

GRADUATES' SPECIAL

The Monash Plan: A message from the Vice-Chancellor

A draft version of 'The Monash Plan: A Strategy for the Future' has been distributed by the Vice-Chancellor, Professor Logan, to all members of staff for discussion and comment prior to finalisation of the document at the end of this year.

The draft attempts to outline the university's strengths and weaknesses, to set targets and goals and to develop strategies to reach them. Its purpose is to provide a framework to direct university decision-making and the allocation of resources. The final Monash Plan will, however, be subject to review with changing circumstances.

In introducing the Monash Plan to the university community, Professor Logan said:

Universities have traditionally been reactive and have depended on collegiate and bureaucratic procedures to underpin their decision-making and long-term direction.

This provided the environment for what OECD researchers have described as "organised anarchy" though the lat-

ter fosters creative activity and scholarship, as well as a productive learning environment.

That older perspective is now being questioned as society begins to query the links between education and the economy. In many OECD countries education and skill development is seen

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as part of a national strategy for overall economic growth, and in these countries new industries have expanded and grown alongside the investment in education and training.

I think Australian society is beginning to expect similar outcomes. In this same spirit, the education sector has been called upon to account for its share of national expenditure.

This period we are entering opens up

new circumstances for universities. These new circumstances will influence the type and style of course we teach, and already we can feel pressure from students upon certain courses where it is known job demand is great. They will also influence the research we do, and call into question older ideas about the difference between basic or pure research and applied research.

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Study reveals hidden bias in job market

There is significant discrimination against women in the Victorian labor market, according to a study by two Monash economists.

Using a method known as "correspondence testing", Dr Peter Riach, reader in Economics, and Mrs Judith Rich, senior tutor, found that in 144 cases where there was a discriminatory response to their bogus job applications, discrimination was 40 per cent greater against women.

Over a three-year period, the two researchers sent 991 carefully-matched pairs of written job applications — one purported to be from a female applicant and the other from a male — in response to advertised job vacancies.

In the letters, all essential job characteristics such as age, qualifications and experience were carefully matched so the only distinguishing characteristic was sex.

"We had a response from 507 of the advertisers — 363 treated our applications equally, and of the other 144 discrimination against females was 40 per cent more frequent," said Dr Riach.

"In none of the cases of discrimination would the question of gender have been in any way apparent to the rejected applicant."

Seven occupations were included in the study — computer analyst-programmer, computer operator, computer programmer, gardener, industrial relations officer, management accountant and payroll clerk, said Dr Riach.

The greatest discrimination was shown in the occupations of gardener and computer analyst-programmer, where females were discriminated against three times more often than males.

Discrimination against females was found in both the private and public sectors.

"In the case of government employment, we found females encountered

discrimination in the two occupations with the lowest socio-economic status — gardener and payroll clerk.

"The study demonstrates a deficiency in the Victorian Equal Opportunity Act which puts the onus on job applicants to start an investigation," he says.

"The usual practice was for the candidate who was denied an interview to receive a standard letter of rejection with no explanation offered," said Dr Riach.

"Moreover, in some cases where applications had to be addressed to a post office box number, a rejected applicant did not even know who had done the rejecting.

"This means that under present hiring practices, a person cannot know, let alone demonstrate, that there has been discrimination and is therefore in no position to initiate a complaint."

Dr Riach and Mrs Rich have suggested that the Act could be strengthened in two ways.

"The first would be to make sure that rejected job applicants are put in a better position to detect and demonstrate discrimination.

"Employers should be required to identify themselves in all job advertisements, and to inform unsuccessful applicants of the name, qualifications and experience of the successful applicant.

"This would at least alert unsuccessful applicants to cases of blatant discrimination."

Dr Riach pointed out that the Consumer Affairs Act 1972 requires anyone advertising goods or services for sale through a private box number to include information in the advertisement which will identify the business or person using that box number.

"This gives consumers protection

when buying goods or services, but they don't have the same protection in applying for jobs," he said.

The two researchers also recom-

mended that the Equal Opportunity Board "be empowered to conduct random audits of hiring and personnel practices".



• Judith Rich and Peter Riach

Careers and Appointments is on the move

"Down town Monash", "Monash on Exhibition", "The Corner Shop", (or whatever title the Monash city branch office earns itself) is an exciting prospect for the Careers and Appointments Service.

Monash has always suffered from the tyranny of distance, and probably no department has suffered more than the service with its essential outreach into the business area and suburban school system.

The full-time secretary-receptionist at Monash's city link will be part of Careers and Appointments.

As well as supplying a 'meet-and-greet' person, the office will house a resource centre containing university and department publications, careers information and course booklets, and, of course, the university prospectus.

It will be a place for university-industry dialogue and will be invaluable as a teaching facility for part-time students and graduates doing MBA subjects.

With the spotlight on graduates and their careers, the service could be expected to be seasonally active at this time of the year. Added to this, it has its new Courses and Careers Information Centre just moving off the launching pad. And it will repeat last year's Junior University Program next month.

The university has made an additional commitment of \$100,000 to develop the resources available to secondary school students in course and career guidance and to provide an additional staff to extend the professional services available to schools.

The new information centre, headed by the service's deputy director, Bryan Barwood, is at the axis of some new developments.

It will be available for use by secondary and tertiary students, teachers, parents and members of the public, including prospective mature-age students who may not have been previously employed.

The centre will pay particular attention to "graduate outcomes" — the destinations of graduates. The education, training and performance of Monash graduates in the private and public sectors concern not only employers but also the university itself. The university's strengths can be identified and marketed.

The destination information will become an important data base for advice to prospective students.

The centre will also:

- House information on courses in institutions throughout Australia and overseas.
- Investigate the use of the Viatel data base to impart course information.
- Present study skills, time and stress management sessions for Year 12 VCE students.
- Produce a Monash video every three years.

The centre will take over some of the existing functions of the service such as the co-ordination of university staff members' visits to schools and careers nights, the arranging of work experience for school students at Monash and for Monash students outside the campus, and the encouragement of schools' visits to the university, with students as paid guides.

The Junior University program is in the care of Bryan Barwood and the new section.

Probably 300 year-11 students will spend three days at Monash next month living in the Halls of Residence or attending day lectures. Last year's evaluation feedback revealed that the young visitors absorbed a lot of university atmosphere, and the keenest of them went back to their schools motivated to do well in VCE.



• Monash's new city base will be on the third floor of this building at 41-43 Exhibition Street. Facilities will include a meeting room, seminar room and catering. The space is being refurbished and will probably be ready for occupation early next month. Photo — Richard Crompton.



• Staff from the Careers and Appointments Service. From left, Sandra McNamara, administrative officer; Lionel Parrott, director; Sue Ackerley, careers counsellor and Bryan Barwood, deputy director.

The Monash Plan From page 1

In some people's minds the universities do the former and the colleges do the latter. I don't believe society in general, and industry in particular, accepts a dichotomy like that. It wants university research efforts to tackle some of the important problems facing our economy and society. This will bring our research teams closer to industrial, environmental and social problems and I believe they will be better for the experience.

The challenge for the university is to take advantage of opportunities that arise in these circumstances, without sacrificing traditional standards of scholarship and quality.

I believe this can be done by shaping the university into an adaptive and entrepreneurial institution. This involves recognising the importance of our clients and their needs and adapting our activity to suit; it also means innovating, taking risks and marketing ourselves, especially where we have some unique attributes. In turn this will mean specialisation on certain activities, knowing that the institution cannot be good at everything, but that its impact on the nation and the world will be underscored by being excellent in just a few areas.

An adaptive, innovative and entrepreneurial university will understand its

environment, be able to react quickly when opportunities arise and develop internal structures that target resources in a consistent manner.

Developing a strategic perspective involves understanding the current circumstances both internally and externally, and for Monash that has involved a good understanding of government and the economy, taken together with an honest appraisal of our student enrolment, teaching and research. The latter has shown we are not uniformly good — there are some things we do better than others — and students have sometimes seen us as a second rather than a first preference.

The external world is cloudy, with unresolved debate about the responsibility of universities, though it does seem clear that the government expects publicly funded education institutions to contribute to national economic and social development.

For Monash it is important to see opportunities in these circumstances. Taking advantage of these opportunities will involve choice — to do more of some things, to carry out some activities differently, and ultimately to stop doing some things altogether. Making choices like these, and backing them up with consistent action in a range of areas is what strategic planning is about.



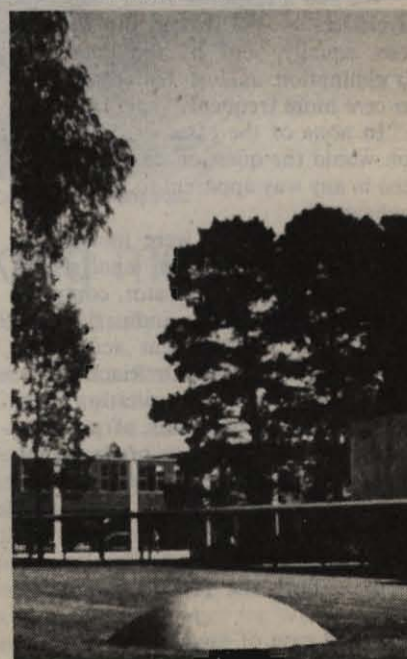
The Murray-White sculpture "Aluminium Hemispheres", referred to in a caption in the last *Monash Reporter*, would seem to be ineptly named.

