusing on sediment (or sand) slugs, the large pulses of sand or gravel which form in and gradually move through rivers and streams.

According to Ms Bartley, there has been considerable research into erosion and its causes but little on what happens to that eroded material.

"Everyone has been focusing on where the sand is coming from," she said. "Very few people in Australia have actually looked down the stream to see where the sand is going or what it's doing."

Stream rehabilitation is a relatively new field in Australia and internationally. With water quality an increasingly

pressing issue in many countries, conserving and restoring the world's water resources is assuming greater political and scientific importance.

The sand slugs Ms Bartley is studying can be highly destructive to stream habitat, killing off insect life and altering fish passages and spawning areas with damaging long-term results.

"With the Ringarooma River in Tasmania, for example, there are 14 million cubic metres of sand downstream that silt up the channel up to 12 metres deep - a column just of sand," she said.

Ms Bartley has carried out intensive fieldwork on three Australian rivers, including the Ringarooma, spending weeks in the water noting patterns of sedimentation development and movement along stretches of up to 40 kilometres.

She said she was trying to establish how and why some streams recovered after sand slugs passed through and others didn't.

In recovered streams, where the silt has dissipated, aspects such as channel structure, water flow and vegetation return to what is regarded as normal; in damaged streams, geomorphic complexity is markedly reduced.



The fieldwork has involved Ms Rebecca Bartley, right, spending large amounts of time on - and in - the water observing sediment changes. Photos by the CRC for Catchment Hydrology and Greg Ford.

"As part of the research, I've been looking upstream at the back end of the sand slugs," she said. "Are the rivers healing themselves? If not, what can we do as a management strategy to help them heal themselves?"

Ms Bartley's work has already attracted wide interest because of its potential to lead to more effective ways

of restoring waterways, such as Papua New Guinea's Ok Tedi, that have been devastated by mining.

The long-term aim, she said, was to develop a recovery model for such scenarios.

For more information on the project, email Ms Bartley at [rebecca.bartley@eng.monash.edu.au](mailto:rebecca.bartley@eng.monash.edu.au)



## BRIEFS

### Monash graduate for magistrates court

A Monash law graduate, Ms Diana Bryant, has been appointed chief magistrate of the new Federal Magistrates Court.

Ms Bryant, a family law specialist based in Melbourne, completed her masters at Monash last year. She is only the second woman to head a federal court in Australia.

The court, comprising magistrates spread through urban and regional areas in all states except WA, is expected to open by June.

### Accounting honour for Monash professor

A Monash academic has been appointed to the newly constituted Australian Accounting Standards Board (AASB).

Professor Graham Peirson, of the Department of Accounting and Finance, is the only academic appointed to the nine-member board.

Set up to replace the previous AASB and Public Sector Accounting Standards Board, the new board will be responsible for developing accounting standards for the private, public and non-profit sectors in Australia.

Professor Peirson's pre-eminent role in accounting was recognised last year

when he won the inaugural outstanding contribution to practice award presented by the Accounting Association of Australia and New Zealand.

### Polish studies receives a major boost

The Stanislaw Blum Foundation has presented the Department of Slavic Studies with \$8000 for the preservation of Polish studies at Monash University.

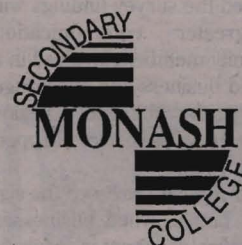
The cheque was recently presented to the dean of Arts, Professor Homer Le Grand, by a representative of the Federal Council of Polish Associations in Victoria.

### Law faculty helping East Timorese

Monash University's Faculty of Law has joined efforts to rehabilitate the devastated infrastructure of East Timor.

The faculty recently sent 25 computers and 24 boxes of law books covering a wide range of subjects to the United Nations authority overseeing the rehabilitation program. The resources will be used by judges, prosecutors and other law personnel.

The UN is in the process of repairing the Dili District Court, the first court to be reopened since militia-led violence erupted in the wake of East Timor's independence vote.



## MONASH SECONDARY COLLEGE

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- ◆ caters for a multinational student population
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- ◆ has an academic focus and excellent VCE results
- ◆ has an active extra-curricular program

### Which is:

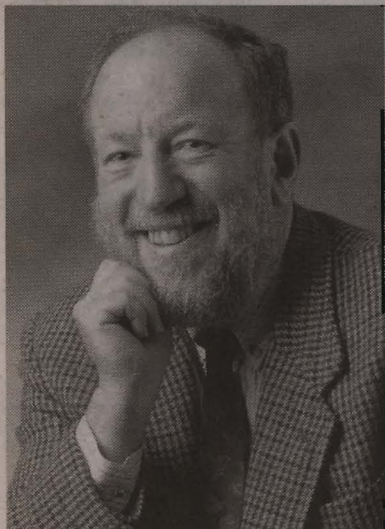
- ◆ small enough that each student is known as an individual
- ◆ large enough to offer curriculum choice

Contact Principal Bob Hogendoorn  
on 9560 9477 for an interview.

