

MOSA goes on the road outback

THE Monash Orientation Scheme for Aborigines (MOSA) is about to embark on its biggest recruitment drive since the program was established in 1984.

MOSA recruitment officer. Richard Jameson will leave Monash early next month to visit about 20 Aboriginal communities along the Cape York Peninsula and Torres Strait Islands.

According to Mr Jameson, his mission is twofold; to speak to the community elders about the benefits of a tertiary education for their people; and to promote MOSA as the most unique education program for Aborigines in Australia.

MOSA aims to open up access to tertiary education for Aborigines by offering a full year of specific preparation for university study. Students who complete the orientation year achieve a standard at least equal to VCE, and can enrol in the faculties of Arts, Science, Law, Economics and Politics, and Engineering.

To launch the recruitment drive a series of posters has been designed depicting MOSA students with captions such as "I'm studying to be a lawyer". (Other careers include journalist, doctor, economist and historian.)

Two other trips have also been planned for later this year. One to Darwin and Arnhem Land in the Northern Territory, and the other to central Australia taking in those Aboriginal communities around Alice Springs and Coober Pedy, and finally across to Broome.

Mr Jameson said it was important fo get information about the program out to the more isolated Aboriginal and islander communities.



"We have mainly relied on word of mouth for publicity, but this year we are targeting specific areas and communities to let people know what we have to offer." he said.

"I believe what we have to say will be well received because there is already a movement there to accept tertiary education."

Mr Jameson said he was hoping to enrol about 60 to 70 people into the orientation program this year.

"Family ties in the communities are very strong, so we hope to encourage at least five people from the one community to sign up together," he said.

"Once they decide if they want to do the program MOSA becomes like a bigger family for them and offers a strong support network."

Mr Jameson is himself a Torres Strait Islander and well qualified to promote both tertiary education and MOSA for his people and Aborigines.

He was educated to Year 10 level before leaving school to take up an apprenticeship in painting and decorating, and later worked as a sub-contractor for a number of years.

While living in Darwin he heard about MOSA from a student who had just completed the program. Mr Jameson enrolled in 1985 and went on to do a degree in social work, which he finished last year.

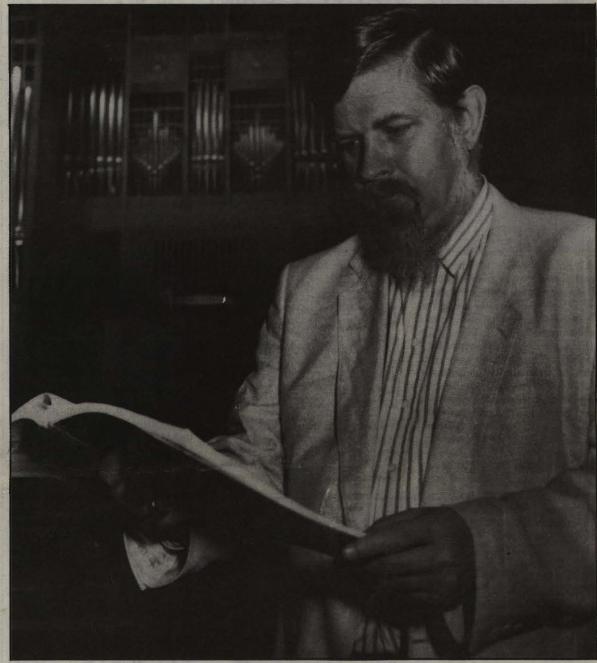
"It is essential for more Aborigines to enter the professional stream of society if we are to compete on an equal footing in Australia," he said.

"We need to have our own doctors, lawyers and social workers to bring an Aboriginal perspective to issues and decisions affecting our' people and communities.

"Some of the community may think we are becoming 'white' in getting a tertiary education but if anything it develops a stronger awareness and self-esteem.

"The people who take part in the program generally have a commitment to go back to their communities and work there with the skills they have learnt.

"What we try to do is equip peo-



Picture: RICHARD CROMPTON



ONE of the world's leading organists, Harald Vogel (above), led several master classes in Robert Blackwood Hall recently as part of the Melbourne International Festival of Organ and Harpsichord.

The festival offered Mr Vogel his second opportunity to play the Louis Matheson pipe organ which adorns the hall's east wall. Mr Vogel first played the organ in a factory at Leer, a northern Germany town near the Netherlands border, where it was built by Jurgen Ahrend.

Mr Vogel is widely recognised as the world's leading authority on the Renaissance and Baroque keyboard literature of North Germany. He is director of the North German Organ Academy, which he founded in 1972 to encourage the study of early keyboard performance practices on historic, original instruments.

His teaching influence is widespread in Europe through events such as Haarlem Summer Academy in Holland and the Pistoia Academy in Italy, and since 1977 he has served as a visiting organ professor at Westminster Choir College in Princeton, USA.

trol of their own future and, the future of their people and community."

Chisholm gets \$1 million treasury dealing centre

A \$1 million simulated treasury dealing centre was officially opened at Chisholm Institute of Technology recently by the Victorian Treasurer, Mr Tom Roper.

The David Syme Treasury Dealing Centre is a learning and training facility that mirrors dealing desks of major banks, finance houses and corporate treasuries.

Established by Chisholm's School of Banking and Finance, the centre provides the financial sector with the latest technology to train the next generation of dealers.

It is the only training dealer facility in Australia which has industry standard software packages, hardware and communication facilities. It can therefore also be used by the finance sector as an alternative unit in times of emergency.

The centre has been funded by

major banks including the National Australia Bank, Westpac, the Commonwealth, ANZ, State Bank Victoria and the Bank of America. Other sponsors are the Victorian Education Foundation and major software and hardware suppliers.

In opening the centre, Mr Roper said the facility provided an important link between the educational needs of students and those of the banking and finance world. "The establishment of this centre is a great step forward for the Chisholm Institute in the study and teaching of some of the most advanced aspects of modern finance," he said.

"I am confident the treasury dealing centre will make a major contribution to Victoria's role at the very forefront of the extremely competitive financial services industry for years to come."

Saranny Brass, House Baran And Bala

Prior to the official opening, representatives from the media, academia and the banking and finance industry competed against each other in a hypothetical "real world" competition using the treasury dealing centre's facilities and capabilities.

Hosted by former Channel 10 news reader, 30 Pearson, the seven participating teams were given the Continued on page 13

Just your average first year student

STUDENTS who enrolled at Monash this year are mostly female, live in the metropolitan area and receive financial support from their parents or guardians.

These are some of the findings of a survey conducted by the Higher Education Advisory and Research Unit at the university.

The survey was based on a questionnaire filled out by 2846 new students at the time of their enrolment. The information, which has been collected every two years by HEARU since 1969, was confidential and has been kept anonymous.

The following includes some of the main findings of the survey.

Sex: Of the students who enrolled this year at Monash, just over half, 51.4 per cent, were female and 48.5 per cent were male.

Residence Type: Most students, 68.8 per cent, lived with their parents or guardians. Those living in the Halls of Residence constituted 10.7 per cent, while 11.3 per cent 'ived in their own or rented accommodation. Only a small percentage of students were private boarders. lived with relatives or share rental accommodation.

Financial Support: Just over half the students enrolling, 51.4 per cent received financial support from their parents or guardians. 20 per cent of students supported themselves through part-time work while another 20 per cent received Austudy. Only 1.7 per cent received scholarships

Country of Birth: Nearly 78 per cent of students enrolling were born



in Australia or New Zealand, and 3.4 per cent were born in Britain. About 12 per cent of students were born in Asia with the largest number coming from Malaysia. European countries were represented by 5.8 per cent of students, while 1.1 per cent of students were born in the United States and Canada, five per cent in South America, 0.3 per cent in the Middle East and 1.1 per cent in Africa.

First language: Overall 83 per cent of students spoke English as their first language, 5.7 per cent spoke Chinese and 2.6 per cent spoke Greek. Other native languages spoken by the students included Italian, Arabic, Polish, Serbo-Croatian, Spanish, Turkish and Vietnamese.

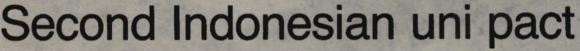
Type of School: The largest proportion of the students enrolling came from government high schools or colleges (39.1 per cent), then independent schools (32.9 per cent)

and Catholic schools (21.9 per cent). Nearly four per cent of students came from schools overseas.

Socio-economic Background: Nearly 32 per cent of students enrolling describe their father's occupation as professional, while 29.9 per cent said they were manager or administrators, 11.6 per cent tradesmen, 5.7 per cent laborers or related workers, 4.3 per cent salesmen or personal workers and 2.8 per cent clerks.

The largest proportion of students said their mothers were full-time housewives (26.9 per cent), while 23.9 per cent described them as professionals, 14.4 per cent clerks and 7.4 per cent managers or administrators. The survey also found that 33 per cent of fathers had at least a bachelor degree and 19 per cent of mothers.

Time Since School: For the majority of students the break from school before enrolling at Monash was less than a year, presuming that many came straight from secondary school. Nearly 3 per cent of students, however, last attended school more than 10 years ago.



MONASH has signed a sister university agreement with a second Indonesian university, the University of Indonesia.

The agreement comes three months after Monash set up links with the University of Gadjah Mada and became the first Australian university to establish such an accord with Indonesia.

The University of Indonesia is the country's largest and most influential tertiary institution. Based on two campuses in Jakarta and with an enrolment of more than 30,000, it numbers amongst its alumni several high-ranking Indonesian ministers. The Monash link is its first with an Australian university.

Several Monash staff have been working with their Indonesian

1onash makes Green stand

MONASH

and joint projects are being carried out in many faculties. A number of senior posts at the University of Indonesia are held by Monash graduates.

The agreement was initiated by Professor Margaret Kartomi, chairman of the Music Department and director of the Institute for Contemporary Asian Studies.



Like others before him, Mr Ramm paid his own airfare and the Swiss company took care of the rest.

Mr Ramm said: "I was very concerned to do something constructive while I was there, not to simply just do my job and then go home. So when I got to Switzerland I was pleased to find that I was treated seriously as a young engineer, not as a third-year student."

He found that Australian engineering students have a lot to gain from working overseas. "Over there, we were given a lot more practical experience than we would get in Australia. They will give something a go in terms of development, whereas here we are a little more cautious."

The scheme also helped other



Four of the third-year mechanical engineering students who worked in Switzerland and France over the summer break. Left to right, Eric Strecker, Dariel de Sousa, Tony Egbers and Grant Ramm.

Overseas training for engineers

FOR the past three years, a private vocational training scheme has enabled a number of mechanical engineering students from Monash to work in places such as Switzerland and France.

Set up in 1986 by Associate Pro-

Monash students find employment in Europe over the recent summer. Tony Egbers worked for BET KURP, a consulting company specialising in air conditioning systems, on the Eurodisney project in Paris.

Eric Strecker's employment was a little less commonplace. For three months he worked on tank designs - military, not water - for SIG Swiss Industrial Group in Neuhausen Rhine Falls, Switzerland.



Mechanical engineering student, Grant Ramm outside ABB in Baden, Switzerland.

The expo was hosted by the Commission for the Future and supported by the Victorian State Government.

MONASH University was

represented for the first time at

the Green Home Expo held at

the Royal Exhibition Buildings

late last month.

The Monash stand was put together by Frank Fisher, a lecturer in the Graduate School of Environmental Science, with the help of some students and Montech.

"What we were trying to do was inform the public about the nature of environmental science and the sort of teaching we do in the graduate school at Monash," Mr Fisher said.

"In addition the questions we answered were very diverse. They ranged from how to insulate your house, to tree planting and bicycle safety.

During the expo, staff at the environmental science stand sold about \$300 worth of books, but according to Mr Fisher, what people really wanted was ideas.



Frank Fisher (right) discusses the ideals of environmental science at the Green Home Expo.

"We were trying to sell something very different from all the other stands. With minimal resources we were able to enlighten people about environmental science and how to study it, and provide a lot of information about the environ-

ment in general," he said. "My students and I also learnt a lot about how to make a display and sell ideas as against selling products. It was an educational exercise for us as well as the public."



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AIDS-related DNA found in plants

RESEARCHERS at Monash have discovered genetic material in plants related to retroviruses, the group which includes the virus which causes AIDS.

Retroviruses have been known for more than 70 years. They cause many diseases, but only in more advanced animals, such as mammals and birds.

So the discovery of retrovirus-like elements in several species of lily by a research group led by Dr David Smyth of the Department of Genetics and Developmental Biology was a surprise, although they had previously been detected in yeast.

The group thinks their presence in lilies (the Liliums) may be evidence for transfer of virus material between more widely differing species of organisms than was earlier thought possible. Elements like retroviruses have now been detected in three different biological kingdoms: animals, plants and fungi.

If true, this increases the potential pool from which infective viral diseases could arise in man. (It seems likely, for instance, that man has been infected twice in recent times by related human immunodeficiency (AIDS) viruses from African monkeys.)

The genetic material in the cell nucleus is a template used by cells to manufacture enzymes, the proteins which control the biochemical reactions through which the cell is constructed and operated.

This template is a double helix of deoxyribonucleic acid (DNA) made up of two cross-linked chains of four different but related compounds (bases) arranged in a very specific order.

Proteins are long chains of amino acids. The order of the four DNA bases read in groups of three directs the order of the amino acids necessary to make specific proteins.

Viruses usually are thought to be bits of escaped genetic material which have the capacity to infect cells, take over the biochemical manufacturing machinery and instruct it to make copies of the virus instead of the proteins necessary to the cell's operation.

Retroviruses do this in a particular way. The genetic material from which they are constructed is slightly different from DNA, but so closely related that upon infecting a host cell it can print off or "reverse transcribe" DNA which can become integrated with the host's genetic material.

This DNA then directs that many copies of the viral genetic material be made, some of which are then packaged into new viruses which can infect other cells. The viral DNA incorporated in the cell's genetic material may sometimes be passed on to the next generation.

There are three genes in retroviruses: one codes for a protein associated with the viral genetic material, a second directs production of the enzymes the virus needs to reproduce itself, and the third is for the protein packaging of the virus.