The two shapes that comprise it are not hemispheres but truncated paraboloids of revolution.

Or rather that is what, to a good approximation, they once were.

Following several vandalisations some years ago, they (particularly the western one) are badly scratched, dented, daubed and indeed holed. It would be hard to assign any regular geometric description to their present shape.

Michael Deakin,
Department of Mathematics



'Cops on campus' has new meaning ...

At certain times in its history Monash has experienced a rather visible police presence on campus.

With the latest changes in top jobs at Victoria Police headquarters, there's a fairly visible Monash presence now in the Police Force.

The chief commissioner elect, Kel Glare, is a former Monash tutor who graduated in Law from Melbourne University in 1976. And the assistant commissioner Bill Horman, is a Monash Law honors graduate from 1976.

And early next year Dr David Wells, who also graduated from Monash in 1976, will become Victoria's new senior police surgeon.

Mr Glare studied for his HSC while a detective with the Fingerprint Bureau and then studied law in his own time as a sergeant at Eltham police station and while working in the Prosecutions Division.

He was admitted to the Supreme Court as a barrister and solicitor in November 1977, and was a co-founder of Eltham Legal Service.

He tutored at Monash in 1979 (an experience he "thoroughly enjoyed") before being moved to Morwell and promoted to Inspector.

Before becoming Deputy Commissioner (Operations) in October last year, Mr Glare was a superintendent in Research and Development and Assistant Commissioner of the Internal Investigations Department.

Assistant Commissioner Bill Horman was a student during the Monash "troubles". As well as his Monash Law degree he has a Diploma in Criminology.

He travelled to New Zealand, the United States and Britain on a Churchill Scholarship in 1977 to study "delinquency control, and juvenile aid bureau services".

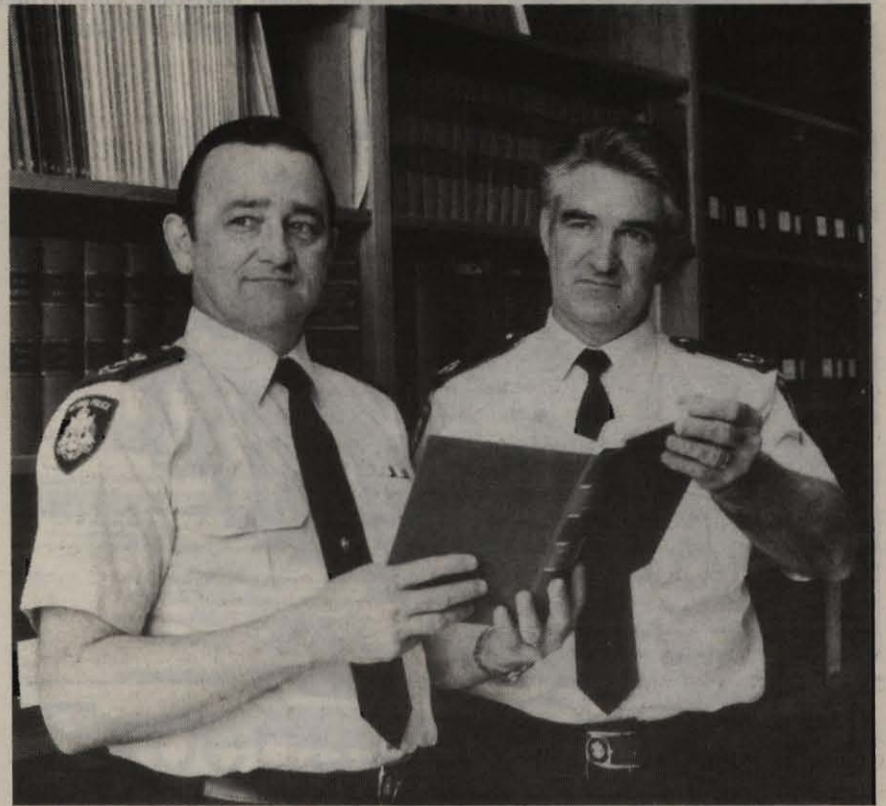
From 1981 to 1983 he was seconded to the Commissioner's position in Vanuatu under an Australian aid scheme.

On his return to Australia as Chief Superintendent he was appointed Deputy Director of the Australian Bureau of Criminal Intelligence in Canberra and became Assistant Commissioner of Internal Investigations in August 1985.

Mr Horman said that during his student days and as a tutor he was the only policeman in the Law Faculty at Monash. He felt it was a good experience for students to be exposed to a policeman.

Today there were "hundreds" of police undertaking tertiary studies and the department was implementing a study leave policy.

Dr David Wells, soon to be the Senior Police Surgeon, has a local as well as a Monash link with this area. As a medical



• Kel Glare, left, and Bill Horman. Photo courtesy *The Herald*.

student he earned extra money acting as club doctor for the Oakleigh Football Club.

On campus he was a member of the Monash Players, appearing in mainly

Shakespearean performances.

Forensic medicine, he says, is no longer a Cinderella discipline.

He, too, experienced the "lively old days" of student unrest.

... as does 'politicians'

Senator Kay Patterson has been "party political" for only five years.

The qualifications which gained her pre-selection for the Liberal Party in Victoria were earned in the field rather than the party room.

"I'm delighted the Liberal Party is flexible enough to accept someone on the basis of skills rather than a long party history," she says.

"There's a danger on both sides — the Labor Party does it, too — of looking only to their own ranks rather than going further afield.

"Bringing in people with a wide range of skills broadens the knowledge and experience base of the party."

A wide range of skills is what Senator Patterson has.

She left school at 14, did a secretarial course, and was inspired to go to university after meeting some purposeful, career-minded young women on a Girl Guides international exchange tour of

Mexico. She returned to Sydney, did a special one year program to matriculate and was awarded a Commonwealth Scholarship to the University of Sydney.

In those days, graduates were encouraged to go to other universities if they were continuing their studies, so she came to Monash to do her Dip.Ed and a Ph.D in psychology.

In 1978, she was elected to the Monash University Council as a graduates' representative, and she has remained there since. Only three members, Emeritus Professor Joe Isaac, Dr Geoff Knights and Mr Tom May have been on Council longer. She also taught at Monash for three years.

Before being elected to the Senate in July this year, Dr Patterson was a principal lecturer and chairman of the School of Behavioral Sciences at Lincoln Institute of Health Sciences.

She believes it is very important that women be represented on bodies like the university Council "because they approach things differently and see things men have overlooked".

Senator Patterson was one of 27 candidates who stood for pre-selection (eight of them women). She gave her areas of interest as ageing, health and education.

During two periods as a visiting scholar in the United States she studied gerontology (ageing), and later co-ordinated the development of the Diploma of Gerontology at Lincoln.

Her other experience includes a long involvement with the Girl Guides Association at State and International level, membership of the Youth Affairs Council of Victoria and fund-raising for the Australian Kidney Foundation.



• Kay Patterson, Celia Rosser and one of the Banksias.

Long project's sparkling moments

Whenever Celia Rosser finishes one of "her Banksias", she and Kay Patterson share a bottle of champagne.

The tradition began several years ago when Senator Patterson was a Psychology tutor with an office in the same building as Celia's tiny studio. "There's as much work involved in each one as there is in a thesis — yet no-one makes any fuss when they're done," says Senator Patterson of Celia's famous Banksia paintings.

That's not to say that the finished works go unappreciated — far from it. In the book, *Australia's New Parliament House*, published recently by John Carrick, two photos show Celia's works on the walls of Members' and Senators' office suites.

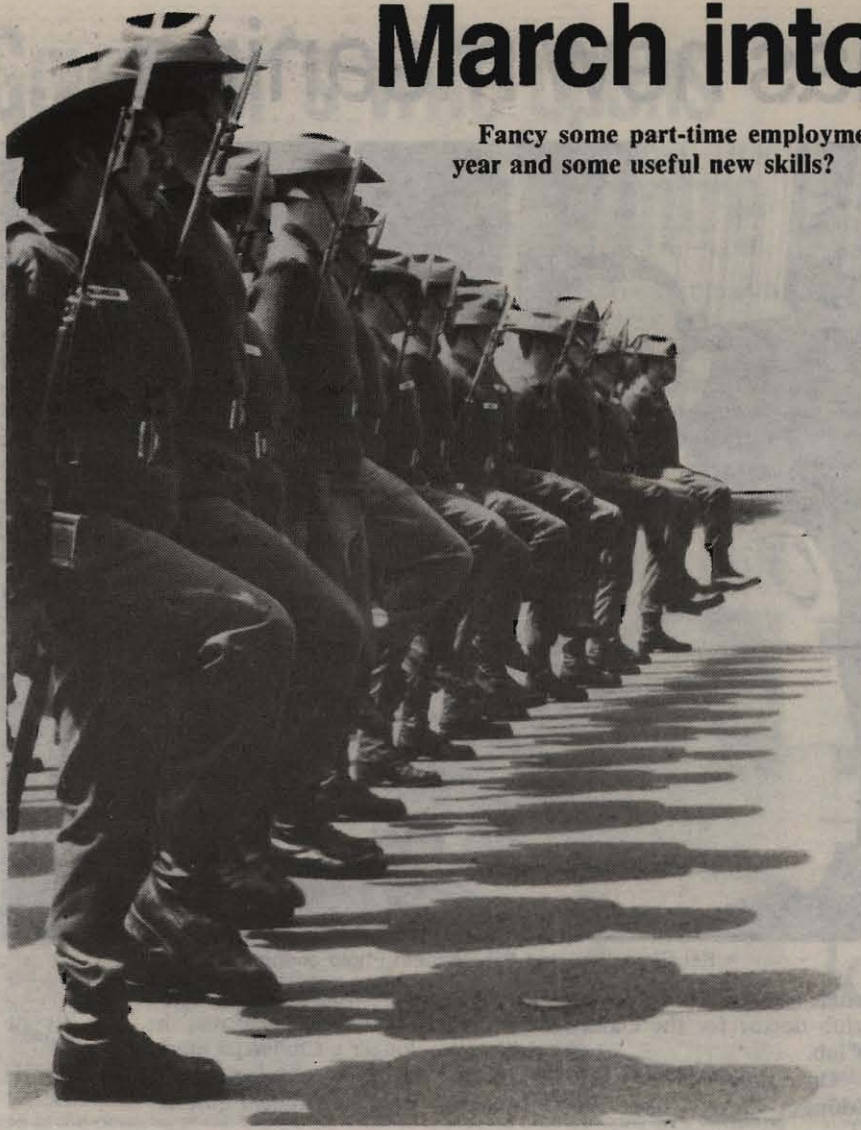
She is working hard at the moment to complete the second series of 24 paintings. There were 11 to be done this year and only seven have been finished so far. There will be a final series of 27 paintings. Celia has a particular preference for Western Australian Banksias which she collects herself, and 60 of her 75 paintings will be of Banksias from that State.