# Presidential election fuels new Taiwan-China tensions

As Taiwan prepares for presidential elections on 18 March, relations across the Taiwan Straits have again emerged as one of the most problematic and dangerous issues facing the Asian region. The threat of war is again very real, with potentially serious implications for Australia, writes the director of the Monash Asia Institute, Professor John McKay.

## OPINION



Following the return of both Hong Kong and Macau to China, the leadership in Beijing has pledged to redouble its efforts for unification with Taiwan, held by the Kuomintang (KMT) since their defeat on the mainland in 1949. In the view of China, the return of Taiwan would finally end its 'century of shame'.

In pursuit of this goal, Chinese rhetoric has become increasingly strident, warning that any declaration of independence by Taiwan would mean war. Also worrying are rumours that Chinese President Jiang Zemin is being pressured by advisers to set a deadline for unification.

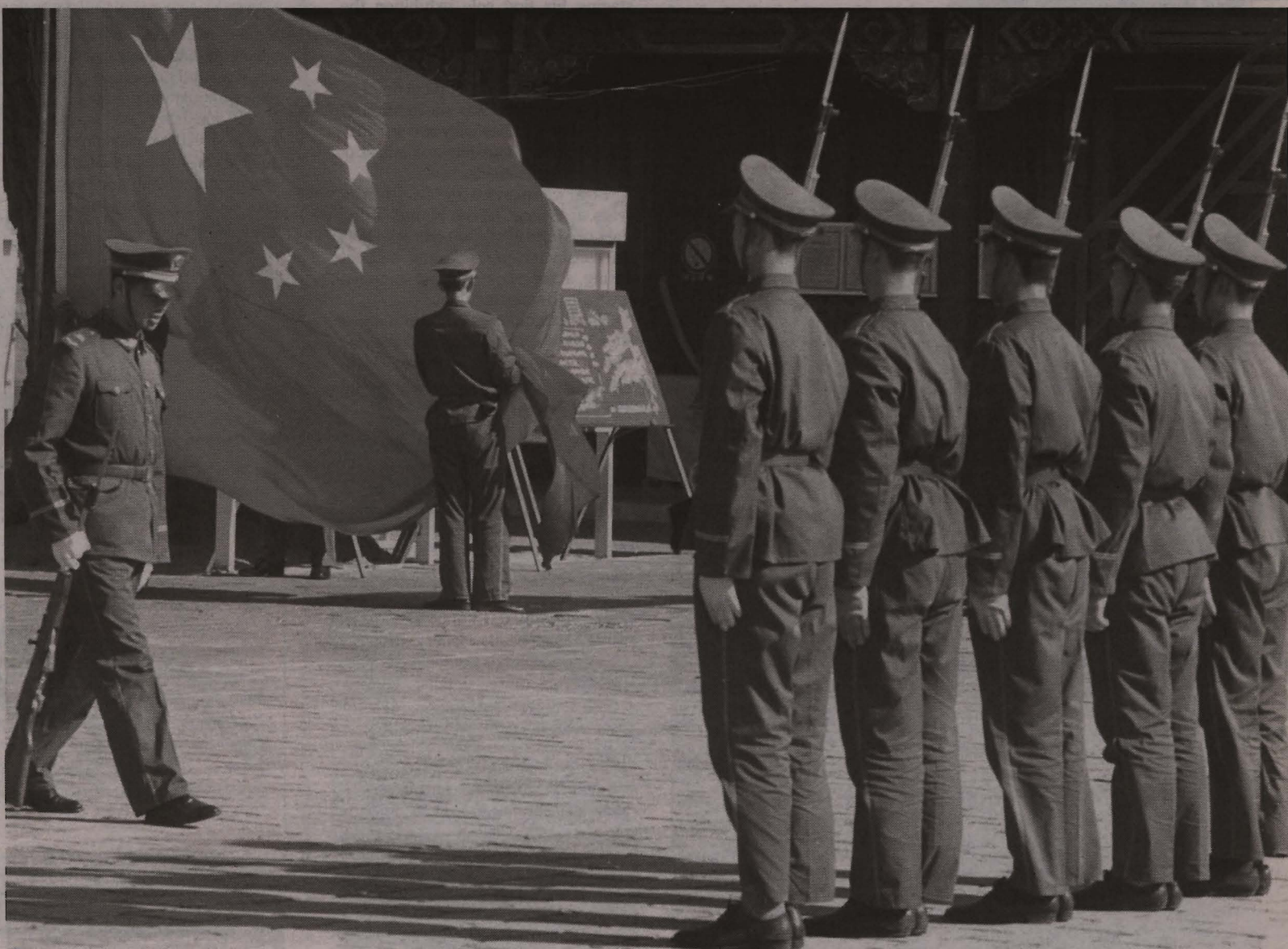
One particularly worrying feature of the current situation is the hard-line position being put forward by practically all the players involved. Hence there is a need to search for some basis and forum for negotiation.

This hard-line position is nothing new, but if anything, the tone is even more uncompromising than that before the last presidential election in Taiwan in 1996.