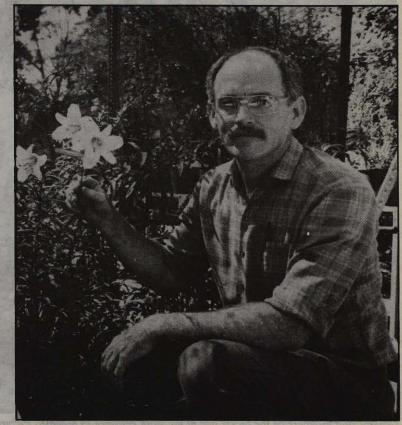
The research group found DNA clearly related to the first two of these retrovirus genes in lilies.

The team began investigating lilies because they contain huge amounts of DNA in every cell, ten times more than in mammalian cells. The group was curious to find out what was there, as it was believed that only a tiny fraction was likely to be genes for the plants themselves.

Much of the excess DNA is composed of sequences which are repeated tens of thousands of times. Graduate student, Mr John Sentry took one such segment from Henry's Lily and began to study it more closely.

Fellow graduate student, Ms Joan Joseph traced the same segment in 13 other lily species, but she did not detect it in several other related plants, such as onions, leeks or maize.

It was Dr Smyth and technician



Dr David Smyth with a regal lily in which researchers have found a DNA element related to retroviruses.

Mr Paul Kalitsis who discovered the link with retroviruses, when they unscrambled the sequence of DNA bases in the segment.

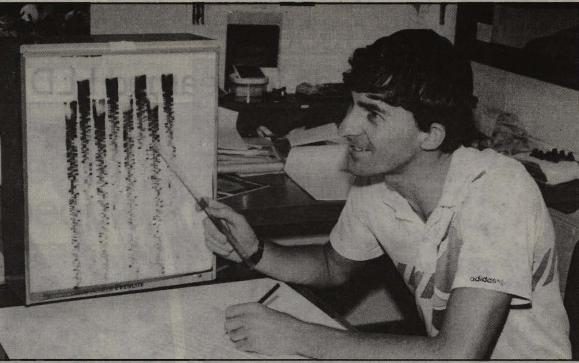
Dr Smyth said that while the relationship with the retroviruses was clear, the DNA sequence was much more closely related to similar DNA segments previously found in vinegar flies and yeast. The most likely explanation is that these three widely diverse species were all infected together in recent evolutionary time, he said.

Strangely, the gene for the protec-

tive protein coat which is necessary to allow retroviruses to move around, has been found in none of these species. All of which leads David Smyth to believe they could have been packaged and transmitted inside the envelope of another infective virus.

Whatever the case, the research has demonstrated the incredible genetic mobility of viruses.

Research on Lily DNA at Monash University has been supported by the Australian Research Council and the Australian Lilium Society.



PhD student John Sentry examines the DNA sequence of the lily element.

New buildings ready by 1991

WORK on the long awaited Engineering Building 7 and new Examinations Hall is expected to start at the end of this month or in early June.

The buildings are to be constructed to the east of the Engineering Lecture Theatres at a cost of \$8 million.

Engineering Building 7 will house the Civil Engineering Department and is expected to be completed by the second semester in 1991.

With the exception of technical staff, all members of the department will be located in the new building. The academic, administrative and secretarial staff, as well as most research students, will occupy the offices of the upper floor.

In addition, the department will have a reception area adjacent to the general office and a large seminar room which could be used for a wide range of activities. The plans also include more specialist areas such as transport and hydrology laboratories and rooms set aside for drafting, photocopying and computer networking.

The ground floor will accommodate some research students and a large design studio for fourth-year students. A large proportion of the ground floor, however, will be occupied by a comprehensive computer laboratory that can be used by the whole faculty for a range of teaching and research purposes.

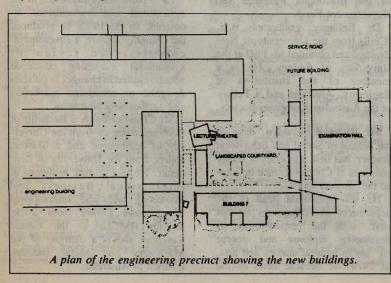
Chairman of the Civil Engineering Department, Professor Eric Laurenson said for the first time the department would have a clearly identifiable home with much improved facilities.

"Ever since Monash started the Civil Engineering staff have been scattered in different buildings. At present, all the staff and graduate students are housed in sub-divided laboratories and offices with temporary partitions," he said.

"The new building will finally bring the department together under the one roof and make it easier for students and staff to interact with each other."

The completion of this building will enable a rationalisation of space within the present engineering buildings which will be of benefit to all departments in the faculty. The Examinations Hall, which

The Examinations Hall, which will seat 500 students during exam time, will be used by the Engineering Faculty as teaching areas for the rest of the year. The floor space will be divided by movable partitions into four areas each with separate entries and exits. One of the areas will act as the new model structures laboratory, and the others as drawing offices.



ndustrial relations seminar

EARLY in the life of the new Federal Parliament questions of micro-economic reform, and the future of the wages system and of the trade unions are already significant issues.

These are the sorts of issues that will be tackled by those in the know at an all-day seminar entitled, *Industrial Relations in the* 1990s: The workplace, tribunals and the legislative framework, to be held at the Melbourne Hilton, 192 Wellington Parade, East Melbourne on Monday 4 June beginning at 9 a.m.

The seminar has been organised by Monash University's Key Centre in Industrial Relations and the Confederation of Australian Industry (CAI).

Speakers will include the Federal Minister for Industrial Relations, Senator Peter Cook; the shadow Minister for Industrial Relations, Employment and Training, Mr John Howard; the chief executive of the CAI, Mr Ian Spicer; assistant secretary of the ACTU, Mr Garry Weaven and deputy president of the Australian Industrial Relations Commission, Mr Colin Polites.

The seminar will be introduced by the director of the Key Centre, Professor Malcolm Rimmer and the session will cost \$160. Organiser Mr Richard Mitchell of the Key Centre in Industrial Relations said: "This is one of the few opportunities to listen to the key parties in industrial relations in Australia all addressing a common theme."

He said some of the issues he expected to be raised were the next wages system, workplace industrial relations and microeconomic reform, the possibility of legislative change in industrial relations and trade union membership and structure. For registration, call Ms Irene

Thavarajah on (03) 565 5418. For further information, call Mr Reg Hamilton of the CAI on (03) 654 2788 or Mr Richard Mitchell on (03) 565 5111.

General staff strike over pay



General staff members on the picket line at the main entrance to Monash. Picture courtesy of the Waverley Gazette.

GENERAL staff members belonging to the Victorian Colleges and Universities Staff Association (VCUSA) set up a picket line at the main entrance to the university on the morning of Wednesday 2 May.

The pickets displayed placards, handed out literature and slowed traffic entry into the university, causing a considerable bank-up and delay in Wellington Road.

Few classes were disrupted and a university graduation went ahead as planned. Parking restrictions were not enforced.

The VCUSA members were striking over lack of progress in Federal award restructuring negotiations now taking place between the Australian Council of Trade Unions (ACTU) and the universities' negotiating body, Australian Higher Education Industrial Association (AHEIA).

They said they were unhappy with the AHEIA stance on automatic incremental increases in salary over time.

The strikers were also opposed to the universities' proposal for a minimum rates award, where only a minimum rate of pay is defined, rather than a paid rates award, where actual rates of pay are defined.

In particular, they were concerned that the minimum salary in the AHEIA proposal was about \$17,000, whereas the present minimum Monash salary was closer to \$20,000.

Monash University's manager, industrial relations, Ms Adrienne Walton stressed that the strike was about a national salary issue over which Monash had little control. It had nothing to do with the present internal discussions on pay for general staff, she said.

The university had made a commitment that whatever the outcome of the federal negotiations, no present general staff member's salary would be reduced, she said.

Federal award restructuring negotiations are continuing.



Planning deans take charge of new faculties

THE University Council has agreed to the appointment of three Planning Deans to coordinate the establishment of the new faculties to be created after the merger with the Chisholm Institute of Technology in July.

They are Mr Peter Chandler, Planning Dean of the David Syme Faculty of Business; Dr Cliff Bellamy. Planning Dean of the Faculty of Computing and Information Technology; and Mr Richard Snedden, Planning Dean of the Faculty of Professional Studies. Their appointments as Planning Deans run until 30 June 1990.



Dr Cliff Bellamy

Dr Cliff Bellamy established the Computer Centre at Monash in 1963 and has been its director ever since.

He has developed courses in computer programming, data processing and computer science at all levels of tertiary education, and has directed the centre's activities towards research and development of technology relevant to education and medicine.

He was a member of a team which developed the Monash University Network (MONET), a baseband network widely used throughout the university and capable of connecting over 2000 terminal and computer ports.

He established the Health Computing Services of Victoria Ltd, and in 1967 helped produce MONECS, a software system for teaching computing which at one time was in use in more than 100 secondary and tertiary institutions.

Dr Bellamy also designed the system adopted by VUAC in 1967 for processing application for places made by prospective first year students School of General Studies (Humanities, Social Sciences, and Art and Design).

Mr Snedden was appointed deputy director in 1976, and became dean of the School of Social and Behavioral Studies in 1981.



Mr Richard Snedden

In 1988, he was appointed executive dean of Chisholm. One of his responsibilities in this position has been to assist the director with the merger process. Mr Snedden has studied at

Mr Snedden has studied at Melbourne, Monash and Cambridge universities, and has degrees in Arts (Political Science), Law and Education. He has taught in courses in politics and public administration and more recently in legal aspects of education and nursing.



Mr Peter Chandler

Mr Peter Chandler joined Chisholm in 1971 and established Victoria's first tertiary course offering a major study in marketing.

Since then he has undertaken a wide variety of consulting assignments in the industrial, consumer and service industries. At present he is dean of Chisholm's David Syme Faculty of Business. He is particularly interested in the agricultural and horticultural industries. In the 1970s he produced the Chandler Report, a governmentcommissioned review of agricultural marketing education which resulted in changes to policies designed to encourage marketing and agribusiness education. Mr Chandler holds a Bachelor of Commerce degree from the University of Melbourne and a Masters degree from the University of Lancaster. He is a visiting professor in International Business and Marketing with the International Management Centre from Buckingham (IMCB) in the United Kingdom and is a member of the Machinery and Metal Industry Council in Australia.

After the law graduation from left: The Vice-Chancellor, Professor Mal Logan; Reader in Law, Dr Richard Fox; Chief Justice of the Supreme Court and Lieutenant Governor, Sir John Young; the Chancellor of Monash, Sir George Lush; and the Dean of Law, Professor Bob Williams. Picture: SCOTT FITZPATRICK.

THE Monash Faculty of Law awarded its first earned, as opposed to an honorary, degree of Doctor of Laws to Reader in Law, Mr Richard Fox at a graduation ceremony held earlier this month.

The Doctor of Laws degree is the highest degree that can be awarded by the university in the field of law.

The Dean of Law, Professor Bob Williams said Dr Fox would be a worthy holder of the unique distinction.

Dr Fox has been a member of the

Faculty of Law since 1972 and since that time has published four books, several government reports and more than 40 major articles.

His work covers the fields of criminal law, criminal procedure, criminology, sentencing and a variety of related subjects.

But it is sentencing, which is Dr Fox's major area of interest. His Sentencing: State and Federal Law in Australia, written with Mr Arie Freiberg, also of the Faculty of Law, was the first comprehensive test on the law relating to the sentencing of offenders in Victoria. The book is more than 600 pages in length and refers to some 150 Commonwealth Statutes, 250 Victorian Statutes and in excess of 1600 cases. It is constantly referred to by the courts both in Victoria and federally, as the definitive text on its subject.

Professor Williams said: "Its publication firmly established Dr Fox as one of a handful of leading Australian scholars in the field and enhanced an already established reputation held both nationally and internationally."

He has taken an active role in fostering co-operative developments with industry including the creation of the Burroughs Research and Development Fund.

Dr Bellamy graduated B.E. (Civil) from the University of New Zealand and obtained his PhD at the University of Sydney. He is a member of the Institution of Engineers, Australia and a Fellow of the Australian Computer Society.

Mr Richard Snedden, dean of the School of Social and Behavioral Studies, has held a number of senior positions at Chisholm since he joined the institute in 1972.

He was appointed head of the department of Humanities in that year, with the responsibility of developing diploma and degree co. Jes in general studies and arts. In 1974, he became head of the

Computers create the right image

A NEW national organisation to cater for computer image processing and analysis was launched with a \$1000 grant from the Department of Computer Science at Monash recently.

The Australian Pattern Recognition Society (APRS) aims to promote contact amongst researchers and practitioners and to stimulate interest in all aspects of computer vision, image analysis and pattern recognition.

The move was prompted by two recent national meetings; the Conference on Image Processing and the Impact of New Technologies held in Canberra from 18 to 20 December. 1989, and a Special Interest Group Day on Image Processing and Analysis held on 6 February 1990 at Monash.

The former attracted about 70 speakers and more than 100 delegates, and the latter, 13



The picture shows a satellite image of weather formations over Melbourne. It is an example of the data processed in a postgraduate research project on classification of different cloud types by computer.

Students decide to go it alone in car pool plan

MANY lobby groups on campus might begin to wonder about the ultimate viability of their cause after having Council reject their proposals a second time.

But the Monash Association of Students (MAS) is so confident of its plan to ease the university's parking problem that it has decided to go it alone, without official sanction.

So far, its new car pooling scheme has met widespread approval. According to co-MAS transport officer Jim Black, more than 500 people have signed up to take part in the scheme in the past two months.

For two years, MAS has sought Council approval for a transport officer to co-ordinate not only car pooling, but also the introduction of other student-backed measures.

Calls from the association have yet to be heeded, but Mr Black said it will maintain its pressure. "We'll keep the present scheme going until it is fully funded, however long that takes."

While it already has proved successful in reducing the number of cars on campus, Mr Black admits that the scheme alone will not solve the university's critical parking problem.

"Encouraging people to accept personal responsibility is the key. Once everyone is making an effort to take public transport, cycle or share a lift to Monash once a week, the present scene will improve dramatically."

The scheme is part of an overall



tion of extra parking spaces will kill the incentive for people to share, cycle or take public transport.

"What's more, an extra car space costs about \$1250, while a rack for two bikes costs \$110." Now is an opportune time to be promoting such a scheme, Mr Black said. "There's a feeling that society is becoming more environmentally sensitive. People are beginning to care about the environment, and feel good about taking action to preserve it.