• Photo from *Australia's New Parliament House* showing Celia Rosser's paintings.

March into a part-time career

Fancy some part-time employment which will give you nearly \$4000 a year and some useful new skills?



If so, you need look no further than the Monash University Regiment which has vacancies for recruits to train as cooks, drivers, medics, signallers and clerks.

The regiment is an Army Reserve Infantry unit which also offers officer training to suitable applicants.

"There's a real cross-section of people here," says Major David Arden.

"We've got lawyers, accountants, managing directors, public servants, architects, clerks and unskilled workers.

"It doesn't matter what you are in civvy life, you still have to earn your army credentials."

Major Arden said a student's horizons were widened by both the training and the experience.

"Employment prospects are also widened as employers find the graduate who is a commissioned officer far more attractive as a future employee."

The 250-strong regiment is composed of about 70 per cent Monash people, and has its own depot in Mt Waverley near the campus. Its training activities are timed so they cause no interruption to study.

The regiment began in 1966 as a company affiliated with Melbourne University. It became the Monash University Regiment on 23 February, 1970, and the current depot in Whiton Street

was occupied in 1973.

On 24 January next year, as part of the bicentenary celebrations, the regiment will be presented with its colors by the Lieutenant Governor on behalf of the Queen.



● Corporal John Liburti instructs Private Elyane Ralton (2nd year Arts) in the use of weapons.

In a break with tradition, women soldiers will be dressed the same as men. They are usually required to wear the women's uniform, but for this special parade the whole regiment will be "just soldiers".

Monash's sister regiments at Melbourne University and Deakin will also be on parade that day.

Among the regiment's memorabilia decorating the walls of the depot are portraits of Sir John Monash, and Sir John's desk and chair are used by the Commanding Officer, Lieutenant-Colonel Bob Slater.

A lance which belonged to the famous engineer, soldier and scholar is also a prized item in the regiment's collection.

Other pieces of interest include a prescribed plate and scroll from another sister regiment, the Queen Mother's Light Infantry at Winchester in the United Kingdom.

The regiment holds recruiting drives in November and February each year. Interested people are invited to attend in person on any Wednesday night between the hours of 7.30 and 10.30pm at Monash University Regiment, Whiton Street, Mount Waverley, or to make telephone inquiries to 543 6233.

\$200,000 boost towards chilling Victoria

The university has just invested about \$200,000 in equipment to produce one of the coldest known substances — liquid helium.

The new machine, a Koch 1410 helium liquefier, is the third engine the university has installed in its liquid helium plant in the department of Physics since the plant began operations more than 26 years ago.

During that time Monash has become one of the most important centres of low temperature research in Australia, particularly in the area of solid state physics. Low temperatures are also important for research into superconductivity and magnetism.

Liquid helium boils at -269 degrees celsius. (Absolute zero, the lowest temperature possible, is just below -273 degrees celsius.)

By-product

The Monash plant supplies the liquid helium needs of the whole of Victoria, together with institutions in South Australia, Tasmania and Queensland. Organisations which get their liquid helium from Monash include three divisions of the CSIRO, the BHP Research Laboratories, the Australian Radiation Laboratories, other tertiary institutions and the Antarctic Division, the Cancer Institute and the Victorian College of Pharmacy.

But this amounts to only about one-ninth of what is used in the Monash departments of Physics and Chemistry.

Liquid helium is made from pure helium gas shipped from the US, where it is a by-product of some oil wells. The liquefier works like a glorified multi-stage refrigerator, where the coolant is fed through the system rather than re-

maining sealed inside.

Gas heats up when it is compressed, as in a bicycle pump. Conversely, it cools down when it expands. In the helium liquefier compressed and cooled helium gas is passed into the system, where it is chilled further by being made to give up energy to drive a flywheel and expanding at the same time.

The chilled gas then is fed into a large storage vessel, where it expands further and partially liquefies. The remaining gas is tapped off, used to cool incoming gas and passed through the system again. Liquid helium is delivered to its users in large, stainless steel vacuum flasks.

Because helium gas is expensive, most



● Koch Process Systems field service engineer, Mr Dave Leonard (left) and Monash helium plant technician, Mr Ken Hall, with the Koch 1410 helium liquefier.

of the liquid helium used in the Physics and Chemistry departments is recovered and fed back to the plant via an elaborate system of tightly sealed pipes. Only about eight per cent of the helium gas used at Monash escapes from the system each year.

Before the recycled gas is passed through the liquefier, impurities are frozen out using liquid nitrogen (-196 degrees celsius). The recycled helium then is recompressed and mixed with incoming new gas.

In all its years of operation, the liquid helium plant has been managed by Mr Ken Hall, who came to Monash in 1960 from the University of Toronto in Canada, where he had worked with a similar plant.

Politics makes news

The study of politics is one which has both intellectual and practical rewards, says lecturer John Dalton, editor of the new Department of Politics Bulletin.

"We value the department as a lively and productive one which accomplishes much in the service of both the university and the community.

"This publication will provide news of the department and the professional activities of its staff members," he wrote in an editorial for the first issue.

"The Bulletin is intended to benefit students by providing useful information about courses and the different methods and techniques employed in studying Politics.

"New courses, changes to existing ones and amendments to regulations affecting Politics students will be publicised in the Bulletin. Visiting and guest lec-

turers will be announced.

"The Bulletin will also give advice on the range of career prospects and options available to Politics students."

Inquiries about the Bulletin should be directed to Dr Dalton on ext. 2414.

NT holiday

Darwin Institute of Technology has accommodation available for holidaying students and conference delegates during the mid-year dry season.

The student residence is only two years old and it can accommodate up to 55 conference delegates.

Further information can be obtained from Mr Martin Heskins, Manager, DIT Students Residence, PO Box 40146, Casuarina, NT, 5792.

Governor's wife opens Women's Studies Centre

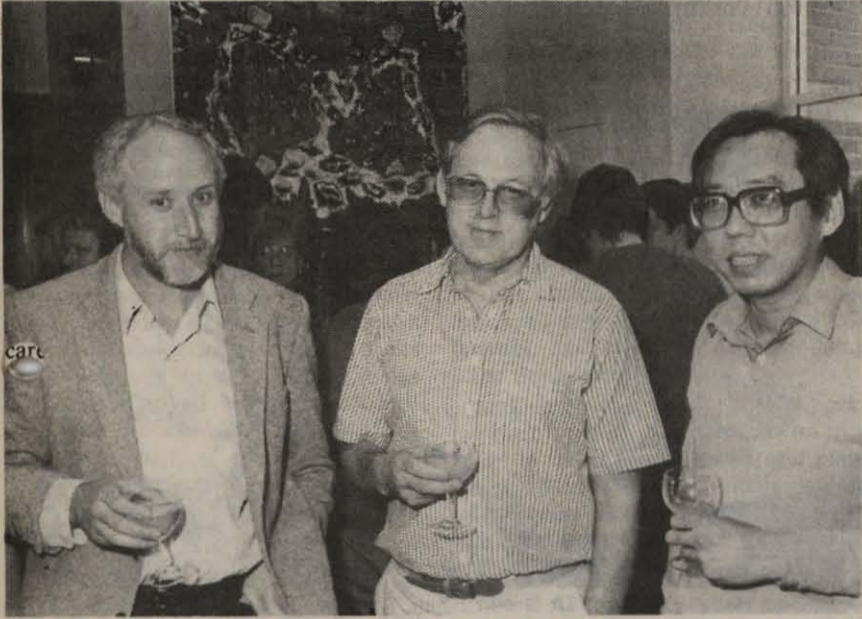
Mrs Winsome McCaughey, wife of the Governor of Victoria, last month officially opened the Centre for Women's Studies at Monash.

The opening ceremony was performed in the foyer of the new Gallery Building.

The centre will draw on the expertise of women from various Arts disciplines to develop a full range of courses in

women's studies.

A minor subject, Representation of women and gender, has been prepared over the past four years and will be offered in 1988 to second year students.