The United States' position has also been hardening. On 1 February, the US House of Representatives voted overwhelmingly in favour of the Taiwan Security Enhancement Act, which strengthens military ties between Washington and Taipei. A number of members of Congress have also indicated that any US notification of China's entry into the World Trade Organisation will be delayed until after Taiwan's presidential elections as a clear check on China's behaviour during this fragile transitional period.

A number of commentators, including some in Australia, are arguing that war between the United States and China over Taiwan is inevitable, and that Australia will be expected to enter such a war in support of the US and Taiwan. Certainly, China has reacted angrily to the Taiwan Security Enhancement Act, warning that it will have "very serious consequences" for US-China relations and for the future of peace and security in the region.

Fortunately, there are several factors which are leading to restraint in this dangerous situation. The Chinese leadership is very aware that its rhetoric and the large-scale military exercises it conducted just before the 1996 elections in



Chinese soldiers practice drills outside barracks in Beijing. Tensions have been high in recent months between Taiwan and China, amid fears China might try to influence the island's presidential election this month with missile tests or war games. Photo by AP.

Taiwan did much to ensure the election of President Lee Teng-hui. In the current campaign, China's message is clearly aimed at one of the favourites in the presidential race, Chen Shui-bian of the pro-independence Democratic Progressive Party. In response, Chen has moderated his message, promising that he would not move towards a declaration of independence unless China used military force against the island.

### **We should not underestimate the seriousness of Chinese threats in this matter.**

But the Chinese must be acutely aware that the tide of public opinion in an increasingly democratic Taiwan is not moving in their favour. The vast majority of voters in Taiwan – around 80 per cent according to recent opinion polls – are deeply suspicious of the 'one country, two systems' formula being offered by Beijing.

Given recent moves towards democracy, and the continued strength of the Taiwanese economy, most

believe that this is not a sufficiently attractive offer for them to give up the status quo. More fundamentally, many voters – and especially the younger generation – regard themselves as Taiwanese rather than Chinese. Recent polls suggest that 38 per cent regard themselves as Taiwanese, and 45 per cent see themselves as both Taiwanese and Chinese, while only 12 per cent regard themselves as purely Chinese.

These polls, conducted now over many years, suggest that the proportion with a purely Chinese ethnic identification is in serious and steady decline, and any pressure from China in the present situation is likely to be very counterproductive. These Taiwanese sentiments are also encouraged by the widespread belief that China does not have the military capacity to launch a successful invasion of Taiwan, and that in any crisis Taiwan could rely on US intervention.

Many doubt that China would risk the international censure that would result from any attempted invasion. Yet, in my own view, we should not underestimate the seriousness of Chinese threats in this matter. This is an issue which is absolutely central to China's perception of its own future and place in the world.

For Australia, this is a central foreign policy concern because it may

well be drawn into any conflict, and because of the importance of both China and Taiwan to our foreign trade.

What, then, are the ways forward in this very dangerous situation? One hope is that economic and trade concerns will remain central. During the

### **APEC is really the only international organisation in which Taiwan and China are both represented.**

1990s, Taiwanese companies invested some US\$14 billion in China, and two-way trade between China and Taiwan is now worth US\$7 billion annually. Also, China has a clear interest in becoming a member of the World Trade Organisation.

Within this context, some commentators have questioned the role of APEC in contributing to a peaceful solution.

APEC is really the only international organisation in which Taiwan and China are both represented. Potentially, the annual meeting of

APEC heads of government, at which the US is also represented, might provide a constructive forum.

However, China has resolutely insisted that Taiwan be represented at a relatively junior level at these meetings, and has also insisted that the Taiwan question is an internal matter which cannot be discussed at an international level.

While insisting that APEC is essentially a forum to enhance trade and investment in the region, China has sometimes used this forum to explain its policies on issues such as nuclear non-proliferation, and has been willing to enter bilateral discussions with the United States over Taiwan at APEC meetings.

Given that the APEC agenda emphasises economic and trade questions, although it increasingly has become involved in wider issues in the region, this may offer a constructive way forward. Certainly, APEC members would emphasise the economic as well as the profound human costs of any conflict in the Taiwan Straits.

*Professor John McKay is director of the Monash Asia Institute and a specialist in North Asian strategic relations.*

# Works trace growth of an artistic genius

BY JOSIE GIBSON

A major retrospective of work by one of Australia's greatest modern artists opens at Monash University this month.

Arthur Boyd: *Sixty Years of Sleepless Nights*, on at the Faculty Gallery at Caulfield campus from 14 April, represents a monumental artistic statement by the internationally feted artist, who died last year at the age of 78.

The exhibition of paintings, etchings and lithographs has been mounted by the Bundanon Trust, which manages the NSW property of the same name that Boyd and his wife donated along with artworks and other memorabilia to the Australian people in 1993.

"This is a rare opportunity for Victorians to see a collection of immense depth by a great Australian artist," said the dean of Monash's

Faculty of Art and Design, Professor John Redmond.

Boyd's entire life was immersed in art, with his grandparents, parents and siblings all practising artists or potters.