The response so far from staff and students has been excellent, he said. "The real leaders we have at Monash are those prepared to set a personal example. We have senior lecturers cycling, administrators using public transport and other members of staff offering to share their cars.

"These people have cast off any worries about their image in order to act in a way they feel is responsible. In fact, most of them are enjoying the challenge." speakers and 68 delegates. Both meetings were attended by a cross section of people from industry, government research bodies and tertiary education institutions involved in a wide range of digital image theory and applications.

President of the new APRS, Mr Anthony Maeder, a lecturer in Computer Science at Monash, said considerable enthusiasm was generated amongst those who attended the meetings.

"It seemed that this was an opportune time to form a national society to cater for all aspects of image processing and analysis; computer vision, signal processing, remote sensing, microscopy, stereology, tomography and many other such topics," he said.

"The interests of all individuals working in this field are represented including research and practice, general and specialist, theory and applications and hardware and software.

"So much activity and expertise in the field crosses the boundaries of these topics and of a variety of disciplines, that a broadly aimed society offers a better chance for those with similar interests but working in different areas to coordinate than would the formation of specialist small societies."

After much discussion, a constitution was drafted and a founding executive committee of the APRS was formed in February 1990. The officers are Anthony Maeder (president, Monash University), Barry Jenkins (vice-president, CSIRO), Mike McDonnell (treasurer, BHP), Binh Pham (secretary, Monash University), Terry Caelli (editor, Melbourne University), Don Fraser (ADFA), Ray Jarvis (Monash University) and Phil Robertson, (CSIRO).

A sponsoring grant of \$1000 provided by the Monash Computer Science Department will fund the operations of the society over the first few months.

According to Mr Maeder, the APRS is committed to generating contact between interested individuals and providing joint activities for broad or specialist groups within them.

"Conference and workshop style meetings held on a regular national basis and on an occasional regional basis will be the primary way to focus the participation of the people and organisations concerned," he said.

"Plans for the first national workshop meeting, to be held in Melbourne in December 1990, are already underway. A newsletter will be distributed to all APRS members to inform them of national activities and developments of relevance, and an electronic news group and mailing list will be set up in the next few months.

"The APRS will also act as an important and unified lobby force for the digital image processing community. The overseas profile of Australian digital image work will be improved by participation in appropriate international bodies such as the International Association for Pattern Recognition."

APRS membership is open to all interested individuals at \$30 a year. Corporate membership and reduced student membership is also available. Enquiries should be sent to the Australian Pattern Recognition Society, c/o Department of Computer Science, Monash University, Clayton Vic, 3168.

Holocaust service

New decade calls forth new people

SCIENCE at Monash is getting a facelift as it enters the '90s.

The Faculty, under new dean Professor Ian Rae, plans to expand into the new decade with new people, resources and course offerings from the merger with Chisholm and Gippsland. As well a new assistant registrar, Ms Elizabeth Anderson, has been appointed.

"As assistant registrar, my main



The scheme is part of an overall transport strategy developed by MAS. Among other measures the association and the Monash Conservation Group are actively promoting are shuttle-buses from outlying areas and nearby stations, an extended rail link to AFL Park, cycling routes, and the potentially controversial idea of free parking for those who share cars.

About 90 per cent of cars arriving on campus carry only one person, Mr Black said. "At present, there are no structural incentives for people to take part in car pooling, other than the implicit one of a shared petrol bill."

Under the present arrangements, he said, it is favorable to have excess pressure on parking to allow time to examine alternatives.

"Just as more freeways produce increased traffic flow, the construcresponsibility is to provide the administrative services to students and academics to ensure that the faculty runs smoothly. But I will also be devoting time to promoting the science faculty, its services and courses. I hope to increase interest in and demonstrate the value of science at Monash," Ms Anderson said.

Most recently Ms Anderson has been head of the Office of Prospective Students at Victoria College and is on the executive of the Victorian Tertiary Admissions Centre.

"I will still be doing a lot of talking to careers teachers. Nowadays students want to know about employment. They want you to show and tell them, "This is what you can do".

"And there are a lot of things you can do with science. It's not just

Ms Elizabeth Anderson

mixing things in test tubes. You don't necessarily have to work in a laboratory."

Ms Anderson says she has had a long-term interest in how people make career decisions. "The world is changing rapidly. People now can expect to have three or four career changes in their lives."

She herself is an example. Before working in several different administrative positions at Victoria College, Elizabeth Anderson lived in Strasbourg, France, teaching at the American University there. She started work on 30 April. Six memorial candles cast an eerie glow at the recent Holocaust Commemoration Service.

THE United States Ambassador

to Australia, Mr Melvin Sembler, told a recent memorial service at Robert Blackwood Hall that "memory is our duty to the past and it is our duty to the future".

Mr Sembler was speaking at a Holocaust Commemoration Service, organised by the Monash Jewish Students' Society to mourn the six million Jews killed in Europe 45 years ago.

He told an audience of about 500, which included several State and Federal politicians, that memorials around the world erected to the victims are "designed to touch our hearts, souls and minds . . . with each we are challenged to remember".

Mr Sembler described the new holocaust museum in Washington, due to be completed in 1992. The museum will include a Hall of Remembrance, an archive for research, a 100,000 volume library, and an interactive learning centre. Among the speakers at the service were Professor Louis Waller of the Law Faculty and the president of the Monash Jewish Students' Society, Mr David Gold.

Monash after dark

IT'S midnight on campus. In Zoology a couple of insomniac rats are practising tomorrow's Pavlovian response. On library shelves a million books are reading themselves quietly to sleep.

Outside a university guard breathes the glazed silent night air and dreams wide-eyed of a Texas prairie he will never see.

He cuts out a herd of imaginary cattle on his Honda, rounds up the beasts in the southern car park, sings softly as he cajoles them into an invisible pen.

Ten hours earlier he was writing parking tickets. Now he is a cowboy.

An experiment in Chemistry is becoming dangerously hot. Then a little switch goes "tock" — so soft you can barely hear it and the temperature begins to fall. It will go "tock" a hundred times before the night is over.

Across campus, a bank of computers swap stories, chattering and humming through the day's events. By dawn they will have caught up with each other's lives.

A wallaby in the Jock Marshall Zoology Reserve is woken suddenly from an outback sleep by the padding of a dog-like creature around the fence perimeter. The animal has a bottlebrush tail and a sharp nose.

Nearby a sleepless student howls at the moon. A computer pricks up its ears. The wallaby forms the mob into a circle. It's branding time in the southern car park.

Something in Engineering goes "ker-chunk". The department has forgotten to order a new tock switch.

In the English Department the typewriters are punning. One produces "Travels with my Angst". Its neighbor counters with "It's my chapati and I'll fry if I want to".

A machine alone in the corner, saddened by its lack of erudition, types "godby" and tries unsuccessfully to do itself in with its ribbon.

The empty stage in Robert Blackwood Hall surrenders the day's sounds. They echo off the walls: "Is this mike on? Give me a C. No, C. The one after B and before D. Try it again in sixeight and we'll catch up with you..."

A spotlight pierces the blackness. Suddenly the noises are hushed. There is a mousy scurrying as they fade back into the parqueted floor.

From the swimming pool in Sports and Recreation comes the sound of furious splashing, as



beneath the pale moonglow a lone swimmer records the end of another lap.

It is her twenty-second length of the pool. She has never gone this distance before. For the first time in her life she experiences a sense of exaltation.

She celebrates by ripping the goggles from her head and throwing them high into the air, where they describe a perfect arc before landing on a rafter. Her joyous laughter dislodges them and they fall back into the water.

Over in the car park the cowboy has completed his branding. He sets aside his irons and rolls a cigarette. His walkietalkie snaps, crackles and pops:

talkie snaps, crackles and pops: "Frank, could you please go to Biology. A couple there have been doing some prac after hours and they've gone and locked themselves in the plant room."

Frank was young once. He continues rolling.

It is 2 am. A bus pulls up at the Wellington Road gatehouse and after some negotiation between driver and security guard is allowed to enter the university grounds.

It is brimful of overseas tourists two hours into a Clayton-after-dark excursion. A dimly-lit Monash is their first sign of life in this dark and empty suburb. The sporadic burst of camera flashes lights up the buildings.

The tourists are entranced by the sight of a man in uniform crooning a lullaby to his motorcycle. They form a circle as his soft singing floats out across the car park.

across the car park. At the end of his song they applaud and throw coins of a foreign currency. Frank tips his helmet and waves as they board the bus.

From a distance their farewell comes back to him: "Godby..."

Carl Moppert's M-pump finds its way to Israel

SOME of the ingenious inventions created by the late Carl Moppert, senior lecturer in mathematics at Monash, have become a familiar sight to staff and students on campus.

It is hard to miss the enormous "Take Your Time" sundial built on to the north most wall of the Union Building which this creative "pure" mathematician designed and his friend Ben Laycock constructed. On the same grandiose scale is Carl's version of a driven Foucault pendulum which he built together with Professor Bonwick from Engineering. The pendulum occupies almost the entire stair well of the Monash mathematics building.

However, perhaps less well known to Carl's admirers is his unusual M-pump. The pump was designed specifically to solve a riddle that has plagued botanists for centuries — "How does sap run "up' trees?"

Carl arrived at an answer to the problem during a short spell in hospital, where ill in bed, he was forced to examine nearby blood transfusion apparatus. Upon discovering the existence of delicate one-way transfusion valves, it took Carl no time at all to invent a unique water pump that required no external sources of power to operate.

While the celebrated M-pump, as it is now referred to, is driven solely from fluctuations in ambient temperature, to this day we are still unsure as to what drove Carl's fertile and inventive mind. Nevertheless, the M-pump is clear testament that this extraordinary thinker's powers of creativity were highly evolved and could operate at their best even under distressing illness and hospital conditions.

By a strange quirk of events the M-pump has become a hot subject of research at the Yigal Allon Kinneret Limnological Laboratory in Israel. The laboratory is situated on the shores of Lake Kinneret near Tabcha — a site better known for its Biblical significance. No doubt, the



An M-pump model working by the historic Lake Kinneret. Picture: Yosef Yacobi

reader will recall the New Testament's description of the miracle of the feeding of the 5000, performed at Tabcha by one Jesus of Nazareth.

With this historical precedent, Tabcha seemed the ideal site for the M-pump; or at least so I thought as one of Carl's ex-students, who has been carrying out post-doctoral reseach at the Yigal Allon centre.

The pump was constructed at the lab by German scientist Werner Eckert and Israeli scientist Miki Schlickter and has now been successfully operating for almost one and a half years. Dr Eckert informs us that the extremes of climate experienced at Lake Kinneret make for ideal operating conditions; the wild fluctuations of temperature, which can occur over a single day, apparently rev the pump into high gear.

Not far away from the present site of the M-pump sits a number of jet engines which are instrumental in pumping water from Lake Kinneret, through the National Water Carrier to the Negev, thus providing an important source of water to the desert regions in the South of Israel. Millions of dollars are spent in supplying electricity to these engines only adding further to the problems already crippling Israel's economy.

It is the hope of Dr Eckert and myself that the costly jet engines will eventually be made redundant by the miracle of the M-pump. As inspired scientists, we are certain that Carl Moppert's pump has the capacity to provide a powerless and priceless supply of water throughout the Holy Land.

Dr Lewi Stone is a lecturer in the Department of Australian Environmental Sciences at Griffith University, Queensland. He wrote his honors thesis under the late Carl Moppert's supervision.

The theory of the M-pump

THE principle of the M-Pump was set out by Dr Carl Moppert in the Monash journal of school mathematics, Function, Volume 8, Part 4, just before his death of leukaemia in 1984. The following is an edited version of the theory of the pump as narrated by its inventor.

The M-Pump is of course one of the greatest inventions of this century. It solves all the problems of irrigation. It is an inexhaustible source of energy and absolutely non-polluting.

The water cannot escape through the left-hand pipe because of the valve. If now the temperature decreases, the air in the tin wants to contract. The pressure decreases and water is sucked in through the left-hand pipe. It cannot be sucked in through the right-hand pipe because of the valve there.



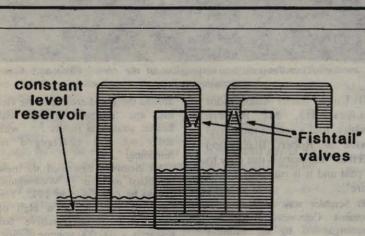


Figure 1: The principle of the M-pump

How it works: A tin is partly filled with water. Two pipes are glued in the top of the tin, both reaching down to the water inside. One of the pipes (the left one in Figure 1) reaches into a reservoir of water. The other pipe bends over: out of this end the water flows.

In each pipe is a valve. The valve in the left pipe opens up for water running down, that in the right pipe for water running up. Either valve closes if the water wants to run in the opposite direction.

The working agent of the pump is the air above the water in the tin. If the temperature increases, this air wants to expand and the pressure in the tin increases. Some of the water in the tin is driven out through the right-hand pipe (like coffee in a percolator). Whenever the temperature increases, water will come out of the right-hand pipe and whenever the temperature decreases, water will be sucked in through the left-hand pipe.

pipe. We shall assume that the barometric pressure remains constant and that the temperature fluctuates. It is true, of course, that our pump also acts if the temperature remains constant and the barometric pressure fluctuates.

The pump is "driven" by changes of temperature. The best pumping action is observed on a summer day with some clouds in the sky; the changes of temperature have a very marked effect.

The late Dr Carl Moppert beneath his sundial on the wall of the Union Building.

Mixing sociology, politics and food

SEVERAL years have passed since Stephen Mennell learned that his father was unable to read his son's first book, a text on sociological theory, without the aid of a dictionary.

Like many academics before him, the novice author thought he had avoided using specialised language. But unlike many, today the new professor of sociology at Monash eschews jargon.

"There is no reason whatsoever why academics should write in a turgid way. If something is worth saying, it is worth saying in plain English," said Professor Mennell, who is also chairman of the department of Anthropology and Sociology.

"It seems that a lot of sociological ideas. if they are to be accepted, have to be expressed pompously. In fact, some sociologists won't take any writing seriously unless it contains a high proportion of obsolete polysyllabic words."