• Pictured at the opening of the Centre for Women's Studies are, top right, Mrs Winsome McCaughey and the Dean of Arts, Professor John Hay; above, Mr Phillip Siggins, Faculty of Arts, Professor Graeme Davison, History and Mr C.L. Ten, Philosophy; below, Mrs Jean Melzer, former ALP senator, Dr Alba Romano, Classic Studies, Professor Ian Polmear, Deputy Vice-Chancellor. Photos — Tony Miller.



Experts gather to aid low-income countries

Monash has set up the most broadly-based multidisciplinary centre for development studies in Australia.

The centre, which opened this month, will conduct research into the social, political, economic, scientific and technological processes that alleviate poverty and improve living standards in low income countries.

It is the first development studies centre in Australia and the first centre at Monash to use contributors from science, arts, economics and politics, medicine, law, education and engineering fields.

The centre was established through the efforts of Dr David Goldsworthy, Reader in Politics, Mr John McKay from Geography and Dr Bob Rice from Economics.

"Australia is in a region where many of her trading partners can be classed as developing countries," said Dr Goldsworthy.

"The centre's work will be of particular relevance to government bodies.

"We hope to do some contract research and consultancy for them and for aid organisations.

"Melbourne is home to most of Aust-

ralia's aid organisations, yet no Victorian tertiary institution has been serving their research and advisory needs."

The Development Studies Centre will be self-financed, with income from the consultancy and contract research as well as from conference fees and publications.

A potential market exists for graduate work in the field and it is envisaged that some income will be spent on fieldwork projects, Dr Goldsworthy said.

Mr McKay said he was impressed with the amount of development research already being done at Monash.

"We have people in Engineering working on water pumping systems and doctors in Medicine looking into nutrition programs for under-developed countries."

A Development Studies Group had been operating at Monash since 1981 but required a formal structure if it was to expand and conduct contract research, he said.

The centre will hold a conference, *Major Issues in Development Studies in Australia*, from 26-27 November, and the proceedings will constitute its first publication.

Logic was wise choice for Lizi

Fourth year student in Civil Engineering, Elizabeth Sironic, has been awarded the inaugural Arup Engineering Scholarship for Victoria.

Lizi, previously a student at the Star of the Sea Convent in Gardenvale, won the scholarship against stiff competition from other students at Melbourne and Monash Universities, Ballarat College, RMIT and the Footscray Institute of Technology.

The scholarship has been awarded each year since 1980 and is now offered in four states: Victoria, Queensland, Western Australia and NSW.

It provides employment with Ove Arup and Partners, a leading Australian and international consulting firm, for two and a half years.

After about six months in Arup's Australian offices, Lizi will spend two years in London. As well as her salary, she will receive travelling expenses and a bursary to allow her to visit international engineering works.

Professor Noel Murray, chairman of the Civil Engineering department, said staff were "as pleased as punch" with Lizi, who is the first woman ever to top second and third years of the Monash course.

"We want plenty more motivated women like her; she will be a great civil engineer.

"Let's hope her example will persuade other women what a satisfying profession civil engineering is."

As for Lizi, she says there is no secret to her success. There was no special teacher who encouraged her, she simply followed her own inclinations.

"I was pretty good at maths and sciences; but I didn't like English or things like that.

"I was always interested in buildings. I looked at architecture but felt you needed to be gifted, creative, imaginative.

"Engineering suited me better; it's logical, mathematically-based, and I enjoy that."



• Lizi Sironic

Bulldozers make way for science park

It used to be said that selling culture was hard yakka.

Be that as it may, Montech Pty Ltd, the commercial arm of this university, is successfully packaging and marketing Monash research and development expertise and its byproducts.

And with bulldozers on Blackburn Road already crusting the ochre earth, Montech next year will move from its dungeon in the basement of the Finance Building to a prime position in the core building of the six hectare Monash Science and Technology Park.



The managing director of Montech, Dr Paul Hudson, said today that the reason for having a technology park was to build up "synergy" between business and industry on the one hand and the University on the other.

Montech would manage the park for the university. It would strive to attract on to it a wide range of technology ventures and organisations oriented to research and development, involved in high technology manufacturing, or related to commerce and business.

Dr Hudson said that there were a lot

of government initiatives in high technology. The Government, for instance, had a \$3 million equity through the Victorian Investment Corporation in the Monash Biochemical Process Development Centre.

Monash was patenting a protein which would make wounds heal faster and could lead to a better treatment of breast cancer and other solid tumors. The application of this research into protein separation would be undertaken at the new biochemical centre.

This centre, and Montech's first subsidiary company — The Wills Record Office Pty Ltd, established in conjunction with the Department of Computer Science — would be in the park.

Dr Hudson said that as manager of the technology park, Montech had an obligation to its tenants to see that they had easy access to Monash research and expertise and facilities.

Other Montech initiatives include:

- Marketing of CHEMMAND — a chemical stores management and information system to meet the need to professionally manage and control chemicals, hazardous materials and other commonly used laboratory items (from the University's Chemistry Department).

- Establishment, with the Department of Economics and Operations Research of an Information Systems Division which will undertake consultancy work.

- Tailoring courses to special needs, such as a background science course for licensing and patenting people involved in biotechnology.

- Marketing of a micro-computer-based AVTECH system which automatically monitors the deterioration of

machine bearings (from the Department of Mechanical Engineering), of the CDP Inclinometer which measures tilt or inclination (from the Civil Engineering Department) and an industrial vision system which rapidly creates and measures three dimensional images of objects (from the Department of Electrical Engineering).

All profits from the activity of the proprietary company or from licensing and patenting go directly to the university. Montech is looking to a turnover of \$300,000 in its first year as a proprietary

company.

The Montech board is: The Vice-Chancellor, Professor Mal Logan, chairman; Dr Paul Hudson, managing director and general manager; Mr Arnold Hancock, chairman of the State Bank and of the university's Finance Committee; Mr Jan Kolm, chairman of the Monash Patents Committee; Mr Peter Wade, Comptroller; Professor Bruce Holloway, department of Genetics; and Mr Nick Callinan, managing director of Advent Western Pacific, a venture capital company.



• Dr Paul Hudson (left) and Dr Gilbert Smith, Professor of Social Administration at the University of Hull, England.

Universities no longer equal under Thatcher

Social scientists could not afford to pretend there were not vast government funds put into their research, says Dr Gilbert Smith, Professor of Social Administration at the University of Hull in England.

He said that already in government circles in the UK, the idea of withdrawing from some universities the one third of the cost of salaries which supported social science research had been floated.

Professor Smith visited Monash recently to look at university decision-making and developments in the social sciences as part of his research project as an Association of Commonwealth Universities Fellow.

"The social sciences so far have always developed in a climate of growth, especially at the newer universities. I would like to know what would happen in a hostile environment," he said.

"As Dean of Social Sciences in threatening circumstances, I have had to lobby to defend the social sciences, innovate in a climate of contraction and think about things in a very detached way.

"For this project, I decided I wanted to compare the Australian and British experience, but I quickly began to realise you couldn't understand the social sciences without understanding universities as a whole.

"How do universities make decisions about moving resources from A to B when the pot is not growing?"

During his six weeks in Australia, Professor Smith visited pairs of older and newer universities in Adelaide, Melbourne and Sydney.

He said he had come to Australia not expecting to draw close parallels, "but

the first thing that struck me on arrival was Dawkins' Thatcherite speech". Nonetheless, he said, there were very important differences between the UK and Australia.

For instance, in Australia the Federal Government was still notionally labor and the governing party from the left, which could lead to a softening of the harder line education policies.

Australian universities tended to be larger than their UK counterparts, and the student/staff ratios were higher. "In fact, they make some of the British arrangements look crazy," Professor Smith said.

He said another big difference was the way universities in Australia were tied to locality. "The majority of Monash students are drawn from the Melbourne area. There are some big advantages in local identity. English universities, in contrast, have no automatic constituency and have to have national appeal."

In Britain under the present administration universities were no longer all treated equally, Professor Smith said. "Although any student studying the same subject is funded at the same level at any university in Britain, different universities are now spoken of as being on different 'escalators'.

"Some have had their income reduced, and a very few have had their income increased, according to value judgements of their level of excellence. No university now has the right to put on a total range of courses."



• The Linguistics department is losing two of its senior staff members. Founding chairman, Professor Goran Hammarstrom, is retiring after 22 years with the department, and Associate Professor Barry Blake is taking up an appointment as head of the Linguistics department at La Trobe University. The two men were farewelled at a special "multi-cultural" lunch organised by students. Tony Miller's picture shows Ph.D. candidate Mala De Silva presenting a gift to Professor Hammarstrom on behalf of the group. Mala is specialising in Sinhala, a child language from her homeland, Sri Lanka.

The more things change . . .

The last issue for 1987 of the *MICS* (Migrant and Intercultural Studies) Newsletter lists on page 1 the membership of the centre's committee, with Radha Rasmussen (Librarianship) as chairperson. The following item is headed "New chairman for the Centre: 1988" and names Peter Hanks (Law) as incoming chairman. It goes on to note that Andrew Perry will resume office as Deputy-Chairman, and concludes: "The current Chairman, Radha Rasmussen, will be on leave from the university from 1 February 1988 - 30 January 1989."

1987: THE YEAR IN REVIEW

V-C: The challenge we face

Monash has seen 15 years of rapid growth, followed by a decade of consolidation.