Born in the Melbourne suburb of Murrumbena in 1920, Boyd showed artistic talent from an early age, starting painting full-time at age 16 and staging his first solo exhibition the following year.

His works tackled many themes, from war and persecution to romance, religion and the land. A recurring element in his work was the tension of choice: between bestiality and spirituality, nature and humanity and a host of other human instincts.

Boyd was married for more than 60 years to Yvonne, whom he met at the start of World War Two and who was his constant companion and support during a life spent moving between Australia, Britain and Italy.

The exhibition has been named after Boyd's habitual sleeplessness, which according to curator David Chalker, gave him "long nights, and time to read, reflect and imagine".

The works range from Boyd's first oil painting in 1933 to those made at Bundanon in 1993. The exhibition originates from an artist-in-residency at Bundanon by the Faculty Gallery manager and sculpture studio coordinator Malcom Bywaters in 1998.

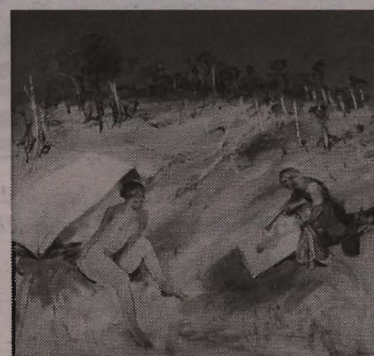
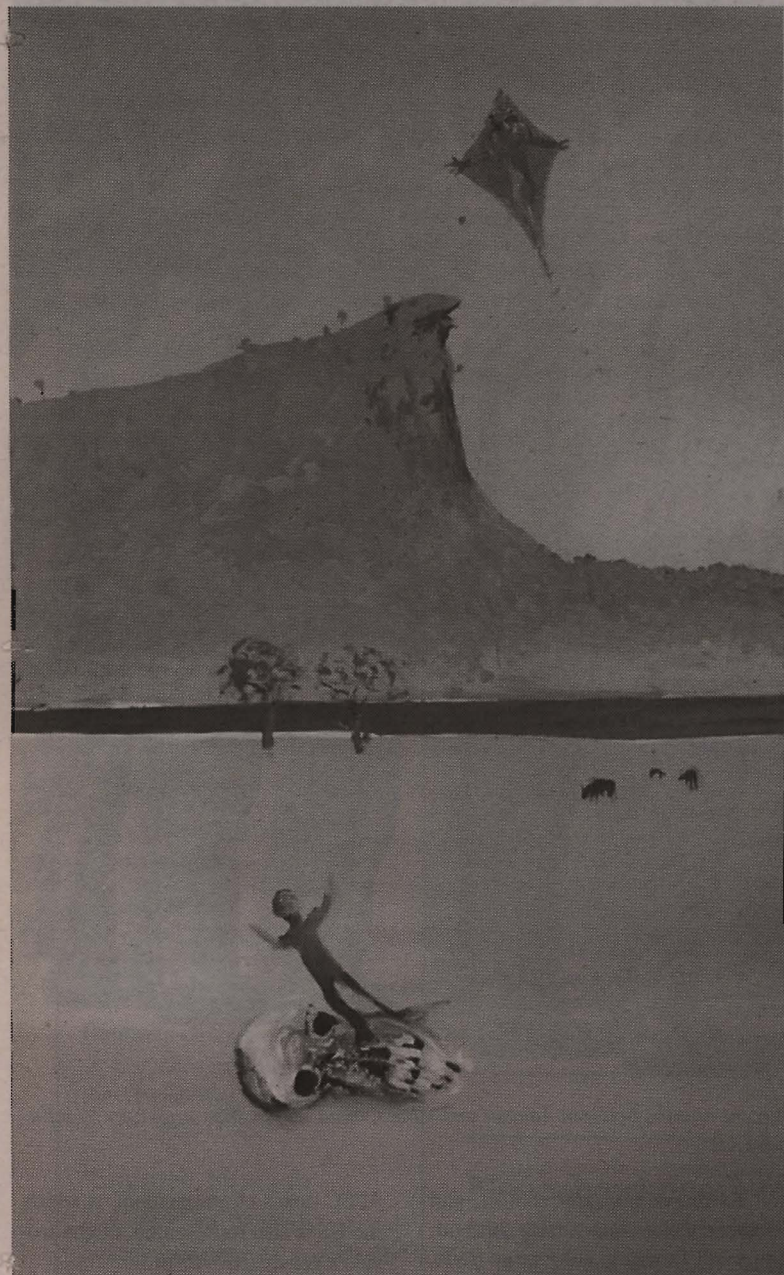
**What:** Arthur Boyd: *Sixty Years of Sleepless Nights*

**When:** 14 April to 13 May

**Where:** The Faculty Gallery, Monash University's Caulfield campus

**Who:** For more details, contact gallery manager Malcom Bywaters on (03) 9903 2882.

'Pulpit Rock, kite and skull' (c 1980), left, and 'Figure under canvas shelter' (1972).