Professor Mennell opposes the mystification of sociology as much as he supports its simplification. Three months after leaving his native Exeter in England, he expresses the need for sociologists to write for what he says used to be described as the "general educated public."

"I really think it's very important that sociologists write on subjects of interest to people. They shouldn't just talk to each other." he said.

A self-described generalist, Professor Mennell's own work suggests his audience lies within and beyond the campus gates. For instance, while a senior lecturer at the University of Exeter he wrote the well-received All Manners of Food: Eating and Taste in England and France from the Middle Ages to the Present.

In the book, which won the Grand Prix International de Litterature Gastronomique in 1986, he compares the eating habits and attitudes to food of the inhabitants of England and France.

As part of his research, he "looked at everything from medieval cookbooks to contemporary women's magazines." But instead of debunking myths — which is what sociologists normally do — Professor Mennell found himself confirming them. "There seems to be a large measure of truth in the stereotypes of the French enjoyment of cooking and the 'Maginot Line' of British cookery, such as meat and two veg," he said.

veg." he said. "Essentially, the French trend grew out of the aristocrats' enthusiasm for eating which permeated the rest of society. English cooking, on the other hand, has always had a kind of thrift mentality.

"Summed up, food for the British is like their attitude towards sex: it's all very well and necessary as long as you don't enjoy it."

At present Professor Mennell is toying with the possibility of writing a slightly more popular edition of the work. He also is considering a joint research project on how modern food technology has affected the home and eating habits, and how the manufacturing of food has contributed to its internationalisation.

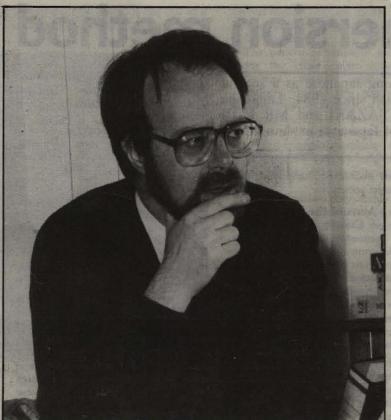
The study of dietary practices, however, was the last thing on Professor Mennell's mind when in the 1970s he was commissioned by the Council of Europe to look at the provision of arts and leisure facilities to European towns.

The research for "Cultural Policy of Towns" involved Professor Mennell and a team of sociologists trying to measure the comparative cultural needs of 14 towns in 13 countries.

Although not a failure — the resultant study was published in seven languages — as an exercise in applied sociology it struck a few methodological snags.

"The real problem is that in a benighted town with poor facilities, people will want the kind of things they are most familiar with, such as a better municipal swimming pool," Professor Mennell said.

"So there's this dilemma. By asking them what they want or enjoy, they'll more or less tell you what they've already got. But expose them to other possibilities and you come across as a bunch of paternalistic middle-class intellectuals



Professor Stephen Mennell: "If something is worth saying it is worth saying in plain English."

telling them what they need.

"At least it proved useful in telling town councils about what not to do."

An unsuccessful Social Democratic Party candidate for Exeter in the 1983 election ("If the UK used the Australian preferential system of voting, I wouldn't be a professor of sociology at Monash right now"), Professor Mennell is turning his political skills to the reorganisation of the department.

Although he claims no credit for it, the output of the department's research has increased since his arrival. Among the topics presently under investigation by its 25 fulland part-time staff are Australia's population and immigration by Dr Bob Birrell, women's studies by Dr Anne Edwards and Dr Jan Van Bommel, information technology by Dr Belinda Probert, and the anthropology of Southeast Asia.

One of the staff's most recent publications is Dining Out: A Sociology of Modern Manners, by lecturer Dr Joanne Finkelstein. Like Professor Mennell's favorite work, it looks at cuisine from a social scientist's point of view, this time the restaurant life of Melbourne and other major cities.

Next year the department will add comparative sociology to its present majors of sociology and anthropology. "We hope the new major, which will be linked to existing courses, will give students more of a world perspective by presenting a whole range of human societies from an historical perspective."

As for his own study — away from food, that is — Professor Mennell hopes to develop some Australian research interests, in particular historical sociology.

"There's a lot to be written about Australian history from the sociological point of view. For example, 1 am very interested in getting to grips with the notion of mateship."

Nor was the fear of indigestion wholly irrational. Jane Grigson hit upon a valuable insight linking this fear both with typical English diets of the past and with fears of social embarrassment. She was wondering why the leek fell out of favour in polite society for 300 years, and happened to look up what Mrs Beeton had to say about leeks. That lady gives only two leek soups, one the traditional Scots cockie-leekie, but adds a note that leeks should be 'well-boiled'' - which in this historical context means thoroughly overcooked by modern standards - "to prevent its tainting the breath" (1861:71). This fear of bad breath - and the fear, Mrs Grigson could have added, of gaseous emissions from the other end of the alimentary canal - seems to have been behind many fussy nineteenth-century recipes for onions.

It seems to have been a major nightmare at the time, not just a silly refinement. I remember my grandmother's obsession with her digestive system, her purges and peppermint tablets; 1 remember too, how constipation hung over some families like a mushroom cloud. If digestions were as bad as all this suggests, and they probably were when diets were stodgy without fruit or many vegetables, the breath must often have been bad. Anything that could have added to the social fear - leek, onion, above all garlic - was prudently avoided, or subdued by strong-arm water treatment. (Grigson, 1978:291).

From All Manners of Food by Stephen Mennell, Basil Blackwell, 1985.

Understanding menopause

THE days of the word "menopause" being a taboo subject in polite society are well and truly gone, if the number of people who flocked to a recent seminar on the subject is any indication.

More than 200 people, mostly women, turned up at Monash Medical Centre on 9 May to hear medical experts speak about understanding the menopause and its consequences.

Addressing the topic of what hap-

blems to emerge," Professor de Kretser said.

The most obvious problem to surface is the number of cases of osteoporosis emerging in postmenopausal women. tre of Reproductive Biology's administrator, Ms Rebecca Lodge, told *Monash Reporter* that the idea of providing a public forum with medical experts was to help women get access to information on possible forms of treatment, such as the controversial Hormone Replacement Therapy.

"Women need detailed informa-



pens when a woman reaches the menopause and the reasons for the changes was Monash University's Professor David de Kretser, director of the university's Centre for Reproductive Biology, which organised the public seminar.

While menopause seems to have become an issue in the 20th century, Professor de Kretser pointed out that 100 years ago, before the days of antibiotics and good public health, women simply didn't live long enough after the menopause to experience the effects of the woman's body no longer producing sufficient oestrogen.

"What we have done is increase our lifespan and the time a woman lives after her ovaries have stopped functioning — it's because of this increase in better health that we are seeing the potential for proone in three women will fracture a bone in their post-menopausal lives, due to the bones thinning and becoming brittle.

According to another speaker, Dr Suzanne Silberberg, an endocrinologist with Monash Medical Centre's Menopause Clinic, any woman has the potential for postmenopausal problems, regardless of whether she experienced any of the symptoms often associated with the menopause. "They are just as likely to ex-

"They are just as likely to experience increased risk of osteoporosis, heart disease and urinary problems later in life. It's rather like hypertension — you may not have any symptoms, but you can still have the problem," Dr Silberberg said.

Organiser of the public education seminar on the menopause, the Cention on topics such as this therapy, as they've often been unable to get this in the course of their normal dealings with the general practitioners,'' she said.

The third speaker at the seminar, Monash Medical Centre's director of Menopausal Services, Dr Elizabeth Farrell, is conducting a two-year study on the effect of a combined implant of oestrogen and testosterone, which she believes may counteract the degenerative aspects of osteoporosis.

According to Ms Lodge, the need for women to be able to ask searching questions about possible menopause therapies and their side effects is so great that each time a public education seminar on the topic is held, those who cannot get in ask for their names to be put down for the next one.

Learning Japanese by the immersion method

The immersion method of teaching Japanese as a second language has been used at Monash since 1984. Language Instructors, MR SATOSHI MIYAZAKI and MR KOJI NAMBA from the Department of Japanese, explain how it works.

IN recent years a number of methods have been developed for teaching foreign languages. The immersion approach represents a significant experiment which combines foreign language study with the study of content.

It has a long history and is well known as an innovative and effective method of second language teaching. As a form of bilingual education, it enables children, who speak only one language, to enter a school where a second language is the medium of instruction for all pupils.

One of the most important outcomes is that immersion learners acruire their second language as a byproduct of studying specific aspects of the societies where the language is spoken.

The approach has been developed for teaching English as a Second Language (ESL), and various programs aimed at preparing children with limited English proficiency (e.g., migrant children) for entry into mainstream courses in elementary and secondary schools.

In recent years, teachers of Japanese as a foreign language have begun to use the immersion technique, but the approach has not yet received full attention among language educators at the tertiary level. Many language educators still feel that this approach to teaching has not been developed to a stage where it is more effective than traditional teaching methods (e.g., grammar translation and audio-lingual methods).

Staff in the Japanese Studies Department at Monash, however, have for some time recognised the benefits of the immersion program and see it as one of the new approaches to language teaching.

Several features of the immersion approach distinguish it from other approaches; the target language is not seen, but is the medium of instruction rather than the object of instruction; and linguistic proficiency develops incidentally to subjectmatter study. This means the goal of immersion is not just linguistic competence or communicative competence but cultural understanding and inter-active competence in the target society.

Aims of the Immersion Course at Monash

Immersion is seen by the Japanese Department at Monash as playing an important role in Japanese language education. It is seen as one way to integrate three kinds of competence; grammatical competence, communicative competence and interactive competence.

These three stages of competence are of relevance to language teaching and are inseparable. In this way, the final aim of language teaching is to give students the tools necessary for socio-cultural interaction. Communication does not occur in a vacuum; it occurs as part of a much broader set of processes known as socio-cultural interaction.

The Monash immersion program in Japanese was originally designed and prepared in the Department of Japanese Studies by Professor J.V. Neustupny and Dr Akito Ozaki. It was introduced at Monash University in 1984 and its aims were:

(1) To provide learners with knowledge of, and some inter-active competence in, one area of Japanese social life.

(2) To increase each student's communicative competence with regard to the area.

(3) To introduce them to the elements of communicative competence which are needed in situations other than the usual classroom situation.

(4) To give learners the opportunity to acquire the grammatical competence necessary for interaction in specific situations.

Course design of the program Five levels of Japanese language (A-E) are offered in the department. The immersion program is offered at level B (for the students who have completed Japanese level A or have studied Japanese at secondary school to VCE standard), and level C (for the students whose competence in Japanese is equivalent to completion of level B). The program is a short (two weeks for level B and three weeks for level C) and intensive course which replaces all normal classes. The aim of the level B immersion in a course on "Japanese Diet and Cuisine", is to provide students with an opportunity to use and extend their knowledge of Japanese while learning about Japanese cuisine and the role of food and eating in Japanese society.

In addition to lectures, television programs, slides and presentations, the students have an opportunity to discuss various aspects of the topic with native speakers who are invited to Monash. Students also study written materials and go out to Japanese restaurants to try Japanese food.

The level C immersion program is designed to provide students with an opportunity to use the knowledge of Japanese they have thus far acquired. Once they have obtained a basic understanding of Japanese education, they discuss education problems with native Japanese speakers. The three week program requires about 15 hours. Level C immersion includes a group project, panel discussion and individual interviews.

The group project was newly introduced this year to encourage students to develop research skills, and to provide them with the opportunity of making a presentation in Japanese. Individual interviews with Japanese are a highlight of the program. Each student is requested to arrange his or her own interviews with Japanese people.

Future Development

Although the Japanese immersion programs at Monash have been very successful, there is still room for improvement. The full effect of an immersion program is often not felt until the students can apply the inter-cultural knowledge which they have acquired through immersion.

One task is to develop such programs at all levels. Especially in the introduction of well-developed immersion programs at an early stage, not only to facilitate retention but also to orient students to the notion of inter-active competence. Early exposure is likely to reinforce the benefits which flow from immersion programs late in the student's language training.

Plural immersion requires the careful development of teaching materials. Early immersion programs need to be linked to late ones, but at the present time students do not have enough opportunities to apply the socio-cultural knowledge and interactive competence they acquire during immersion.

In order that immersion at Monash be linked to such oppor-



Professor Ross Garnaut at an all-day seminar held recently at Monash.

Examining the Garnaut Report

RECENT upheavals in Eastern Europe and in China and Korea would not greatly affect the importance of Australia's relationship with Northeast Asia, the author of an influential report on the topic told a recent all-day seminar at Monash.

Professor Ross Garnaut of the Australian National University, a former Ambassador to China, played down fears that diversion of a large amount of money and resources from Asia to Eastern Europe would have a negative impact on Australia.

He said Japanese promises of large amounts of capital to rejuvenate Eastern Europe represented only a few per cent of the value of its overseas trade and was "small in the Pacific context."

Turning to the internal affairs of the five dominant economies of Northeast Asia — Japan, China, Taiwan, Hong Kong and Korea he argued that the outlook for China looked troubled for several years as it searched for a political base to cope with economic reform. Japan seemed to have settled back into controlled economic growth after political upheaval last year, he said.

Professor Garnaut submitted his report, Australia and the Northeast Asian Ascendancy, to the Australian Government in October 1989. It already has had an important impact on Government, corporate and educational thinking.

The seminar entitled, The Gar-

development of the educational capacity to analyse and communicate with Asia.

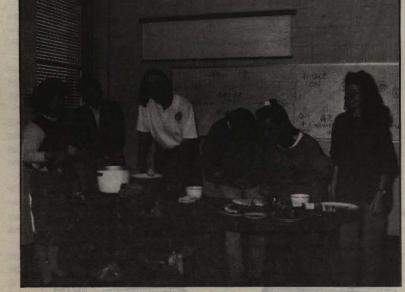
Some of Garnaut's detailed recommendations, particularly in the area of education already have been put into practice.

Other speakers at the seminar included the chief executive of QANTAS and former Ambassador to Japan, Mr John Menadue; BHP's Corporate General Manager, Technology and Development, Mr Peter Laver; the Federal Secretary of the Clothing and Allied Trades Union, Ms Anna Booth and Professor Kaosa-Ard Mingsarn, of the Department of Economics, Chang Mai University, Thailand, a former Garnaut student.