This has led into a world of substantial change in attitudes of governments, employers and students about the role and purpose of universities.

Coping with this change while still holding on to those aspects we believe important is the challenge that faces Monash University.

This challenge has been addressed by other institutions, both public and private. Successful answers have usually been built upon a strategic perspective, a carefully considered approach to the area where a sense of priority is set and applied to all key resource decisions, and pervades the operating life of the institution.

Developing a strategic perspective involves understanding the current circumstances both internally and externally, and for Monash that has involved a good understanding of government and the economy, taken together with an honest appraisal of our student enrolment, teaching and research.

The latter has shown we are not uniformly good — there are some things we do better than others, and students have sometimes seen us as a second rather than a first preference.

A home for the university's art treasures

About 600 people attended the opening of the university's new gallery and the Drysdale exhibition on March 12 by the Governor of Victoria, Dr Davis McCaughey.

Among them were friends and relatives of the late Sir Russell Drysdale, including his widow and a schoolfriend, Professor Rod Andrew, former Dean of Medicine at Monash.

The gallery, on the ground floor of the new and controversial Gallery Building designed by architect Daryl Jackson, will be the permanent home of the Monash University collection.

It was described by the Vice-Chancellor, Professor Logan, as being "of national significance".

He said the gallery was a magnificent addition to the externally-oriented facilities of the university.

"It can house temporary exhibitions of sufficient standard that they can be taken around the country.

"It demonstrates the university's commitment to art; we have followed a consistent policy right through of purchasing works of art by well-known and promising Australian artists," Professor Logan said.

Construction of the long-awaited gallery was set in motion with a fund-raising effort by the Friends of Russell Drysdale, a group formed soon after the artist's death in 1981.

The external world is cloudy, with unresolved debate about the responsibility of universities, though it does seem clear that the government expects publicly funded education institutions to contribute to national economic and social development.

For Monash it is important to see opportunities in these circumstances. Taking advantage of these opportunities will involve choice — to do more of some things, to carry out some activities differently, and ultimately to stop doing some things altogether.

Making choices like these, and backing them up with consistent action in a range of areas, is what strategic planning is about. Monash has embarked on this process and discussion on early ideas for the strategy is underway.

For some the involvement of a university in a planning exercise that has its roots in private sector perspectives seems incongruous.

Traditionally, universities have held values of scholarship and attitudes to quality in education, and they alone have been sufficient to underpin their day to day decision-making.

That background is not inconsistent with the need for a strategic perspective, as any university strategy requires evaluation of alternatives and a recogni-

tion of quality that can be defended in an international community.

In this way, the old values, preserved in the great universities of the world, can be linked to the new values that call for efficiency, effectiveness, accountability and service to clients.

To make the most of the current situation, Monash has to develop a strategy for the future, one that enhances our traditional strengths, minimises weaknesses and inefficiencies and moves us into some new ventures which can underscore a unique contribution to tertiary education in Australia.

Some preliminary decisions have been taken to turn us in this direction. Earlier this year submissions were called for an Academic Development Fund, established as a resource by a levy on central funds.

This funded several initiatives in areas of outstanding expertise including:

- a Centre for Research into Intelligent Robotics in Computer Systems Engineering;
- a Centre of Reproductive Biology which will offer a new Master of Reproductive Sciences;
- a new masters course in biotechnology;
- a Centre of Public Sector Management which will study both the management and policy-making processes.

It is likely this process will be repeated in 1988, to reinforce our strengths and

reward excellence in both teaching and research.

Graduates have an important part to play in this process. Across the university, departments will need to assess their current activity and reach decisions about their likely future.

Graduates can be an important source of advice in these debates; where possible openings need to be created for our graduates to participate in the re-appraisal and subsequent planning process of the university.

The university is committed to the development of an active alumni organisation, based upon departments or faculties but with a central office to co-ordinate alumni affairs.

In this way, the alumni can be part of the challenge for Monash to revitalise itself and strive for greater excellence.

— M. I. Logan,
Vice-Chancellor

Now open: The best hospital in Australia

The opening of the \$132 million Monash Medical Centre in Clayton this year gave the Premier, Mr Cain, the greatest pleasure of any opening since he took office "with the possible exception of switching on the MCG lights".

Describing the 436-bed centre as "the best and most up-to-date hospital in Australia", Mr Cain praised all associated with the project, in particular because it was finished on time and within its budget.

"The decision to relocate the Queen Victoria Medical Centre to Clayton was not taken lightly. Relocation of a major public hospital had not been attempted by any Victorian Government before.

"It presented all sorts of human, financial, logistical, professional and political problems, but we now have a slightly more equitable geographic distribution of health care.

"And the people of the Southeastern suburbs are among those who notice the difference. Since opening the centre on 19 July, there has been a great demand for services among local residents — nearly 60 per cent of those attending Casualty live locally."

The Victorian Minister for Health, Mr David White, pledged that Prince Henry's Hospital would be relocated to the Monash Medical Centre by 1992, together with construction to include 100 new beds at the Moorabbin Hospital. "This next stage is integral to the vitality of the new hospital," he said.

He said the linkage of the Monash Medical Centre to Monash University would ensure quality of service of the highest standing. "The Monash University Faculty of Medicine will play a leading role in the planning of the health services of the region."



Twenty-five years on, and ... Monash Blues cap a great year

Twenty-five years ago, in their first year of play, the Monash Blues won the "E" Grade amateur football grand final — and they haven't won a premiership since.

But the tables turned this year when the Blues, now in "C" Grade, made an extraordinary effort and took the final from the favorites, Kew, who had beaten them by 95 points just two weeks earlier.

Club president, Associate Professor

Keith Frearson from the department of Economics says the Blues' run-at-all-costs attitude turned the opposition's 22 point half-time lead into a 28-point Monash win.

They scored eight goals in the final quarter to climb into "B" Grade competition next season.

Information about the Blues can be obtained from Associate Professor Frearson on ext. 2311.

Penguins under surveillance

Monash researchers were involved this year in a most unusual study to determine whether Fairy Penguins around Phillip Island had adequate food supplies.

The birds were fitted with removable radio transmitters and their movements followed through signals transmitted to three specially-designed directional antennae on shore.

"We have found that it's vital for the Fairy Penguin (or Little Penguin) to live close to a substantial food source," said Professor Mike Cullen of the department of Zoology.

"Little Penguins require large amounts of energy to walk, feed their young and exist on land in high temperatures — their conservation of energy is pitiful."

The project was set in motion after autopsies revealed that an extraordinary number of penguins washed ashore in 1984 had died of starvation.

It found the birds were spending much of their feeding time three or four kilometres offshore, returning quickly to the breeding colony as evening approached.

"While we know a good deal about the life of the penguins while they are ashore, almost nothing is known of their behavior at sea," said Professor Cullen.

"More research is needed, but this kind of study will tell us where the birds' preferred food — bait fish such as pilchards and anchovies — is critically low."

Teams from the Arthur Rylah Institute, the Victorian Marine Science Laboratory and Monash were all involved in the project, which was funded by the Victorian Government through its Penguin Protection Program.



● Close inspection will reveal the radio transmitter attached to this Fairy Penguin's back.

Top ASTEC post for former V-C

Former Vice-Chancellor, Professor Ray Martin, has been appointed chairman of the Australian Science and Technology Council to succeed Professor Ralph Slatyer. He will begin his three-year term of office in January, 1988.

Professor Martin, who currently holds a Chair in Chemistry at Monash, is the second ex-vice-chancellor to fill the ASTEC post.

Sir Louis Matheson, the university's founding vice-chancellor, was also founding chairman of ASTEC when it was established by the Whitlam Government in the early '70s. He held the post for two years and carried on as a member for a further two years.

Announcing Professor Martin's appointment, the Prime Minister, Mr Hawke said: "Professor Martin comes to ASTEC at a time of considerable change in the structure of Government

science and technology in Australia and I have complete confidence that he will give the leadership needed to ensure that ASTEC provides the best advice to me and my Government on science and technology matters.

"ASTEC's role in providing an overview on science and technology matters throughout Government administration — and advising where co-ordination is necessary — will be particularly important in the period ahead."

"So also will its contribution to strategic thinking on the role of science and technology in the economic and social development of Australia."

Computers make a long story short

A new computer language, developed in Monash's Computer Science department, has caught the attention of the giant IBM Corporation in the US, and of other researchers worldwide.

The language, CLP(R) (the name stands for Constraint Logic Programming Real Numbers), simplifies the statement and solution of mathematical problems.

For instance, using CLP(R) a versatile program to do mortgage calculations can be written in four lines, whereas a program of similar capability written in the traditional mathematical computer language of Fortran would take several hundred lines.

Since CLP(R) was released in experimental form in June, the department has received at least 36 requests to evaluate it, 26 of them from overseas.

The experimental form was developed and implemented at Monash by a research team led by former Computer Science lecturer Dr Joxan Jaffar, and including postgraduate students Peter Stuckey, Spiro Michaylov and Roland Yap.