## Avant-gardism, dinosaurs at the Monash Gallery

BY STEPHANIE GOETZE-THIES

On at the Monash University Gallery in Clayton at the moment are two distinctly unique exhibitions which are bound to delight.

*Avant-Gardism for Children* is concerned with teasing out further possibilities of spontaneous and improvisational artmaking while extending notions of modernist abstraction.

The works in this exhibition utilise materials and methods which are both familiar and forgotten. Recycled household goods and playroom materials abound.

The artists have sought to couple childlike playfulness with adult know-how and sensibilities to create thoughtful and engaging images which appeal to a broad range of audiences.

Kathy Temin's 'Arrange Your Own Room No. 6', constructed of felt on felt and plastic wrap, appears to revel in its unprofessional finish and parodies the highly finished modular design it replicates.

Built in collaboration with his five-year-old son and three-year-old daughter, Michael Phillips' untitled construction is made from second-

hand educational toys similar to those used by the Queensland Education Department.

Other artists included in the exhibition are Catherine Brown, Mikala Dwyer, Elizabeth Gower, Pip Haydon, Elizabeth Newman, John Nixon, Robert Rooney and Paul Saint.

On show in the project room is *Dinosaur Days*, an exhibition of palaeontological paintings and drawings by Peter Trusler, supplemented by much of his source material of dinosaur bones, fossils, models and replicas.

*Dinosaur Days* has been developed in conjunction with the Monash Science Centre at Monash University and includes reconstructed scenes of early cretaceous Victoria and Australia, as well as designs for Australian megafauna, believed to be the basis of many Dreamtime stories of indigenous Australians.

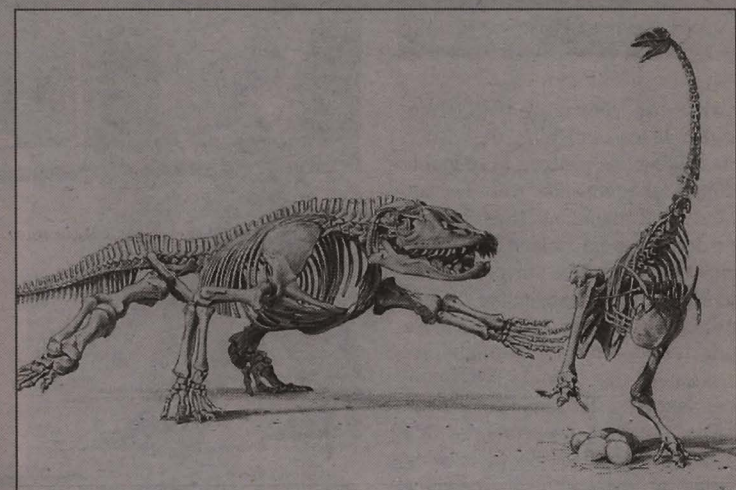
A talk by the artists will be held at the gallery on 14 March at 1.30 pm.

**What:** *Avant-Gardism for Children* and *Dinosaur Days*

**When:** Until 20 April

**Where:** Monash University Gallery, Clayton campus

**Who:** For more details, contact the gallery on (03) 9905 4217.



Megalania and Genyornis (1985), a skeletal reconstruction illustration by Peter Trusler.



Kellogg's Sugar Frosties: Jumble animals (elephant) circa 1960s (1999) by Robert Rooney.

## ARTS SCENE

### Summer school spot for glass student

A Monash University student will head for the US later this year to take part in the prestigious Pilchuk Glass School.

Phil Stokes, an applied arts honours student majoring in glass, has received assistance from Pilchuk to attend the famous summer school near Seattle.

The half-scholarship guarantees Stokes a place at one of the workshops, which attract some of the biggest international names in glass artistry to lecture and participate.

The Pilchuk award is seen as international recognition of the quality of Monash's glass program, run through the Faculty of Art and Design.

### Viva Voce supporting Relay for Life

Monash University's mixed choir, Viva Voce, will perform in support of cancer research later this month.

The 70-member choir of staff, students and members of the public will sing a program of contemporary Australian and Afro-American music as part of the Anti-Cancer Council's Relay for Life on 18 and 19 March.

The team-based event, being held this year at multiple locations throughout Victoria, is aimed at raising funds for cancer research.

Viva Voce will appear as part of the candlelight memorial ceremony at the Duncan MacKinnon Athletics Track in Murrumbena on 18 March.

For more details, contact the Relay for Life Office on (03) 9635 5378 or email relayforlife@accv.org.au

### Paris exhibition for Monash lecturer

A Monash staff member recently exhibited her work in Paris.

Ms Louiseann Zahra, a sessional lecturer in photography, has been an artist-in-residence in Paris for three

months as a recipient of an Australia Council award.

Her installation of delicate beaded and stitched work was exhibited at the Cité Internationale des Arts.

### Monash students on London visit

The first Monash students have taken advantage of Monash's link with King's College London.

In January, a group of students from the Faculty of Art and Design visited the newly opened Monash University Centre London as part of a program of seminars and visits.

Led by Dr Bronwyn Stocks, the student group visited art galleries and museums including the Courtauld Gallery, next door to King's College London's Strand campus.