Most of the speakers were full of praise for Garnaut's work in putting together the report. Criticism tended to be limited to detail, and the lack of Government action on taking up the report's recommendations.

The area of greatest contention centred around the liberalisation of trade, questions of trade barriers, Government regulation and investment.

Mr Peter Laver, in particular, gave several examples of where business had difficulty in putting Garnaut's ideas into practice. He spoke, for instance, of how hard it was to mount a concerted export drive under a decentralised Federal system of Government, and of the problem that Australia's most competitive industries tend also to be the most environmentally sensitive. Professor Mingsarn was outspoken in her insistence that Australia had to get on with making a push into Asia or it would lose out. She said that business people in her country often preferred to deal with Australians, whom they saw as fundamentally honest, but that Australia was losing opportunities through lack of drive. Tapes of the proceedings of the seminar are to be made available. For further information, contact Ms Rhonda Lyons of the Institute of Contemporary Asian Studies on (03) 565 5280.



The preparation of sushi involves cutting, peeling, chopping, mincing, shredding and dicing. Japanese language students show how it's done.

tunities, it is necesary for us to consider the various situations which Japanese encounter here in Melbourne, and the kinds of activities which will prepare students for involvement in those situations.

In developing immersion programs, we have tended to introduce the new topics at the different levels in second semester and the students have been required to perform with the new topics. The links with their previous immersion experience remain somewhat undeveloped, but with more investigation the new immersion programs could play an important role in providing a bridge between skills already learned and new skills. To do so, however, it will be necessary to look further for the threads which are common to interactive competence in a wide range of social settings.

naut Debate — The Next Stage, was organised by the university's Institute of Contemporary Asian Studies in conjunction with the Commission for the Future. Its aim was to examine the longer-term economic and social implications of the Garnaut report, and how its conclusions might affect Australia's relations with the burgeoning economies of Southeast Asia.

In his report Garnaut wrote: "Relations with Northeast Asia are of an order of magnitude more important to economic development in Australia than are relations with any other region."

He made a series of recommendations based around themes of Australia's structural and cultural strengths, negotiations with Asia emphasising shared interests, liberalisation of trade, setting our own economic house in order, and

Unravelling the mystery around cells

RESEARCH into the properties of the structural material between cells in multicellular animals has led to a new theory of osmosis, new concepts in animal evolution and a faculty prize for senior lecturer in Biochemistry, Dr Wayne Comper.

Dr Comper, who has written 24 scientific papers in the field over the past two years, has been awarded the Faculty of Medicine Silver Jubilee Research Prize for 1989.

His new mechanism for osmosis - the movement of water across semi-permeable membranes in response to concentration differences - could have a farreaching impact in coming to grips with problems as diverse as how animal tissues take up water and how plants grow.

In the past, theoretical models for osmosis have centred on the properties of the membrane to explain the rate of flow of water through it. The new theory argues that osmotically active molecules physically interact with the membrane, driving water through it.

The structural material between cells consists of biochemical compounds made inside the cells themselves and expelled into their surrounds. These substances form an extracellular fabric or matrix of which the most important constituents are complex sugars (polysaccharides), water and the fibrous protein, collagen.

This extracellular matrix is significant by virtue of its volume alone - it makes up about 30 per cent of the body. In addition, it is responsible for much of the body's shape and has many different functions, most of which are associated with structure and transport.

Some of the more familiar parts of our bodies are, in fact, specialised kinds of extracellular matrix - cartilage, skin and bone, for instance.

But the matrix environment is biochemically unusual, which may explain why it has been little studied until recently.

There are very few chemical reactions going on in the extracellular matrix. Even the passage of substance's through it is passive, that is, it does not involve any expenditure of energy (released in chemical reactions).



Dean of Medicine, Professor Bob Porter (left) awards the Jubilee Research Prize to Dr Wayne Comper at a faculty board meeting.

In fact, the study of this biochemical environment calls for the techniques and theory of physical chemisty, and that is where Wayne Comper whose background straddles both chemisty and biochemistry comes in.

"In order to understand what goes on at the molecular level in this matrix, we first explored what controls the retention of water, the major matrix component. These regions necessarily retain relatively large amounts of water. It not only defines tissue volume and shape, but also creates space for molecular transport and communication," he said.

This water is subject to two types of force, hydraulic pressure and osmotic pressure.

In the case of hydraulic pressure, the research group, which included PhD students Roderick Williams and Oliver Zamparo, set about investigating the physical and chemical properties of individual polysaccharides with respect to water. For example, the researchers

measured the flow rates of "water under varying physical and chemical conditions.

Comper said: "In cartilage, for instance, water is retained (against hydraulic pressure) to resist mechanical compression. We have found that the matrix itself is composed of a particular polysaccharide which we established as the most flow resistant material known. "We were able to identify the

molecules in the matrix which control the water content of the tissues. They turned out to be particular polysaccharides, long chains of sugars decorated with several different chemical groups, most notably sulphate groups.

"Further we were able to identify the specific chemical groups on these polysaccharides responsible for controlling water distribution in tissues.

"From this analysis, we have concluded that the sulphate groups on these polysaccharides form links or bridges which act like the nuts and bolts helping to organise the porous matrix structure. Surprisingly, the sulphates are not involved in water retention.'

The pattern of sulphate groups along the chain varies between molecules. Because sulphate is negatively charged this results in different patterns of negative charge along each molecule. These patterns determine interactions with positively charged materials, such as sections of collagen or cell membrane and thus help to organise the matrix.

The sulphate polysaccharides were also implicated in osmosis. In fact, they turned out to be the most osmotically active substances yet found.

The explanation lies in the new theory of osmosis where osmotically active molecules physically interact with the membrane and thereby help to drive water molecules through.

It was able to explain the results the research group obtained when it varied all the characteristics in the osmotic system - for example, the nature of the membrane, shape of the pores, size of the pores.

But the aspect of the work which excites Comper most, is the implications for genetics and evolution.

He said: "Sulphated polysaccharides first appeared in organisms about 600-800 million years ago with the advent of multicellular animals when oxygen became plentiful in the atmosphere.

"The matrix components are physically and chemically distant from genes. Unlike materials inside the cell, their final form is not under the tight machine-like control of the

"For instance, there is a degree of randomness in the pattern of sulphation, which in turn means that the extracellular matrix is more random and less organised than the cell.

"The matrix area is important because all physical and chemical information must filter through it to individual cells. It is a prime element in remodelling, growth and wound healing in multicellular organisms.

"So maybe this built-in randomness is characteristic and important for the development and adaptation of multicellular tissue systems."

This new concept of evolution has been put forward in a paper just accepted for publication in the Journal of Theoretical Biology.



Dr Srinivusiah Muralidhar and Mrs Sundari Muralidhar proudly show off their Monash degrees after the Education graduation ceremony.



Fijian graduands

TWO academics from the University of the South Pacific in Fiji, took the opportunity to catch up with friends when they returned to Monash for the Education graduation ceremony ler this month

with how the study material was written and presented and teachers required more support and inservice training.

In the summary chapter, Dr Muralidhar makes a number of recommendations for teachers,

On a recent visit to Monash where he spoke at the Holocaust Commemoration Service, the United States Ambassador to Australia, Mr Melvin Sembler (third from left) met with several US students studying here on the Education Abroad Program. The students, from left, are Laura Shanner (Georgetown University, Washington DC), Carolyn Morgan (University of Illinois), William Caplinger (UCLA), Elana Jacobs (Emerson College, Boston) and Christy Carello (University of California, Santa Cruz). Picture: TONY MILLER

Dr Srinivasiah Muralidhar, a senior lecturer in education, received his PhD in science education, while his wife, Mrs Sundari Muralidhar was awarded a Masters degree in Educational Studies.

The couple came to Monash on an International Development Program fellowship, and lived in Australia for three years while completing their studies.

Dr Muralidhar's thesis, "An exploratory study of a science curriculum in action: Basic science in Fiji", involved a study of the entire science program for junior secondary schools in Fiji.

For the study, Dr Muralidhar observed 300 classroom lessons, spoke to students about the curriculum and interviewed all the teachers. He found that both students and teachers had trouble

teacher educators and the Fiji Education Department.

The study is the first of its kind in the South Pacific and has the potential to directly improve teaching and learning, not only for Fiji, but for other developing countries as well.

Mrs Muralidhar also did postgraduate work in education, with special reference to mathematics education. She looked at the problems children aged 12 and 13 years old have in understanding number operations and fractions.

Her study found that children do have problems in these areas and she has made several recommendations to mathematics teachers in Fiji. Mrs Muralidhar will take up a position with the Mathematics Department at the University of the South Pacific in June.

Adapting universities to the competitive climate

THE change in the culture of universities to a more business and community oriented organisation has been achieved without sacrificing the traditional values held by all universities, the Vice-Chancellor, Professor Mal Logan said recently.

These traditional values include a commitment to teaching, research and the application of knowledge of the highest possible quality, he said.

Professor Logan was speaking on "Competitive universities: Adapting to a more enterprising environment", at a Victorian Science and Industry Forum meeting held earlier this month.

According to Professor Logan the nature of change that has occurred at Australian universities in recent years has best been expressed in *The Times Higher Education Supplement* editorial on 13 April 1990.

In the article, the editor sets out to identify significant differences between the experience of British universities and their Australian counterparts in recent times.

Professor Logan quoted five points he regarded as significant in understanding the nature of the change in our universities.

1. "The Hawke Government has set out to modernise Australia's economy and institutions to adjust both to the demands of a knowledgeled post-industrial world and it has placed the state at the centre of this process of modernisation. Nothing could be more different from the uneasy combination of politicised tinkering and destructive privatisation which has guided the Thatcher Government," he said.

2. "The (Australian) pattern of undergraduate and postgraduate education owes far more to America than Britain and Australian research priorities are increasingly influenced by a Pacific rim environment.

3. "The Dawkins reforms have taken place against a background of sustained expansion both of student numbers and of institutional budgets. They have not been tainted as have the reforms in England with cuts and a wider sense of intellectual closure.

4. "There have been no attempts to present recent changes in Australia as anything but what they are: the establishment of a close relationship between universities and government unmediated by outof-date buffer bodies.

5. "The Dawkins revolution has been far more thorough than the (British) one. The obsolescence of the binary policy has been tackled and a new Unified National System created. In Britain binaryism has been left to fester to death."

According to Professor Logan the new Unified National System has resulted in a much greater openness and a willingness to adapt university courses and research to the wider community. other universities and institutions like CSIRO, Telecom, BHP and CRA research laboratories."

Professor Logan described the university as a catalyst of change operating at two levels — "one in the future, some 20 years out, and the other in the case of suburban university at present."

In his capacity as chairman of Education Committee of the Multi-Function Polis, Professor Logan was asked to identify a role for higher education as a commercial proposition some 10 to 20 years in the future.

"Higher education, which we later described as a world university, emerged as probably the most central component of the proposed Multi-Functional Polis," he said.

"It was seen as an industry in its own right, one which produced high value added products — its graduates and other knowledge based activities — but more importantly as the industry which provided the structural underpinning of other proposed activities in the MFP.

"These included medical and agricultural biotechnology, international business and financial services, artificial intelligence, communications and transport technology and environmental management. Here the university was acting as a real catalyst for change.

"Education was seen as the engine of growth which could drive a number of knowledge based, high value added activities. We could draw on the best in the world. It was a concept of great excitement and it remains so."

From the concept of a world university some 20 years on, Professor Logan also examined the role of Monash University as a catalyst for change.

"Some years ago we set out to manage the university in a different kind of way; to break as far as possible the traditional loyalty of academics to their disciplines and to develop a corporate view of the future," he said.

"We identified a number of objectives for the organisation which included good teaching and research, an understanding of the wider external environment and our place in it, and the need to concentrate more on outputs and the market we serve.

"We also aimed to at least understand the difference between skills and knowledge and the kinds of skills required by employers, to internationalise, especially in the Asia-Pacific region, to integrate with Chisholm and Gippsland, and to develop collaborative links with other institutions, government and business.



Professor Mal Logan

Students strike gold in mining research

TWO Monash PhD students have won international recognition for their work in mining and related fields.

The students are winners of the 1990 Pacific Rim Congress (PACRIM) student competition, which is an integral part of the international congress on mining, geology and economics to be held in Queensland this month.

Ms June Hill won first prize with a paper on "Extensional deformation in the

D'Entrecasteaux Islands of eastern Papua New Guinea. Mr David Cooke took out

second prize with a paper titled; "The development of epithermal gold and porphyry copper-style mineralisation within an intrusive centre: Acupan, Baguio district Philippines."

Third prize was won by Mr Lu Anhuai, a doctoral student of geosciences, in China's University of Geosciences, Beijing.

The students win an all expenses paid trip to the PACRIM Congress where they will present their papers.

The congress, sponsored by The Australian Institute of Mining and Metallurgy is being held on the Gold Coast from 6 to 12 May and is expected to attract up to 800 delegates from Australia and overseas.

Welch awarded Goethe Prize



The 1989 Goethe Prize winner, Catherine Welch, accepts her award from the Vice Consul-General of the German Federal Republic, Mr Hans Müllers, at a recent ceremony in the department of German Studies. Looking on is chairman of German Studies, Professor Philip Thomson. The Goethe Prize is awarded annually to the best student in first-year German.

expertise and products in what is

Apple centre opens

THE first Victorian Apple Technology Centre was officially opened at Chisholm Institute of Technology on Friday 23

now the second standard PC environment. The centre is equipped with a number of Apple's sophisticated Macintosh IIcx machines which will enable advanced software to be developed and used. It will also provide educational services to computing professionals, the community and business. At the same time enhance the presence of Apple Computer Australia in the Victorian market by providing training in hardware and applications software. The Apple Technology Centre is seen as a very important development for the Pearcey Centre as it is the first joint venture with a major computer vendor and the start of a continuing and lasting partnership. The Pearcey Centre will be running courses on topics such as desktop publishing, executive presentations, financial management, database development, and Apple's version of Unix on the Mac, A/UX version 2.0.

Pacific seminar

THE Centre for Pacific Basin Studies at the Brisbane College of Advanced Education is holding a conference on the impact of the Asian Pacific Economy on Australasia.

"There is much more emphasis on the application of research results, rather than research for its own sake," he said.