Dr Jaffar now is part of a research team working in America with IBM on

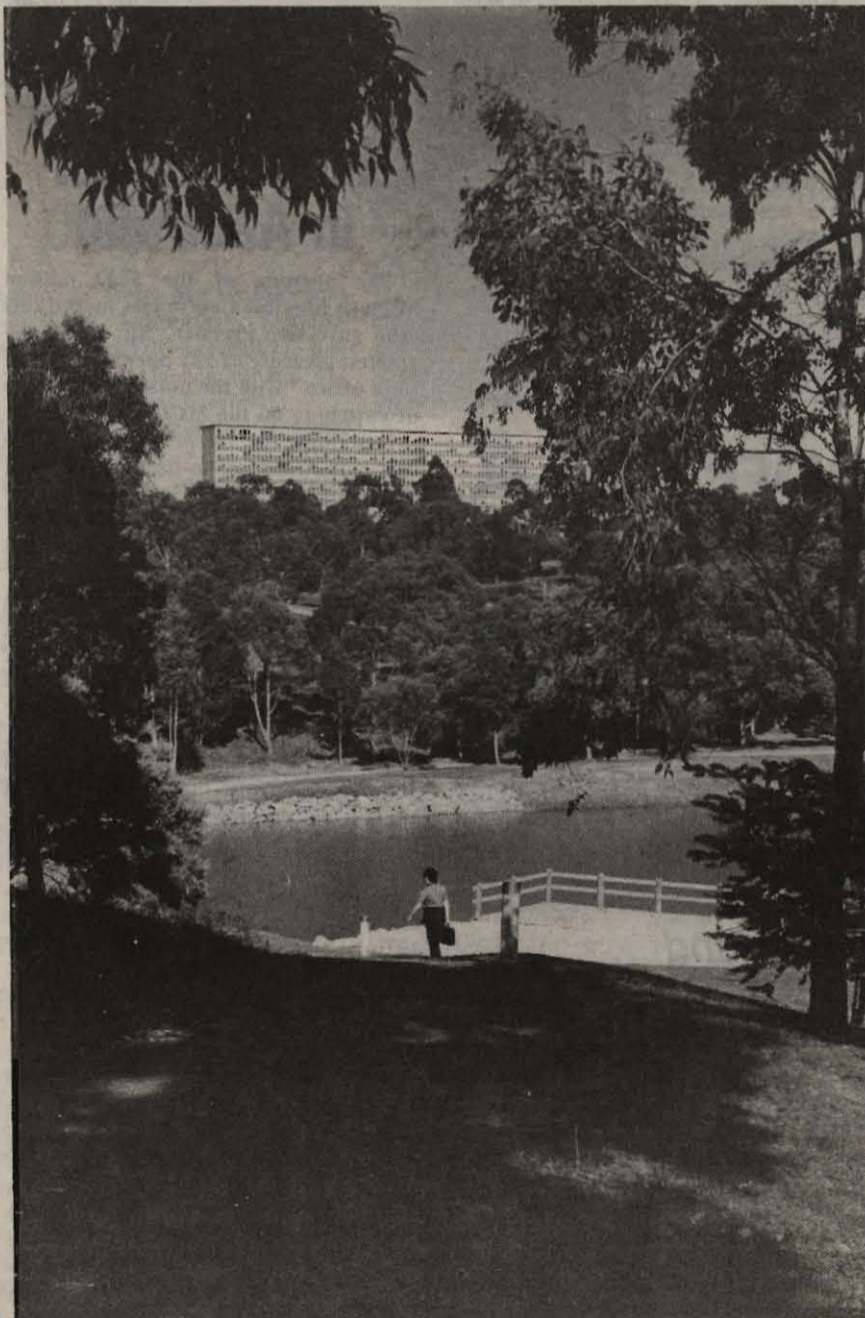
its further development.

CLP(R) is one of the first computer languages able to handle ordinary decimal numbers based on the system known as logic programming.

It has particular application to complex mathematical problems with large numbers of symbols, such as in the area of stockmarket option trading and electrical circuits.

Logic programming gets over the problem of having to specify to the computer in sequence and in complete detail every operation to be performed in every program.

Instead, the computer is pre-programmed with the rules of logic and problems are set up in terms of logic. The computer then can simply be asked to operate on the problem using rules of logic, and left to itself. So the language is used merely to describe to the computer what is to be done, rather than how it should do it.



● When the university learned that part of its land was required for a flood-retarding basin, a lot of thought went into turning such a liability into an asset. The result is a spectacular ornamental lake near the north-east corner of the campus, surrounded by treed slopes and delightful walkways. An added bonus is a nearby mini-mountain which will be used for grass skiing. The entire project was carried out and paid for by the Dandenong Valley Authority. Tony Miller took this photo with the Menzies Building in the background.

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Christmas Island crawls with crabs

The annual mass migration of Christmas Island's red crabs is one of the great sights of the natural world, says Dr Sam Lake of Zoology.

Each December, about 120 million red crabs (*Gecarcoidea natalis*) move from their rainforest home to the sea-shore to breed.

The fullgrown crabs are of considerable size — about 11 to 12 centimetres across the shell — and very little deters them during the migration; certainly not human habitation or works. In fact, about a million of them die on the island's roads each year.

Dr Lake and Dr Dennis O'Dowd of Zoology and Botany recently completed the first ecological study of the crabs

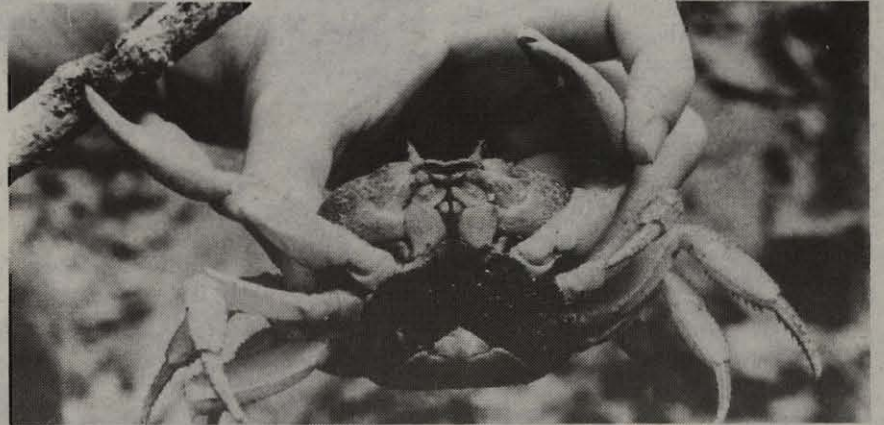
and their interaction with the rainforest.

The research was important not only for its contribution to ecological theory, but also because it could provide information which would be useful in helping to manage the national park which comprises much of the island.

And that national park looks as though it will play an important role in the island's future, as the mainstay of its economy switches from phosphate mining to tourism.

Christmas Island is 134 square kilometres of Australian territory in the Indian Ocean about 360 kilometres south of Java.

What the researchers found was that almost everything that reached the



• 120 million of these crabs migrate across Christmas Island each year.

forest floor, including fallen leaves, fruits and seeds, was investigated and handled by crabs.

"So great is the crab activity that the forest floor is bare — an unusual condition in tropical rainforest," Dr Lake said.

Dr O'Dowd said that the mass of red

crabs living on Christmas Island amounted to about 800 kilograms a hectare. For comparison, at Lake Hattah in Victoria's Mallee where kangaroos are living in high enough densities to have a considerable effect on the vegetation, their combined mass amounts to only about nine kilograms a hectare.

Greenhouse effect 'proven'

A researcher from the Geophysical Fluid Dynamics Laboratory, working on global atmospheric circulation, has found persuasive evidence of the existence of the 'greenhouse effect'.

Dr David Karoly said his findings came from a check of the reliability of temperature data gathered in the Southern Hemisphere over the past 20 years.

In recent years scientists have become concerned that the measured increasing level of carbon dioxide in the atmosphere will trap heat in the earth's lower atmosphere (troposphere), raising the global temperature.

Accompanying this, Dr Karoly said, one would expect a drop in temperature in the upper atmosphere (stratosphere) because less radiation would penetrate the carbon dioxide blanket in the lower atmosphere.

"According to data from two independent sources, the Southern Hemisphere troposphere has been warming, although that could happen through a number of causes.

"But at the same time the stratosphere has been getting colder at most stations in the Southern Hemisphere."

Dr Karoly said he thought the effect was not all due to the build up of carbon dioxide, but was due to a mixture of causes, including the warming of the ocean, the effect of carbon dioxide and the effects of the increases in other heat absorbing gases such as methane.

• The CSIRO Division of Atmospheric Research has organised a conference, *Greenhouse 87: Planning for Climate Change*, to be held at Monash from 30 November to 4 December. Further information can be obtained from the conference secretariat, Ms V. Jemmeson or Dr W.J. Bouma, on 586 7666.



A stronger base for offshore gas

A Monash research group has made a significant contribution to a huge project aimed at upgrading the North Rankin A gas production platform on the Northwest Shelf against cyclones.

The Civil Engineering department's geomechanics research team developed tests, and measured much of the important data on the behavior of foundations.

This information was used to design the \$150-million upgrading project for Woodside Offshore Petroleum Pty Ltd.

North Rankin A has a particular problem. Like several other platforms it sits on soft calcareous soils and rock, which are derived from the calcium-strengthened shells of pre-historic marine organisms, particularly corals. But it is also subject to severe storms such as cyclones.

The problem is that not only is the calcareous rock soft, it also is highly irregular in structure.

Geomechanics research team leader, Dr Ian Johnston said: "It is not composed of round particles cemented together, but of shell fragments with some infill and very weak bonding between. Consequently it does not behave conventionally and can be very difficult to work with."