The Monash centre has been set up as part of a strategic alliance with King's, a founding college of the 170-year University of London.

## New booklet looks at rural cardiac care



Monash senior lecturer Ms Anne Leversha. Photo by The Visual Resource.

BY KAREN MEEHAN

**A new manual, partly authored by a Monash academic, promises improved rehabilitation care for cardiac patients in rural and remote communities.**

Pharmacist and senior lecturer Ms Anne Leversha has compiled the medication guide for *Promoting Heart Health: An Educational Resource Manual for Rural and Remote Health Workers*, recently released by the Heart Foundation.

Ms Leversha, who is also deputy manager of pharmacy services at Gippsland's Latrobe Regional Hospital, co-wrote the guide with hospital colleague Ms Elaine Maxted, a pharmacy expert in cardiac rehabilitation.

*Promoting Heart Health* provides practical information and resources for the establishment of cardiac rehabilitation programs in isolated communities, where access to particular specialists may be limited.

"We want all patients to have the expertise available to them for cardiac rehabilitation," Ms Leversha said. "This manual will assist rural and remote health professionals to set up their own program, whether they be domiciliary nurses, community health centre nurses, or nurses in a very small hospital where there might not be a pharmacy or a dietetics department."

The two women's contribution to *Promoting Heart Health* includes detailed descriptions of cardiac drugs, their brand names and actions, as well as any adverse effects.

As in other sections of the manual, these technical notes are complemented by extensive patient information handouts written in simple language, which deal with issues such as appropriate handling for the drugs and what to do about side-effects.

"Most patients who have a cardiac history are on medications, and they can be very complex," Ms Leversha said. "Treatments also change rapidly, so the manual has been designed to be easily updated."

Originally developed by Queensland University of Technology, the idea for *Promoting Heart Health* was presented at a rural health conference Ms Leversha attended. At that time, the draft had no section on medicating patients with heart disease, and the researchers suggested that Ms Leversha assist them by compiling it.

"This publication is a one-stop shop," Ms Leversha said. "Rural health professionals can purchase the manual, and all the information is there to set up their own cardiac rehabilitation program."

*Promoting Heart Health* is available from the Heart Foundation on 1300 362 787.

## A feast of music at Monash campuses

BY NADIA SARTORI

**Monash University's free lunchtime concert series kicks off this month with a diverse program of leading Australian and international musicians.**

Performances will take place regularly on all Monash campuses in Victoria and are open to staff, students and the public.

Highlights of the first semester program include local artists such as John O'Donnell commemorating the 250th anniversary of the death of Bach with a glorious all-Bach organ program, and Mark Mogilevsky, associate concertmaster of the Melbourne Symphony, performing the virtuosic works of Russian and eastern European composers.

Voiceworks, Australia's leading female a cappella vocal ensemble from

Sydney, will perform Graham Hair's *Seven Words* for voices and cor anglais.

Monash ensembles Viva Voce, the Monash Women's Choir, the New Monash Orchestra and the Monash Sinfonia highlight the talents of the students of the School of Music - Conservatorium.

International guests include the Academic Female Choir Lyran of Finland; Lili Suparli, a leading exponent of the instruments of the gamelan orchestra; Kazue Sawai on koto; the University of Michigan Glee Club Choir, one of the finest male choruses in the world; and the Washington and Lee University Wind Ensemble performing Count Basie and Duke Ellington.

For full details of performances on each campus, contact the Monash concert manager on (03) 9905 9034.

## Monash sport finds its way to international success

BY DEREK BROWN

**A new sport, started by a group of Monash University students in 1976, now has a word to describe it in the Czech language and an international federation with members from more than 12 countries.**

Rogaining, which involves teams competing in 24-hour cross-country navigation, began as a Victorian inter-university sport, went national in 1979 and, in 1989, the International Rogaining Federation was formed.

According to Dr Neil Phillips, one of the founders of rogaining, championships in Canada, sporting clubs in New Zealand and the formation of the Ceska Asociace Rogainingu in Prague all document the sport's international appeal.

"From Australia to the Czech republic, I think people in any nation can appreciate the need to escape the confines of the city and be surrounded by nature. A rogaïne gives people this opportunity," said Dr Phillips.

"The sport allows recreational competitors to participate in the same event as the world's best rogainers. It is this accessibility that has added to the success of rogaining."



Image by Elizabeth Dias.

Dr Phillips and his brother, Dr Rod Phillips, have now published a revised edition of *Rogaining: Cross-Country Navigation*, a book they produced more than 20 years ago as the first manual for the sport.

"The book was used to help the sport develop in new areas and included sections on the basics, tips for successful competition, and how to run a rogaïne. This third edition has been revised to keep up-to-date with changes in the sport," he said.

It includes a detailed history of the growth of the sport, including an analysis of rogaining conditions in many countries.

The wide open spaces of the US are contrasted with the dense population and highly urban development of the Czech republic to show the diversity the sport has come to encompass.