"There is also more strategic thinking and looking for competitive advantages, for example the building of strategic alliances with other universities around the world.

"It has also meant closer links with business and the private sector, not just for funding purposes, but to gain understanding of the needs of employers.

"We have had to pay more attention to the outposts of the system and more consideration to teaching. It has led to a greater drive to collaborative work such as the establishment of research links with "All of these necessitated quite major changes in the traditional management styles and operations of universities. It represents a change in culture.

"Other universities in Australia have reacted differently. Indeed universities are now much more competitive. In time they will develop down different paths and will be very different from each other.

"They will also be much more responsive to their environment and I am convinced that Australia will be well served by these changes." March by the Parliamentary Secretary of the Victorian Cabinet, Mr Mal Sandon.

The Apple Technology Centre is a joint venture between Apple Computer Australia Pty Ltd, as part of its technology offsets program, and the Pearcey Centre for Computing at Chisholm Institute.

The centre will be a national resource unit for information technology developers, consultants and system integrators.

It will provide support for the development of innovative products for local and overseas markets and is fully supported by the Department of Industry, Technology and Resources.

The acting executive director of the Pearcey Centre, Mrs Pearl Levin, said the centre was a tremendous opportunity to produce local The conference will be held on 15 and 16 September at the ANA Hotel, Surfers Paradise. The cost is \$195 or \$175 for members.

Topics listed for discussion include the Multi Function Polis, the Very Fast Train, business migration, changes in labor structure, ecological impact and the export of education.

Publishing companies and other organisations will also have a display at the conference which will draw together business, academia, government, unions and other agents of social change.

For further information contact the chairman of the centre, Bob Leach on (07) 352 8597.

Back in the USSR

IN the West, Mikhail Gorbachev is hailed by most as the great reformer, and the man personally responsible for the winds of change which have swept through the Soviet Union and Eastern Europe.

Since assuming power in 1985, Gorbachev has sought to revitalise the Soviet Union's cultural and intellectual life and rebuild its failing economy.

Yet how successful have the policies of glasnost (openness) and perestroika (economic reconstruction) been?

Dr Ian Cummins, a senior lecturer in the History Department, has recently returned from a two month sojourn to the Soviet Union as part of the Australia/USSR Academic Exchange Program. (He won a scholarship for the program in 1979, but his trip was called off following the Soviet invasion of Afghanistan in 1980).

While researching the history of nationalism at the Moscow State Historical Archives Institute from December 1989 to early 1990, Dr Cummins was able to observe first-hand the effects of glasnost and perestroika on the ordinary Soviet citizen.

Despite having to bear a bitter Soviet winter (temperatures got as low as -30C), Dr Cummins witnessed a period of great upheaval which included the death of Andrei Sakharov, the overthrow of Ceausescu, the outbreak of civil war in Azerbaijan and the beginnings of the secession movement in Lithuania.

He recently gave a public seminar for the Centre For European Studies, about some of his impressions of Gorbachev's Russia. And although reasonably sympathetic to Gorbachev, Dr Cummins does not share the rosy view of him that's held in the West, and argues that neither do very many Muscovites.

It would seem the economic hopes of perestroika have faltered so far, Dr Cummins said. "What we see is the complete economic collapse of the country. It's bankrupt. For example, at the every day level, food is of an appalling quality and very hard to get, the quality of service is dismal and sanitary conditions are a disaster.

"Another thing I noticed is that very few people seem to work. They are employed or at least guaranteed an income, but there is no service at all. A terrible sense of demoralisation has hit the Soviet Union and it tends to result in low productivity."

In addition, Dr Cummins found the ecology of the country in an appalling mess with Chernobyl providing only the most dramatic example.

"You can also point to the drying up of the Aral Sea, the pollution of Baikal as well as whole areas which have been just devasted and turned into dust bowls," he said.

According to Dr Cummins, the poverty of the country is partly due to climate and partly to mismanagement.

"Often you have the situation of rather high-handed bureaucrats in Moscow dictating policies regardless of the local pecularities of ecology or even the way people live," he said.

"There are also climatic factors like crop failures and droughts, and of course the collectivisation of agriculture has possibly more to answer for as well."

At least in the area of glasnost, Gorbachev does seem to have made some progress, Dr Cummins said.

"Under glasnost, there has been the whole opening up of the country in terms of intellecutal, cultural and scholarly life," he said.

"Books that were previously banned but have now been published legally include Doctor Zhivago (Boris Pasternak), Solzhenitsyn's The Gulag Archipelago, George Orwell's 1984, and Arthur Koestler's Darkness At Noon. They are all published in mainstream literary journals although it is still very hard to get the actual book in hard copy.

"The other positive aspect of glasnost, of course, is that people are not so frightened anymore. People are prepared to express themselves quite openly now and grumble against the government."

When Andrei Sakharov died in December 1989, Dr Cummins saw a crowd of at least 150,000 people gather to mourn a once reviled dissident.

Yet, in freeing Soviets from the fear that has gripped them for 70 years, Gorbachev has also unleashed many pent-up nationalist and political forces.

According to Dr Cummins there are two key problems occupying Gorbachev and the Politburo at the moment. One is the economy and the other is the nationalist question.

"When I was there, the secession movement in Lithuania was just beginning to happen and Gorbachev was heading off there," he said. "I think he (Gorbachev) was sur-

"I think he (Gorbachev) was surprised by the strength of nationalist sentiment there. As it turned out however, that was less of a crisis than what was going on in the south with the Armenians and Azerbaijanis fighting each other.

"Refugees from Baku told me that was quite awful and a striking contrast to the way national protest was being voiced in Lithuania. People were being hanged in the streets and flung out of top storey windows. There really was some terrible violence."

Although Gorbachev has tried to defuse the Lithuanian situation with his announcement of new laws on federation and secession by



Dr lan Cummins in front of the Zagorsk Monastery just outside Moscow.

republics, Dr Cummins believes the national questions will continue to plague him.

"Gorbachev is trying to introduce changes gradually but, from his point of view, Lithuania has jumped the gun and gone much too far, too fast. Of course, you can employ all sorts of delaying tactics in these situations and I think the Lithuanians are aware they have to be cautious and on their guard," he said.

"Then, apart from the three Baltic states that want to secede, you have Georgia, Moldavia and Azerbaijan and there are others to watch as well.

"The Ukraine is another matter. Large numbers of Ukrainians are certainly very nationalistic, but I think the situation is that the republic is complicated by the fact that there is much more of an ethnic mix and a lot more Russians settling there. Moreover the economic resources of the Ukraine would not be surrendered lightly." Dr Cummins said while he was in Moscow, people were beginning to speculate on the possibility of a coup against Gorbachev by the KGB and the Red Army.

"Gorbachev has a lot of opposition to contend with and not just from radicals or nationalists, but from people in the bureaucracy, particularly middle level bureaucrats and party functionaries who find their positions are threatened," he said.

Despite the positive signs of glasnost, Dr Cummins says he finds no cause for real optimism for an improvement in living standards for Soviets.

"The problems are such that I'm not sure someone of even Gorbachev's talents can really handle them," he said.

"The whole situation is a bit like that of someone stricken with cancer. If you neglect it, it will get worse and, while surgery may be painful, it is advisable if the patient is to live."

Liberties at risk warns judge

SIGNIFICANT changes are taking place in our governmental structures and institutions which can profoundly affect our lives and could even destroy our liberties, the Chief Justice of Victoria, Sir John Young said recently.

Sir John was giving the occasional address at the Education/Law/Medicine graduation ceremony held in Robert Blackwood Hall earlier this month.

what are thought by the media to be unpopular views is apt to be so strongly expressed and so steadily maintained as to deter all but the stoutest hearts from expressing



Cortége for a composer: A mock funeral procession was held on campus to advertise the Monash University Choral Society's major concert of the year, Verdi's Requiem, presented with the Frankston Symphony Orchestra at Robert Blackwood Hall early this month. Picture: RICHARD CROMPTON According to Sir John, the power of the Parliament has been steadily declining for many years and becoming more and more under the control of the Executive.

"The independence of the judiciary is being eroded. The judicial arm of government is being more and more influenced by the Executive," he said. "By this I do not mean to say that

"By this I do not mean to say that actual decisions are directly influenced by the Executive, but there are many ways in which judicial independence can be eroded without the appearance of interference with the actual decision in any given case.

"Freedom of speech seems to me to be declining also. Once the only restraint upon freedom of speech was that which the law provides. Now the public denunciation of them.

"Comfort and affluence are apt to sap the energy of society and we in Australia are apt to think, even if we do not say, that we are immune from what is happening elsewhere, but it is clear enough that we are not.

"I do not, however, think that we should allow the apparent surge of demand for democratic systems of government in Eastern Europe to blind us from a realisation that the institutions and practices of our democracy are delicate instruments which we allow to be altered at our peril."

Sir John stressed the need in the community for educated and informed discussion about matters which would profoundly affect our society in the future.

Student revolt remembered 25 years on



The front cover of Student Revolt: La Trobe University 1967-1973, by Barry York

STUDENT REVOLT: LA TROBE UNIVERSITY 1967-1973, by Dr Barry York, Nicholas Press, PO Box 57, Campbell, ACT, 2601. Price: \$17

WHEN Dr Barry York heard that La Trobe University was going to celebrate its 25th anniversary last December, he decided to write its history from the perspective of someone who participated in the events surrounding the campus crisis of the late 1960s and early 1970s.

As an arts student at La Trobe in 1969, Dr York was involved in one of the most sustained and militant student revolts in Australia.

La Trobe, then a brand-new campus, was thrown into turmoil with the whole gamut of student protests. confrontations, strikes and battles with police. Though smaller than other universities, its authorities responded with a degree of repression that was uncommon in other Australian universities.

More than 20 students were fined and/or excluded by the university's disciplinary tribunal during 1971. The university also took criminal and civil action against others in the courts and called in the police who carted off disruptive protesters "by the paddy-wagon load". Finally York, and two other perceived ringleaders, were imprisoned for contempt of court for more than two months in Pentridge.

Dr York, now a research fellow at the University of New South Wales, recently published Student Revolt: La Trobe University 1967 to 1973, to tell a story he believed would be ignored or underrated in the university's official commemorative publications.

"Students played a leading role in the anti-war movement and I hope my book helps to counter those publishers and producers who would trivialise or ignore the movement," he said.

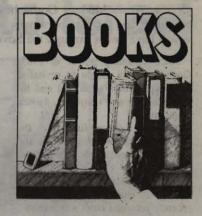
Dr York says he is often asked: "What did the student movement of the 1960s achieve?", or "Aren't those radicals of yesteryear the Yuppies and conservatives of today?'

"In my opinion, the whole 1960s movement has left a cultural legacy with some very positive aspects,

he said. "For one thing, I doubt whether Australians will ever again go off to war simply because a government waves a flag and plays some patriotic tunes as they did in the First World War.

"And judging by the people with whom I associated back then, and with whom I am still in touch, I feel that while many have become more moderate and realistic in their objectives, they nonetheless have retained a sense of justice.

"Thus you will find the old student rebels from La Trobe in such places as the environmental movement, as lawyers specialising in



workers' compensation, as social workers and educationalists in lower socio-economic suburbs, in trade unions as health and safety officers, in public service jobs concerned with human rights and equal opportunities and so on."

Student Revolt considers in some detail the 1960s youth culture, the protest movement against the Vietnam war and conscription, the nature and role of universities in Australian society.

Although it is unusual to find an historian writing about events in which he participated, Dr York says: "In writing this book, I have tried to apply the maxim of C. Wright Mills, who once declared that in his writings he always did his best to be objective but made no claim to being detached."

Anyone who would like a copy of Student Revolt can send a \$17 cheque c/o Barry York, PO Box 57 Campbell, ACT 2601.

ressed for the occasion

THE deputy Vice-Chancellor of the University of Lae in Papua New Guinea, Dr Beno Bartholomew Tomon Boeha, received his PhD in the field of science education at a recent Monash graduation ceremony.

Dr Boeha graduated in the full native dress of his people in Papua New Guinea. His magnificent attire as a warrior was topped by the academic black and scarlet gown, hood and PhD hat. Before receiving his degree from the Monash Chancellor, Sir George Lush, he gave the ceremonial greeting of his people.

Dr Boeha is a member of the first group of graduates in physics in Papua New Guinea and taught at the secondary level before taking up a

Bike plan for Monash

teaching position at the University of Lae.

He was later appointed Vice-Chancellor - a leading position in Papua New Guinea - which is an indication of the respect in which Dr Boeha is held in his country.

At Monash, he completed his master of Educational Studies degree and then went on to do a PhD under the supervision of Professor Peter Fensham.

According to the Dean of Education, Professor David Aspin, both Dr Boeha's postgraduate qualifications were completed with considerable distinction.

"His doctoral thesis is regarded as an outstanding piece of work, which contributes to our understanding of the application of concepts of research in teaching practice," he

"Dr Boeha is a remarkable person, whose double dress at the graduation ceremony exemplified the movement of Papua New Guinea society towards its technical future and its integration into the Asia-Pacific development area.

"His appearance saw embodied in him the pride in his own people's culture and identity and yet his own sense of the key importance of the scientific and educational achievements he was able to complete at Monash University.

Following the graduation ceremony, Dr Boeha presented a native mask as a permanent reminder of the connections and mutual interdependence of Papua New Guinea and Australia.



Dr Beno Boeha (left) presents the mask to the Dean of Education, Professor David Aspin, as his thesis supervisor, Professor Peter Fensham watches on.

Color copy

A FULL color photocopying service is now available on campus. Educational Technology Services (ETS) is offering full color A4 and A3 photocopies (and overhead projector transparencies) from books,

University of NSW), Robert Irving (chairman of the National Trust's NSW Historic Buildings Committee) and Peter Reynolds (teaches Building Conservation at the Faculty of Architecture at the University of NSW)

Deals with six significant periods - Old Colonial, Victorian, Federation, Inter-War, Post-War and Late 20th century. Ideal for students and practitioners of architecture and design.



FORMER Monash student, Dr John Miller has been appointed Head of the School of Management in Chisholm's David Syme Faculty of

BICYCLE riders and those with an interest in bicycle use on campus are invited to submit comments and suggestions relating to cycling conditions, facilities and safety to a joint working group, recently formed by the Road and Traffic Sub-Committee.