Offshore platforms, as most other large man-made structures, commonly are founded on piles which conduct their weight down into the bedrock in which the piles are set. Much of the strength of the piles can derive from the friction of resistance between their rough sides and the material into which they are built.

What the Woodside engineers found when they constructed the North Rankin A platform foundations in 1982 was that the sidewall skin friction of the piles was much lower than had been assumed.

Despite this, so far there have been no signs of instability and the company considers the foundations satisfactory. But cyclones can increase the load factor of a rig by up to 80 per cent because of the force of the wind and the waves.

A nagging uncertainty as to what might happen in a really severe cyclone (a storm of which there is a one in 100 chance in any year) caused Woodside to spend \$40 million investigating the properties of calcareous soils, and that research has led to the present upgrading program.

Woodside originally approached the Monash group because of its known experience in studying soft rock foundations.

Course breaks new ground

A pioneering course in information systems, largely supported by business enterprises and aimed at providing an understanding of computer applications to business, is expected to begin at Monash next year.

The course, which will lead to the degree of Bachelor of Information Systems (BIS) has been approved in principle by the University Council. The regulations and degree structure will be considered by the Professorial Board at its meeting in 30 September.

The major part of the course will be taught in the Faculty of Economics and Politics, with input from the Department of Computer Science.

The initiative for the program stemmed from the Commonwealth Tertiary Education Commission (CTEC), in association with the Australian Business Council, and was announced in Canberra by the Minister for Employment, Education and Training, Mr John Dawkins, and the Minister for Industry, Technology and Commerce, Senator John Button.

The project is part of a broader program involving the University of New South Wales, the NSW Institute of Technology and Swinburne Institute of Technology.

Initially, 50 students will be enrolled for the course at Monash. A unique feature of the scheme is that each student will be awarded an "Information Systems Scholarship", valued at up to \$8000 a year. In return, the student will be expected to undertake work experience with participating companies during normal vacation periods, as well as complete a full year's study.

The specification of the CTEC that the degree should be completed in three years will be met by adding a final summer semester to the third year of the course.

Aboriginal food could not sustain explorers

For Burke and Wills, a little knowledge was a dangerous thing.

The two starved to death eating the Aboriginal plant food, Nardoo, which they believed was nutritionally adequate.

"Nardoo was actually a food of last choice for the Aborigines," says Dr Beth Gott, of Botany.

"They ate it along with other more important foods like fish and witchetty grubs. Burke and Wills knew nardoo was edible but they didn't know its limitations."

Nardoo (a little water-fern with leaves like a four-leaf clover) is one of more than 100 specimens gathered so far for the Botany department's unique collection of plants traditionally used by Victorian Aborigines.

Most are growing in the Aboriginal Plants garden, a special section in front of the south-west corner of the Botany building. Others are in the System Garden at the back and in isolated places around the campus. They can be recognised by their distinctive yellow or white labels.

The collection attracts the interest of Aboriginal community groups who ask



• Ian Rossiter follows the Aboriginal tradition of burning bulrushes to encourage new growth. This pond is located in the System Garden behind the Botany building.

Dr Gott for guided tours and for cuttings, seeds or roots of plants they have not been able to otherwise obtain.

It is also used in ethno-botany courses which are now part of the curriculum

for second and third year students.

The Aboriginal Plants section adjoins a Banksia Garden to the north, and further on is the re-vitalised Grampians Garden. For the past few years, all three

have been tended by Dr Gott and two other members of the Botany department's staff, Rob McClure and Ian Rossiter.

Photo: Bruce Fuhrer.

Rare earths hold the key to superconductors

One of the foundations of modern chemistry is the Periodic Table. In it, the more than 100 different elements so far discovered are arranged so that those that react in a similar manner are grouped together, one under the other.

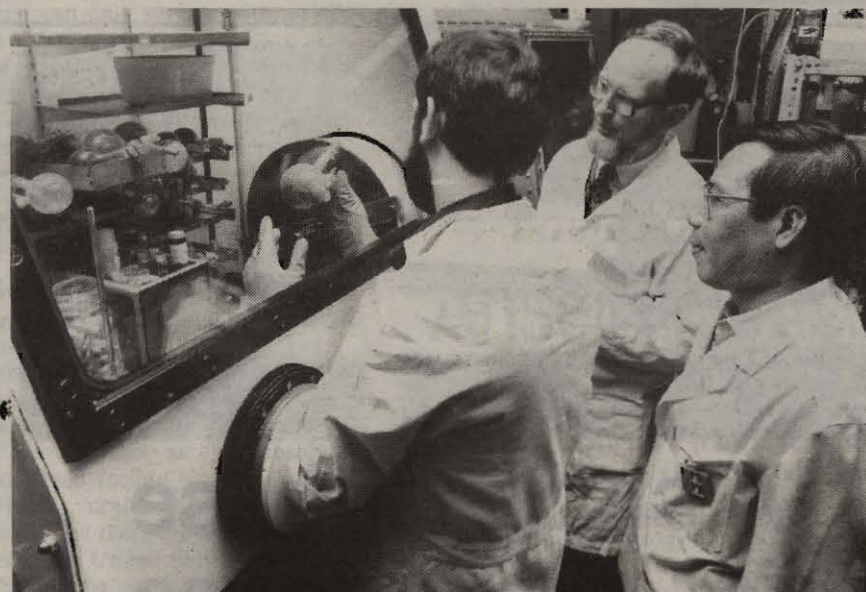
But two groups of elements — the lanthanoids (commonly known as the rare earths) and the actinoids — do not fit in to the main table. They contain elements with strange names like Praseodymium, Gadolinium and Ytterbium and radioactive elements like Uranium and Plutonium.

These groups are almost always banished to the bottom of the table. And the next thing the chemistry student notices about them is that teachers of chemistry almost never mention them.

But, according to Dr Glen Deacon of Chemistry, who has been studying the rare earths for more than 13 years, that is about to change in Australia.

The reason is that the rare earths recently have been found to be useful in a wide variety of industrial applications. And Australia is one of the world's largest producers of rare earth minerals.

By far the biggest potential use for rare earths is in the production of the new generation of high temperature super-conductors which look set to revolutionise the electric and electronic world.



• Postgraduate student Dallas Wilkinson handles a rare earth compound inside the dry box, watched by Dr Glen Deacon, centre, and Dr Tran Tuong.

New research develops a way to 'see' through rock

The seemingly miraculous technique of CAT-scanning which uses the computer to build three-dimensional images of what's inside the body, is now being applied to mining geology.

Research groups at Monash and Macquarie universities and the CSIRO Division of Radiophysics are co-operating to develop CAT-scanning to "see" through solid rock.

They hope to find ways of using the technique to provide a sharp TV picture of the fine geological structure of mines,

which will show where ore bodies, obstructions, fractures and pockets of gas and fluid are located.

The aim is to put together a marketable package which, for a few thousand dollars, will produce detailed images to allow mine engineers to plan how best to extract ore at minimum risk to men and machinery, said Dr Steve Edwards of Earth Sciences.

Most people associate CAT- (computer assisted tomography) scanning with medicine, but there is no reason why the technique should be restricted to that. For example, at Chisholm Institute telephone poles have been scanned to determine the site of insect attack. And it has been suggested that tomography could be used to locate ancient bones in fossil-bearing rock.

Monash sets up a Reproductive Biology Centre

A Centre for Reproductive Biology has been established on campus to combine the expertise of a number of departments and affiliated research institutes.

The departments involved are Anatomy, Physiology, Biochemistry, Obstetrics and Gynaecology, Paediatrics and the Centre for Early Human Development. Other participating groups are the Medical Research Centre (Prince Henry's Hospital), the Infertility Medical Centre (Epworth Hospital) and the new Division of Reproductive Medicine at the Monash Medical Centre.

The centre has two aims: to foster research through academic courses and to increase public awareness of research at the university.

Academic courses will lead to a Diploma of Reproductive Sciences and a Master of Reproductive Sciences. Students may also be enrolled in member departments and organisations for the degrees of Masters of Science, Doctor of Medicine and Ph.D.

Sir James McNeill

Sir James McNeill, the longest-serving member of the University Council, died suddenly on 12 March, 1987, aged 70.

Sir James was appointed by the Governor in Council on 5 August 1969, to succeed Sir Robert Blackwood, the University's foundation Chancellor, and was subsequently reappointed for four more successive terms — a total of almost 17 years.

In May, 1986, during the university's Silver Jubilee celebrations, he was awarded the honorary degree, Doctor of Laws.

His death was noted with great sadness by Council at its first meeting for the year.

Links with telecommunications

A new Chair in Telecommunications and Information Engineering will be established in the Monash department of Electrical Engineering.

It is anticipated that the chair, which will be initially funded under the Academic Development Scheme, will eventually become self-funding.

A wide range of interest in telecommunications technology has developed in the area surrounding the university. The Telecom National Research Laboratories are located adjacent to the campus, and some of the major telecommunications industries in Australia have plants in the Monash region.

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Protein discovery will speed healing process

Monash is patenting a small naturally occurring protein which makes wounds heal faster and could lead to better treatment of breast cancer and other solid tumors.

The protein, one of a newly discovered family of growth factors, appears to control the development of small blood vessels or capillaries.

It was first purified by a research team in the Department of Biochemistry, led by Professor Milton Hearn, which has developed innovative automatic techniques of protein separation.

The team also played an important role in recovering the hormone, Inhibin, which looks as though it will be of great use as a fertility drug in animal husbandry, and might be the basis of a unisex contraceptive.