The sport's unusual name, a word constructed from the names of the three founders - Rod Phillips, Gail Davis and Neil Phillips - was given official recognition with the emergence of the Victorian Rogaining Association and has now entered the vocabulary of several nations.

## INPRINT

### Religion in an Age of Change

Edited by Dr Peter Ballis and Professor Gary Bouma  
Christian Research Association  
(RRP: \$18)

Religion in Australia has gone through radical changes over the last century. The beginning of the 21st century sees a variety of spiritualities thriving as people move away from the homogenised and institutionalised forms of traditional religion towards a more self-directed path.

From women's ordination and the image of God to new religious

movements and the relevance of religion in an electronic culture, *Religion in an Age of Change* attempts to map Australia's contemporary religious landscape.

Through a series of chapters written by people involved in faith, the text reveals religion in Australia as an eclectic mix where individuals mediate their own spirituality, choosing from a variety of practices and traditions to form their own relationship with divinity.

Editors Dr Peter H Ballis and Professor Gary Bouma from Monash University's School of Political and Social Inquiry have published several works on the topic of religion and its place in Australian society.

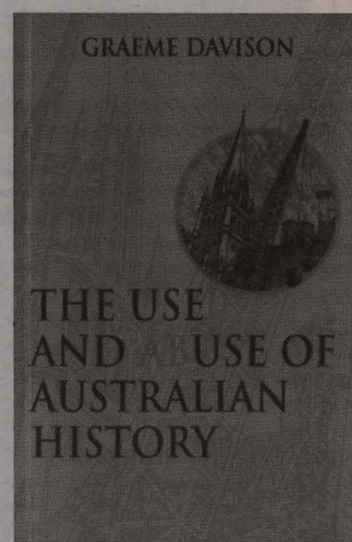
### The Use and Abuse of Australian History

By Graeme Davison  
Allen & Unwin (RRP: \$29.95)

In the age of Mabo and the republic, history is often in the headlines.

The past can inspire, console and condemn - sometimes all at once - but how do Australians use, and sometimes misuse, the past? What are the private and public purposes it serves, and what dangers attend its abuse?

In *The Use and Abuse of Australian History*, Professor Graeme Davison



provides a provocative look at the way history is employed, manipulated and indeed understood.

He presents a wide-ranging and perceptive exploration of the many ways in which the past enters everyday life in Australia, and a powerful plea for the imaginative study of history.

Graeme Davison, a professor of history at Monash University, has been an academic historian for almost 20 years and is a former president of the Australian Historical Association and chair of the Victorian Heritage Council.

All books featured in 'Inprint' are available or can be ordered at Monash's four on-campus bookshops.  
• CITSU (Caulfield) (03) 9571 3277 • Clayton (03) 9905 3111 • Gippsland (03) 5122 1771 • Peninsula (03) 9783 6932  
www.monash.edu.au

# Study finds the hot spots in Victoria

BY DAVID BRUCE

**Parts of Western Victoria are still bubbling with the heat of their volcanic past, according to early data being analysed from the first detailed seismological study of what lies deep beneath the surface of southeastern Australia.**

Geologists at Monash and Adelaide universities have partially completed a giant ultrasound of the southeast corner of the Australian continent.

Until now, our understanding of the foundations of our continent has barely scratched the surface. Geologists have relied upon surface mapping and drill holes no more than a couple of kilometres deep.

In the first phase of an ongoing project, researchers Dr Greg Houseman and Dr Frank Graeber at Monash and Professor Stewart Greenhalgh at Adelaide have obtained the first detailed three-dimensional tomographic image of a large area of western Victoria, down to depths of 300 kilometres.

In the image, the speed of propagation of sound waves has been measured and mapped using sensitive ground motion detectors and energy emanating from earthquakes on the Pacific Rim.

"This tomographic image enables us to see down under Victoria in a dramatic way," Dr Houseman said. "We get clear evidence of some of the geological events that have been responsible for the present-day structure of Victoria."

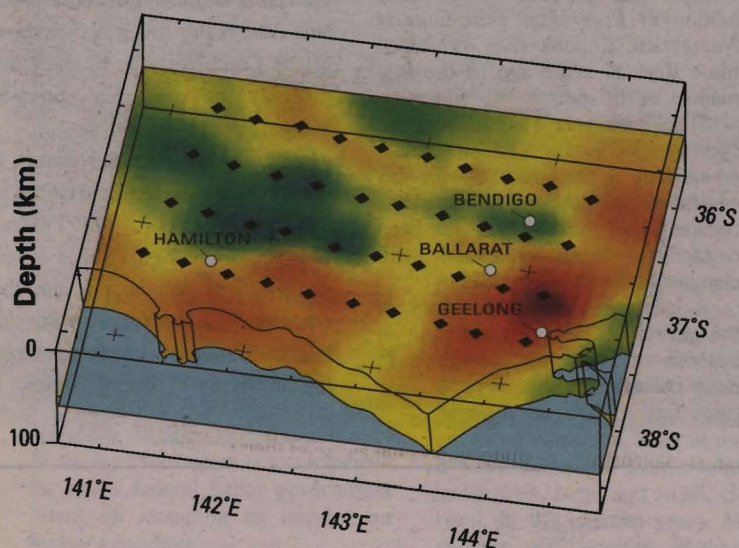
"Perhaps the most interesting finding so far is that the lithosphere beneath the volcanic plains of western Victoria is still surprisingly hot to depths of at least 100 kilometres, and we can see this in the slow wave speeds. Perhaps this should not be too surprising because all those extinct volcanoes along the road to Hamilton are not very old."