The group has been asked to prepare a draft for a Monash University Bicycle Plan, which will be based on assessments of the requirements of cyclists and their integration into the university's overall traffic plan.

Comments, preferably in writing, should be sent to Mr Alan Wilson, Safety Adviser, University Offices, or to Ms Kate Creighton, Monash Association of Students, Union Building.

Business.

Dr Miller was the foundation dean of the David Syme Business School from 1974 until 1981, when he left to take up an appointment as director of Consumer Affairs.

During his absence from Chisholm, he obtained his PhD at Monash and wrote three researchbased books on business and management - two of which were sponsored by the Australian Institute of Management.

He also chaired the State Recreation Council, was appointed by the Federal Government to the Management and Investment Companies Licensing Board, and was chairman of the international management, consultancy and chartered accounting firm, Pannell Kerr Forster. In 1982-83 Dr Miller was president of the Australian Society of Accountants, and in 1985 he became

the first Australian to head the Confederation of Asian and Pacific Accountants.

Monash graduate Professor Tony Hassall has been appointed Pro-Vice-Chancellor (Humanities and Social Sciences) at James Cook University of North Queensland. Professor Hassall studied at Monash from 1964-67, when he completed a PhD thesis on the 18th century novelist, Henry Fielding. From 1968-82 he lectured in English at the University of Newcastle.

In 1983 he was appointed professor of English at James Cook University and executive director of the Foundation for Australian Literary Studies.

magazines, photographs, 35mm transparencies and negatives, as well as reduction and enlargement (50%-400%), and image editing facilities, including framing, blanking, image segmentation, and mirror image.

Basic charges range from \$3.20 to \$5.50 a copy. Rates for more complex tasks will be made available on application. For further information, contact Mr Alan McKenzie on ext 3281.

Architecture

A Pictorial Guide to Identifying Australian Architecture: Styles and Terms from 1788 to the Present, (Angus & Robertson), RRP \$39.95. By Richard Apperly (chairman of the Faculty of Architecture at the

Maths puzzles

Number Chains: 50 Challenging Crossnumber Puzzles, (Angus & Robertson), RRP \$9.95.

By Geoffrey R. Marnell (educated at the universities of Melbourne and Oxford and holds a doctorate in moral philosophy).

Contains 50 crossnumber puzzles which can be attempted by anyone who has a simple knowledge of arithmetic, a bit of logic and a liking for challenges. Included in Number Chains are a useful glossary of terms, mathematical tables, a set of rules and, of course, solutions to each puzzle.

Exploring the Pacific's brittle rim

THE BRITTLE RIM: FINANCE, BUSINESS AND THE PACIFIC REGION, by Maurie Daly and Mal Logan Melbourne: Penguin, 1989. Price: \$24.99

By Michael Webber

THIS interesting, informative and beautifully written book attempts to describe the development of and to assess the future of Pacific-Asia — the set of countriess located on the western edge of the Pacific Rim.

To do this, Daly and Logan survey the changes in the global economy since the early 1970s and place the growth of Pacific-Asia within that context.

In a sense, the book is an historical essay on the real effects of money. But it also provides a warning that Australians should not regard the continued growth of Pacific-Asia as unproblematic.

The Brittle Rim has 10 chapters. The first sets out the issues and presents the framework of the study: namely that the economic history of the last 20 years has been dominated by the formation and characteristics of a global financial system.

Daly and Logan also make the curious claim that their history is free of theory; of course, this cannot be true — though their history is certainly free of the ideological and normative use of mainstream economic theory that so permeates official views of Australia's place in the global economy.

The next eight chapters describe the changes that have occurred in the global economy since the early 1970s.

Daly and Logan are true to their claim that these changes have been dominated by the growth of global money markets: they devote five of the eight chapters to this issue.

Other chapters examine trade, industrial restructuring and the place of developing countries in the global economy.

The final chapter uses all this information as background to examine the future of Pacific-Asia. What are the problems faced by the region and its components? What are future prospects for Australia and its neighbours?

Daly and Logan divide the economic history of the post-war years into two phases. Until the end of the 1960s, growth proceeded apace, carried along by rebuilding after the war, by consumer demand, by Keynesian policies of stabilisation and — most importantly of all — by cheap energy.

The system was organised by



communication and the development of financial institutions that operate on a global scale to invest the sea of surplus capital. Many of the economic changes of the last 20 years are a direct consequence of the manner in which the global financial market has changed.

Stated this baldly, the central story of *The Brittle Rim* is hardly novel. The explanation of the decline of the old order is reminiscent of Piore and Sabel (*The New Industrial Divide*) and the tale of knowledge industries and fast communication has been sketched before, for example by the Bureau of Industry Economics (*Globalisation*). But the real contribution of Daly and Logan does not lie in the story they tell; instead it lies in the manner of its telling.

The major feature of *The Brittle Rim* is the way in which the central tale is embellished by a detailed economic history.

Daly and Logan have pieced together a fascinating story of trade, finance and industrial development that draws on an enormous variety of sources and on detailed research in east Asia. This is a history, rich in cases and wide in scope.

We walk away from *The Brittle Rim* with a complex understanding of the changes that have taken place in the global economy and particularly — in the global financial system since the 1960s. A second feature of Daly and Logan's use of the story is the way in which they explain the problems that have developed from the reorganisation of the global financial system.

This reorganisation has involved a free trade in money, progressively developed through deregulation and new technologies of communication.

It has also involved competition between banks for the right to lend: a competition that has seen overlending not only to the Bond type of corporation but also to many countries.

The banks were doing what they had never done before, on a scale that had never before been visualised. Capital has become highly mobile internationally, rates (of interest and exchange) have become volatile and flows huge. This enormous, unstable system poses tremendous problems for the real economy of production and for those who would try to manage that economy.

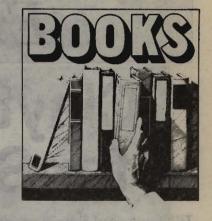
Thirdly, Daly and Logan take a long, cool look at Pacific-Asia. In current Australian policy, this is regarded as the region whose development will pull Australia along (or even "up") in the twentyfirst century.

The Brittle Rim casts serious doubt on this expectation. Pacific-Asia is a "region", mainly because its members are all dependent on the USA or Japan, or both: its members share few other characteristics.

The future prospects of the region are not clear either, for the countries of Pacific-Asia are especially vulnerable to energy price fluctuations, protectionism in North America and Europe, world debt, unstable capital markets and their limited development of global financial institutions. We should be wary, it seems, of tying our coat tails to this giant yet.

At the same time that I read The Brittle Rim I was also reading Garnaut's report to the Prime Minister on The Northeast Asian Ascendancy. The contrast between the two books could hardly be more startling.

Garnaut offers a highly theorised interpretation of the growth of North-east Asia and Australia, one



in which actual historical circumstance, government policy and real economic actors seem to play little part.

Alongside *The Brittle Rim*, Garnaut's report seems unreal. Garnaut offers a far more sanguine view of the prospects for continued prosperity in North-east Asia than do Daly and Logan. One hopes that the government and its advisers — as well as the Australian people — pay serious heed to the message of *The Brittle Rim*.

Finally, it is a pleasure to read *The Brittle Rim.* Even though it is about a subject potentially as dry as the evolution of the global financial and economic system, nevertheless it is highly readable.

This is partly because it is rich in fact and in people and institutions: it conveys a sense of what actually happened. But it is also because the authors have spent effort choosing the right words and images. And despite the dual authorship, there are no evident changes in style from one part to another.

The authors deserve congratulation for this book, for it is wellwritten, interesting and informative. I have some complaints about the broad outlines of the story they tell: the causes of the world-wide slowdown in growth since the early 1970s seem to me to be far from clear.

I also had some difficulties with the organisation of the book: the division of the chapters on global money markets, finance and the banks was not entirely clear. But I learnt a lot from it; I enjoyed reading it; and I recommend it to you.

Professor Michael Webber is Chairman of the Department of Geography at Melbourne University.

Chisholm opens new dealing centre

Continued from Page 1

latest CPI and balance of payments figures, and then let loose to play the market. After 45 minutes there had been a \$1.3 billion turnover. The team from Westpac Bank won the competition making a profit of \$2.8 million. Head of the School of Banking and Finance, Ms Denise Wheller said: "Facilities installed in the David Syme Treasury Dealing Centre are at the leading edge of technology. The system is currently configured to represent an interbank market offering the ability to deal with brokers and corporate customers under the direction of a central bank. "By designing and providing an installation that is exactly what is found in industry and offering instruction by dealers, we are catering for the precise needs of the finance sector.

transnational corporations. However, the inefficiencies and contradictions in this system resulted in a gradually accelerating inflation that culminated in the OPEC price rises.

These price rises caused trade balances to change dramatically and provided an enormous quantity of surplus capital that flitted around the globe, seeking profitable investments.

The old, energy intensive industries entered a period of relative decline: knowledge intensive industries are the basis for the new industrial order.

This new order has rearranged the spatial economic system, giving increased prominence to the countries of Pacific-Asia.

It is also more closely integrated than in the past, by instantaneous "Education in the sophisticated finance sector of today must be tailored to produce graduates who can adapt directly to a practical work-oriented situation."



The team from Chisholm Institute swings into action in the new treasury dealing centre. Picture: TONY MILLER.



Clayton's a stage for Shakespeare

THE first national Shakespeare Association in Australia will be launched next month with a conference at Monash University.

The inaugural conference of The Australian and New Zealand Shakespeare Association (ANZSA) has been timed to coincide with the English Department's production of one of Shakespeare's major tragedies. Antony and Cleopatra.

The ANZSA conference will be held at Normanby House from 1 to 3 June, and is open to anyone interested in the study of Shakespeare.

The main focus of the conference will be on Shakespeare's Roman Plays but a few papers on other plays have been accepted too.

Eminent Shakespearians will be presenting papers at the conference. They include Professor Howard Felperin (Macquarie University), Professor Fred Langman (ANU), Professor Alan Brissenden (Adelaide University). Dr Alan Dilnot (Monash University) and others

Professor Tim Mares (Adelaide University) will give a paper on Antony and Cleopatra and delegates are invited to attend the production of the play on the Saturday evening.

One of the convenors of the conference. Dr Dennis Bartholomeusz. a reader in English at Monash (the other convenor is Professor Derick Marsh, La Trobe University), said the association would be the first of its kind in Australia and New Zealand.

"The object of the association is to further the study and understanding of Shakespeare's life and work. and the work of his contemporaries, and to encourage the production of his plays," he said.

"Other Shakespeare societies are restricted to their state or city of origin, but membership to our association is unrestricted. There is also an opportunity for other societies to affiliate with us."

An executive committee will be elected at the conference, which will then be responsible for keeping members informed of other conferences, seminars, and amateur and professional productions of Shakespeare's plays.

The association will also consider founding and publishing a journal of Shakespeare studies and hosting an international conference in Australia.

The production of Antony and Cleopatra is being directed by Dr Bartholomeusz, an acknowledged world authority on Shakespeare in performance.

He said timing the play to coincide with the conference would enable the English Department to display its art work to Shakespearian enthusiasts from interstate and overseas.

The play also has wide appeal somewhat closer to home. Antony and Cleopatra is a text for VCE students this year and is presently being studied by all Monash undergraduate English students at various levels.

Secondary schools from as far away as Lang Lang, as well as other schools in the immediate vicinity of Monash, have already reserved their places at one of the eight performances.

According to Dr Bartholomeusz, the play is a great and complex work of art, which is difficult to perform because of its density.

"We are trying not to simplify the play but touch its complexities in as many places as possible," he said. The cast, consisting of mainly

SHAKESPEARE

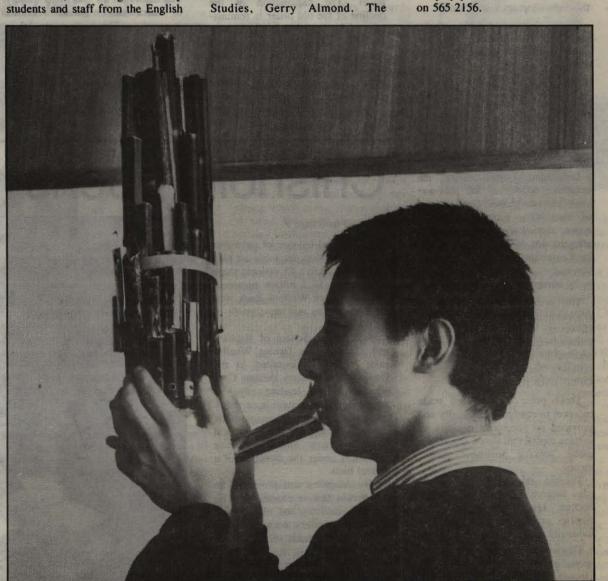
Department, have been rehearsing since March.

Antony is played by Richard Pannell, a senior lecturer in the department, who played Shylock in last year's production of The Merchant of Venice. He also played a brilliant King Lear in 1988. Debra Nielsen, a graduate of the Victorian College of Drama who is now a second-year English student doing a Shakespeare course at Monash, is playing Cleopatra.

All the sets for the performance have been designed by Neville Weeraratne, and the musical director is a masters student in Australian lighting director is Matthew Peckham and Barbara Calton has choreographed the dance and movement in the play.

Antony and Cleopatra will be staged at the Alexander Theatre from 25 to 30 May and on 1 and 2 June at 8.15 pm. A matinee will also be performed on 30 May at 2.15 pm.

Tickets cost \$12 for adults, \$6 for students and group concessions (20 and over) is \$5 a student. For bookings phone 565 3992. For further information about the conference or the play phone Mrs Barbara Calton on 565 2156.



Bad habits at The Alex

WINTER in Melbourne is not traditionally the funniest time of the year.

The Alexander Theatre is set to change all that.

To coincide with the first month of winter, the "Alex" is presenting a show to make Melbourne forget its woes and make the city's collective funny bone sore.

Dan Goggin's hilarious Broadway hit "Nunsense", is turning the theatre into a chapel of laughs from 7 to 16 June.

Following on the heels of "Lipstick Dreams" and "The Barber of Seville", "Nunsense" hopes to continue the Alexander Theatre's winning streak in its first extended season of professional theatre.

Take an order of nuns of which 22 have been accidentally poisoned by the contaminated vichyssoise made by one of their number.

Then discover that Mother Superior couldn't resist the special price she was offered on a video recorder, which she bought with the money provided for the funerals of the last four of the deceased sisters.

matter of urgency, so the nuns swap their hymn books and sensible shoes for show stopping songs and tap shoes - "Nunsense" is born!

Starring in "Nunsense" is audience favorite June Bronhill, whose many talents lead her from operetta to straight acting, to musicals.

Sharing the stage with Ms Bronhill are Pat Pitney (Sister Amnesia), Patricia Vivian-Hall (Sister Hubert), Sarah Herliay (Sister Robert Anne) and Karen Walsh (Sister Leo). Directing the star struck sisters is well known singer and actress, Betty Bobbitt, who wooed Melbourne audiences some years ago when she played Reverend Mother, Sister Mary Regina in "Nunsense".

Raised and confirmed a Catholic in her native Philadelphia, Ms Bobbitt feels she has a special insight into the world of "Nunsense".

However, Ms Bobbitt's early career was hardly appropriate for a good convent girl.

"My first stage r

Making money fast to bury the dead nuns in accordance with healthregulations suddenly becomes a



whore - my father was most concerned and told me at every opportunity 'Don't have your skirt so tight'!" she quipped.

Ms Bobbitt is quick to point out that her father would have approved wholeheartedly of the character she once played in "Nunsense".

In 1962 Ms Bobbitt came to Australia on a six-month contract and decided to make it her home.

Among her many credits are leading roles for the Melbourne Theatre Company, and her membership of the original "Glitter Sisters" vocal group.

Many television fans will remember her five-year stint in the serial "Prisoner", as inmate Judy Bryant.

Directing "Nunsense" seems a long way from the inside of a prison cell!

Musician Wang Zheng Ting plays the sheng (Chinese mouth organ) at a concert of Japanese contemporary music, presented earlier this month by the Japanese Music Archive in the Music Department. The sheng was recently purchased by the department for use in its new Chinese orchestra.

Entertainment and The Arts

Sculptures mark time for Wollmering

THE recent sculpture of Dan Wollmering has been created in three vastly different environments as he travels from art studios in the heart of the city, suburbia and the country.

A lecturer in the School of Visual Arts at the Gippsland Institute of Advanced Education, Mr Wollmering is fortunate to have excellent facilities at his disposal.

He also has access to an art studio at the Royal Melbourne Institute of Technology. where he is presently finishing a masters degree. His own studio, set up in an old garage at the rear of his Pascoe Vale home, is where the final touches are added to sculptures before they are exhibited. sold or given away.

"Each environment has its own special attractions. RMIT, in the heart of the city, invigorates you to work in a different fashion than the rolling hills of Gippsland. Each contributes something quite separate and distinct to a piece." Mr Wollmering said.

An exhibition of Mr Wollmering's recent work is being held in the Switchback Gallery at Gippsland Institute from 25 May to 7 June. It will include about 18 sculptures of metal and bronze, some of which were started in 1988 and others which have only just been completed.

Mr Wollmering's work has been described as entertaining for its expression, humor, vitality and confidence. Mr Wollmering, himself says the sculptures are both figurative and abstract and could be construed to abound with symbolic reference depending on the individual.

"They probably have something to do with time and how one travels through life," he said.

"They are like time markers in an international and global sense but also in an individual level they deal with notions of where the universe fits into things.

"It's hard to say exactly what they mean because when you do it's like putting a full-stop to them, but they should have some reference to meaning on various levels to individuals."

he simply goes to work in the physical sense.

'Some of my work has just come about from fooling around with shapes and pieces on the studio floor," he said.

"I don't like having a fixed notion because it is the creative process that is interesting. I start by adding

Once together, a metal sculpture is not finished until the pieces have been painted.

"By putting color on you can change the piece enormously. It's like trying to identify forms and give prominence to forms with color and then working and reworking it until you're satisfied," he said.

Mr Wollmering originally started working with timber but took to metal and bronze about three years ago when he began teaching at the Gippsland Institute. The decision to work with metal primarily came about because of the availability of the raw material from the SEC scrap yards in the Latrobe Valley.

Mr Wollmering was born in Minnesota and migrated to Australia in 1975. He taught in the secondary school system before leaving to take up a senior tutorship in Art Education at Phillip Institute. In 1982 he was appointed assistant co-ordinator of art/craft at Richmond Technical and Further Education college and since has lectured in sculpture at Chisholm and Gippsland institutes.

Some of Mr Wollmering's recent individual exhibitions have included "A Beckett on Swan", at the LaTrobe Valley Arts Centre, Morwell and one at the Caulfield Arts Complex in 1988. He has also participated in a number of group shows including the 1981 and 1987 Australian Sculpture Triennials.

Mr Wollmering's forthcoming exhibition at the Switchback Gallery is the first one where he deals exclusively with the medium of metal.

"Some people don't like metal because it is very easy to make mistakes. Even given its rather rigid and hard nature though, it has a certain plasticity which one can take advantage of," he said.

Of the exhibition Mr Wollmering said: "One is never completely pleased and there are things one would always change, but at the same time they are not important. You don't learn if you are always satisfied but I am pleased with the results.

And what of the future?

"I feel optimistic about looking at the concerns in the art world and questioning its own foundations, however, I want to avoid the cynicism that has occurred in some of the chapters of postmodernism," he said.

"It's all about doing more with a positive element in the visual arts. There are some examples of that thinking in this exhibition but it is more my future direction."

Winter brochure now available THE winter brochure of the Arts and Crafts Centre is being distributed

now. The courses start in early June and continue until the end of August.

Pamela paints the wild side of life

HIGHLY acclaimed wildlife artist, Pamela Conder will present three exciting courses at the Monash Arts and Crafts Centre in late June, July and August.

Ms Conder has been the recipient of numerous awards, including several first prizes from the Widlife Society of Australia, and she has participated in many major exhibitions.

The incredible demand for her work has Ms Conder painting and drawing wildlife in places as far

pieces, taking them off again and adding different pieces. It soon starts to develop its own personality and I find I have to follow along with that and knock it together.'

> The final course, Scientific Drawing on 11 and 12 August, will be of particular interest to students and staff of anatomy, zoology, physiology and botany. Acute observers of the natural world may already be aware how a drawing can often highlight the relevant aspects of an object far more effectively than a photograph.



Many of the traditional courses such as pottery and painting have already been planned. However, seasonal programs such as Knitting for Beginners and Colorful Picture Knitting will be held during lunchtime and just after work to suit staff.





Dan Wollmering puts the finishing touches to some sculptures which will feature in his forthcoming exhibition at Gippsland. Picture: TONY MILLER As with all art forms that require

inspiration and creativity, the hardest thing is coming up with an idea. Mr Wollmering says he has no systematic way of starting a piece,

flung as Botswana and China. She has also illustrated children's books and writes a monthly column for the Warrandyte Diary.

In the Wildlife Art Weekend course on 30 June and 1 July, Ms Conder will demonstrate how to draw imaginative representations of animals and plants. Participants can choose the drawing or painting style that they consider most effective, for example, traditional, semiabstract or experimental.

Far from being merely picture postcard copies, wildlife art is a fascinating look at the natural world, birds in flight, plants in their natural habitat and a great diversity of living organisms. The course is for both beginners and the more experienced.

The Acrylic with Watercolor course, on 7 and 8 July, teaches the traditional methods and basic prin-



ciples of using watercolors and acrylics on paper and canvas. For the more adventurous, Ms

Conder will demonstrate some mixed media techniques. Beginners and the more experienced are welcome.

to work from specimens, microscopes and electron micrograph photographs. This form of illustration cannot only result in a clear presentation of information but it can also be aesthetic and attractive. For further details about the courses contact the Arts and Crafts Centre on 565 3180.

Ms Conder will demonstrate how

Knitting at present is experiencing a boom with the explosion of colorful fibres and simple bobbin knitting. The classes are led by experienced tutor, Joan Pretty.

Another new course that has been included in the winter program is etchings, which starts on 25 July. Even beginners can come and learn this ancient art, which was the favorite medium of Rembrandt and Goya. Naomi Matthews will be teaching this course as well as classes in screenprinting and paper making.

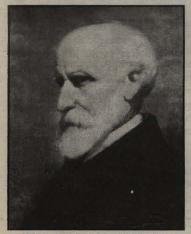
Anyone who would like more information about the winter program can call at the Arts and Crafts Centre and collect a brochure or phone ext 3180.

Entertainment and The Arts Portraying Australian society

THERE will be two exhibitions running concurrently during June in the Monash University Gallery. The first to open is "Defective Models": Australian Portraiture, 19th and 20th centuries, from Regional and University Collections.

The show originated as a complementary activity for the international conference of the Australasian and Pacific Society for Eighteenth-Century Studies being held at Monash from 25 to 29 June, although the exhibition will be opened on Monday 4 June by Professor Max Charlesworth of Deakin University.

It provides an overview of Australian portraiture from 1830 to 1990 with some fifty paintings, drawings, etchings, photographs and some sculpture. A considerable number of works in the exhibition are from the university's own collection.



TOM ROBERTS (1856-1931) Portrait of W. A. Howitt 1900 Collection: Monash University

The more recent work in the show, selected by Jenepher Duncan, includes a number of self-portraits by contemporary artists, few of whom now engage in the portraiture



FRED WILLIAMS Sir Louis Matheson 1976 Collection: Monash University

mode. Artists include Tom Roberts, Charles Blackman, Albert Tucker, Mike Parr, William Dobell, Donald Friend, Hugh Ramsay, Violet Teague and Jenny Watson and others.

The accompanying catalogue will include two essays by art historians and past teachers in Visual Arts at Monash University, Vivienne THOMAS FLINTOFF (c 1811-1891) Henry F. Stone and his Durham Bull 1887 Collection: Ballarat Fine Art Gallery

Gaston and Helen Topliss. Conducted tours are available by appointment.

The gallery will be open from

Tuesday to Friday 10am to 5pm and Saturday from 1 to 5pm. For further information phone

565 4217.



Mixing fine art and academics

OVER the past year Monash University has been negotiating mergers with other institutions. In the discipline of the Visual Arts these amalgamations will join what has been essentially an academic community with ones that are engaged in the practice of art.

Both the campuses of Chisholm and Gippsland 'institutes of technology have large and reputable fine art departments teaching painting, printmaking, sculpture and ceramics. Monash University Gallery, with the support of the Art Committee, thought that it would be appropriate to mark the amalgamations with an exhibition of work by graduate diploma students from both of these institutions.

It will be an opportunity for Monash campus staff to see the high quality of work nurtured by their colleagues at Chisholm and Gippsland; and for Monash students to become acquainted with the achievements of aspiring young artists.

Affiliations is an exhibition of graduate diploma work by 1989 students from both art schools selected by Monash University Gallery curator, Merryn Gates. A continuation of study to this stage is usually the prelude to a career as a professional exhibition artist. Indeed, the final evaluation of work at Gipsland Institute is undertaken in an exhibition format (in 1989 the Graduate Exhibition was held at Latrobe Valley Arts Centre, Morwell).

At Chisholm, the diploma is not awarded until the student has exhibited their work in a solo show of some kind. Some of the Chisholm students seek exhibition at commercial galleries in Melbourne and Sydney, others show in more informal spaces.

At both art schools the teaching staff are themselves artists of some standing in the art world. The Monash University Collection includes works by staff members Clive Murray-White, who teaches sculpture at Gippsland, and painters Chris Pyett and Craig Gough of Chisholm.

The students represented in Affiliations are Annette Douglass, Deborah Halpern, Anderson Hunt, Robert Lee, Arthur Lyczba, Catherine McCue, Jim Pasakos, Geoff Riciardo, Jean Sheridan and Rosalie Sieira.

The exhibition will be on view in the Russell Drysdale Gallery throughout June.



WITH a great awareness of the effects of smoking and the strong evidence of the harmful effects of passive smoking, it is no wonder the practice of "lighting up" is becoming the social taboo of the 1990s.

Anti-smoking practices adopted by both government departments, statutory authorities and private organisations, as well as restrictions on cigarette advertising, has helped to discourage smoking habits.

For a long time smoking has been seen as the "in thing to do", sophisticated, overtly sexual or delicately stylish. However, as more research is done into the effects of smoking, and anti-smoking groups step up their campaign. many people are trying to reduce their consumption or quit.

A Few Facts

A heavy smoker can damage their lungs, reducing their respiratory function by 75 per cent. With this decreased lung function exercising becomes difficult. Smokers tend to breathe harder, have a reduced exercise tolerance, and are generally less fit than non-smokers.

Carbon monoxide in cigarette smoke has about 200 times more affinity for red blood cells than oxygen. It takes the place of oxygen in the blood, causing muscles and other organs to work inefficiently.

An article titled "The Benefits of Quitting", compiled by the Health Department of Victoria, The Anti-Cancer Council and the National Heart Foundation, describes how a person's health can improve if they quit or reduce their smoking.

"Within days accumulated phlegm will loosen in your lungs and you'll cough it up over the next few days," it said.

"Cilia, the body's natural cleaning mechanism will be working normally. Gradually blood components and cells lining your lungs return to normal. This can take 12 months or more.

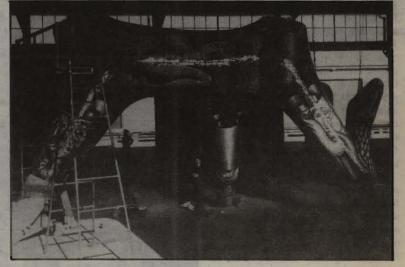


"Within five years the risk of lung cancer is halved and the risk of sudden death from heart attack is the same as for a non-smoker."

Even reducing the number of cigarettes you have a day could help to reduce the chances of emphysema, lung cancer, chronic bronchitis and diseases of the heart and circulatory system.

Exercise can help to alleviate many of these problems and possibly speed up recovery. Decide you are going to improve your wellbeing, fitness and health and then throw the cigs away!

Leigh Branagan Recreation Officer Sports & Recreation Association



Deborah Halpern (Gippsland Institute) Angel under construction 1987-89, Commissioned for the National Gallery of Victoria. Now installed in the St Kilda Road Moat