The hottest regions are found beneath Ballarat and Daylesford at depths of around 70 kilometres. This big anomaly is perhaps the root cause of hot spring activity centered in the Daylesford region. The hot region extends in a less prominent way towards Stawell and Bendigo.

"There are some more subtle features in the images which tell us something about events that pre-date that burst of volcanic activity which has occupied much of the last six million years," Dr Houseman said. "The most important of these features is the relatively steep transition from fast wave speeds on the west side of the Grampians to slow wave speeds on the east."

This transition corresponds to a large surface fault between two major blocks of lithosphere which were first joined together probably 400 million years ago. Dr Houseman said the image suggested that this major fault zone might extend right through the lithosphere to depths of about 150 kilometres.

"Until now," he said, "we had no indication of how deep this structure went."



Sixty kilometres below the surface, the heat of western Victoria lingers. This three-dimensional image shows the hot springs regions east of Ballarat and the remnants of a recent volcanic past between Geelong and Hamilton. To the north, the green zones show cooler regions with more solid foundations. The image has been created by measuring the speed of sound waves through 40 highly sensitive ground motion detectors listening deep below the earth's surface.

## Study to probe implications of transnational education

BY JOSIE GIBSON

**As more educational institutions expand internationally, how do host and provider countries manage to reconcile their social, cultural and political differences?**

That's one of the questions being addressed in a new study by Dr Chris Ziguras, a research fellow in the Centre for Research in International Education at Monash University.

Focusing on Malaysia and Singapore, Dr Ziguras hopes to answer some of the more pressing questions raised by the explosive growth in transnational education.

'Transnational education' refers to teaching or learning activity where students are based in a different country from that of the educational provider. More than 20,000 students were enrolled in offshore campuses of Australian universities in 1998, a significant proportion from Malaysia and Singapore.

The two Asian neighbours also host transnational programs operated by universities and vocational training institutions based in Britain, the US, Canada and New Zealand.

In a just-completed study into the development of culturally sensitive



Dr Chris Ziguras. Photo by Richard Crompton.

content online, which also focused on Asian countries, Dr Ziguras touched on some of the implications of borderless education.

Malaysia and Singapore, he said, would allow him to explore some of those issues in greater depth through two contrasting experiences.

"The leaders of both countries, Lee Kuan Yew and Mahathir Mohammed, have been outspoken in their belief in the distinctiveness of 'Asian values'," he said. "However, the two countries have followed different paths in using the

education system to reaffirm particular national and ethnic identities."

The most obvious difference, he said, was in national language policies and their implementation in education.

"In economic relations, while Singapore has embraced globalisation, the Malaysian Government has adopted much more restrictive trade policies on the whole," Dr Ziguras said. "But in educational trade, Malaysia has been much more liberal than Singapore. The choice of these two countries allows a comparison of two very different responses of trade, education and cultures."

He said most existing research had looked at narrowly defined educational outcomes, overlooking the social impacts of transnational education within a host country.

Dr Ziguras' study will involve interviews with policy-makers, transnational education providers, education marketers and international agencies with an interest in education, such as the World Trade Organisation. He will also speak with teaching staff and students.

For more details, email christopher.ziguras@education.monash.edu.au

## BRIEFS

### Monash comes clean on environment

Monash University has adopted an environmental policy that will see Australia's largest university strive to become clean, green and energy efficient.

Launched earlier this month, the policy is a cooperative effort between university staff and the Monash Student Association.

Policy objectives include working toward the efficient use of resources, reducing greenhouse emissions from cars and incorporating environmental content into appropriate courses and subjects.

### Busy time at Monash's Gippsland campus

Staff at Monash's Gippsland campus have been busy over the summer playing host to a number of community groups.

In January, the campus hosted the Junior Chess Championships, with more than 250 secondary students, coaches and families on campus for two weeks.

In February, delegates from across Australia attended the Distance

Education Library Conference, and then it was the turn of dairy farmers from across the state to attend a one-day conference.

The busy round of activities continued with a conference for 450 kindergarten and primary school teachers, interspersed with a stream of regional secondary students undertaking orientation programs at the campus.

### International award for engineer

A Monash engineer has been honoured with an international award.

Associate Professor David Brennan, from the Department of Chemical Engineering, has been presented with the international Institution of Engineers Senior Moulton Medal.

The award was for a paper, co-authored with his then-PhD student Dr Kurt Golonka, on 'Costs and environmental impacts in pollutant treatment: A case study of sulphur dioxide emissions from metallurgical smelters'.

The Moulton Medal has been won only twice before by an Australian.

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