Professor Hearn said: "These new growth factors were fantastic substances on which to apply our new techniques.

"In low dosages they stimulate cell

growth selectively and increase the speed of healing many times. They could be impregnated into Band-aids and could also be important for wound healing after surgery.

"But it is more fundamentally exciting than that, because these growth factors are involved in the development of the blood vessel network in a number of forms of cancer. They even could be tied up with Kaposi's sarcoma, the cancer found in AIDS."

He said that solid tumors, such as are found in breast, liver and colonic cancers, can only survive with an adequate blood supply.

"If we could make an antagonist to these growth factors and block their function, we might be able to decrease or destroy the cancer."

New role for forensic science

Forensic scientists and pathologists will soon play a more assertive role in the legal process, says Professor Stephen Cordner, director of the new Victorian Institute of Forensic Pathology.

The Forensic Science Society of Australia is considering an ethic which includes consultation before a trial.

"Even though the lawyers may not like it, forensic scientists and pathologists are going to work that way," he said.

Professor Cordner, 33, was appointed in May to the foundation Chair of Forensic Medicine at Monash, an appointment which also makes him director of the institute.

He graduated MBBS from the University of Melbourne in 1977, having also obtained a Bachelor of Medical Science degree and a Diploma in Criminology.

He has held a lectureship since 1981 in the Department of Forensic Medicine at Guy's Hospital Medical School, London, where, in addition to his teaching

responsibilities, he assisted in police investigations of suspicious or homicidal deaths.

Although he had no part in planning the new State Coronial Services Centre in South Melbourne, he is delighted with what he describes as "an absolutely purpose-built facility".

"There's nothing to touch it in England, and there are only one or two places in the United States and Canada which could be comparable.

"Forensic medicine owes Monash University a great debt for its farsightedness and commitment."



• Stephen Cordner

Gallery gift

The former Vice-Chancellor's wife, Mrs Rena Martin, presented a Robert Dickerson painting and a Douglas Stephen sculpture to the Monash University Gallery at an informal function last month.

Mrs Martin thanked her committee for their support in fund-raising and also thanked sections of the university for their co-operation.

The gallery curator, Jenepher Duncan, described the Dickerson painting *Before the Operation* as "Dickerson at his best" and said the Stephen sculpture *Arethusa* would enhance the gallery's fine sculpture collection.

Making contact

Letter from the Women's Officer of the Victorian Secondary Teachers' Association begins: Dear Sexism Contact Person.



• Sandy Lie talks to medical students about her work in Thailand.

Ansell sponsors Thai trip

Ansell International, the largest manufacturer of condoms in the world, has endowed an annual scholarship of \$1000 to the Faculty of Medicine towards the airfare for a student to go to Bangkok to work with Mr Mechai Viravaidya, Thailand's famous family planner.

The scholarship has been provided in gratitude for advice given to the company by Professor Roger Short of Physiology about how to improve the effectiveness of its condoms, particular-

ly against the spread of AIDS.

The first scholarship holder, Ms Sandy Lie, a fifth-year medical student, went to Thailand in April for six weeks.

Boost for public health program

Monash University has received the first instalment of a \$1.4 million Federal Government grant aimed at strengthening and upgrading public health teaching and research in Victoria.

Senator Barney Cooney handed the Vice-Chancellor, Professor Mal Logan, a cheque for \$100,000 as the first instalment of the grant to the Department of Social and Preventive Medicine to support its Master of Public Health program over the next eight years.

Senator Cooney, speaking on behalf of the Federal Minister for Health, Dr Blewett, said that Monash would be playing an important part in the government's Bicentennial initiative to make public health more relevant and responsive to Australia's needs.

IMPORTANT DATES

The Registrar advises the following important dates for students in November:

- 7 Third Term ends for M.Eng.Sc. by coursework.
- 9 Last date for discontinuance of a subject or unit taught and assessed in Medicine V for it to be classified as discontinued. If a subject or unit is not discontinued by 9 November and the examination is not attempted or assignment work is not completed, it will be classified as FAILED. In exceptional circumstances the Dean

may approve the classification of a subject or unit as discontinued between the appropriate date above and the end of the appropriate teaching period.

- 12 Publication of results, Medicine VI.
- 28 Third Term ends for Medicine IV.
- 23 Summer Term commences — Faculty of Law.
- 27 Applications close for Dip.Ed.Psych., B.Ed.St., B.Sp.Ed. and M.Ed.St.
- 30 Examinations commence for Medicine IV
- Publication of results, Science IV.

ALUMNI NOTICEBOARD

Monash graduates now have a permanent contact person on campus: Jennifer Beck has taken up the new position of director of Alumni Affairs.

Ms Beck will head a new branch charged with responsibility for the development and management of alumni activities, protocol functions, and the university's relationship with other institutions and with government departments.

Ms Beck comes to Monash from Canberra, where she has been company secretary of the International Development Program of Australian Universities and Colleges (IDP). Previously she had been Assistant Registrar in the Faculty of Music at the University of Melbourne.

Monash Graduates Association

Monash Graduates Association (MGA) represents all graduates of the university at the annual Australian University Graduates Conference (AUGC).

Except for Monash and Macquarie, all universities are represented by graduate bodies formed under state legislation.

Our contact with other graduates has shown that MGA is extremely disadvantaged in terms of status and recognition in the university because of our voluntary nature.

But the university is also a loser because the close links established elsewhere ensure graduate sponsorship and support for university objectives.

A recent example of the lack of communication at Monash was the introduction of a \$50 library fee for MGA members without any official notification to MGA. We regret that the membership privilege of free library access was withdrawn in such an off-hand manner. Perhaps the university's attitude will change when the newly-

appointed alumni affairs officer begins work.

We note with interest the increasing number of faculty based graduate associations. Understandably graduates will feel more affinity with such groups than with MGA. We hope that MGA will evolve into a peak organisation for these bodies as well as being their continuing medium for representation at AUGC.

At this year's annual general meeting, Ann Langdon was elected to replace David Harris who has resigned as president after four years in office.

GEOGRAPHY

What a great night! Over 200 past geography students and many past staff members turned up to launch the Geography Alumni and renew old acquaintances. The noise level indicated that the night was off to a good start as graduates and staff members who had not seen each other for many years caught up on all the news.

Joan Szalman, organiser of the evening, welcomed guests to the serious side of the night's activities and introduced the Vice-Chancellor and former chairman of the Geography department, Professor Logan, as the first speaker.

Professor Logan, who was delighted to see such a response from geographers, spoke on the future direction of Monash University.

He said an alumni was essential to a university as a means of keeping in touch with the community. Not only

could it help graduates to keep abreast of what was happening in the university, but the alumni could be of assistance in reviewing courses being taught, thereby helping to keep a high standard of degrees conferred by the university. To reiterate the importance of these activities, Professor Logan stressed that as far as he was concerned, fund-raising was not the prime objective of an alumni.

Question time followed with several queries relating to other alumni organisations at present established at Monash, the need for information on current courses and update on new techniques, as well as the job structures for geographers and the relevance and opportunities for women in Geography.

Associate Professor Jim Whitelaw from the Geography Department then gave a brief history of the department



• Dr Jim Peterson, left, Peter Box, Margaret Clark and Kay Langdon at the launching of the Geography Alumni.

from its modest beginnings housed with the Engineering Department to the 7th Floor of the Menzies Building with three labs in the basement, and to its present position on the first and second floors of the Menzies Building's South Wing.

Associate Professor Whitelaw pointed out that two of the department's chairmen are now Vice-Chancellors: Professor Bob Smith at UWA and Professor Mal Logan at Monash.

Contact: Joan Szalman, 565 2858.

CLASSICAL STUDIES

During the university's Jubilee celebrations, the department of Classical Studies invited all its alumni and alumnae to a special viewing of the exhibition on the *History of the Classical Text*, followed by a dinner at the Union.

The response was enthusiastic and it was decided that an interim committee be formed to organise an Association of Alumni and Alumnae.

Early in the year a newsletter was circulated to all Classics graduates outlining the social and cultural program for the year and inviting graduates to attend a second dinner.

The Association of Classical Studies Alumni and Alumnae was formed this year as a result of the enthusiasm of Classics graduates and with the support of the departmental staff.

The association has now planned a variety of activities which will further strengthen the ties between Classics graduates and their alma mater.

Any Classics graduates interested in the activities of our alumni/alumnae association should contact Adele Pretty or Alba Romano in the department of Classical Studies (565 3263) or Norma Gilbert in Student Administration (565 3013).

MANAGEMENT

A Graduate Management Association for all MBA graduates was formed in September this year.

The impetus behind this move came from MAGA, the Monash Administration Graduate Association, which has been in existence since 1972. During that time, it has been an active group running monthly education programs at the Australian Institute of Management.

MAGA president, Nancy Hogan, says that the move to a GMA is a positive one which will allow the organisation to attract members from other schools in Victoria including Deakin, RMIT and

Melbourne as well as interstate and overseas MBAs.

Ms Hogan adds that there is a flourishing GMA in Sydney and moves are being made now in Adelaide, Canberra and Brisbane to set up similar associations.

The 1988 GMA program will be available before Christmas. Lunch and dinner meetings will be held at the Victorian Arts Centre, the Victoria Hotel, the Dorchester, and the AIM.

For further details contact Nancy Hogan on 528 6333.

MATERIALS ENGINEERING

Some 270 Materials Engineers have graduated from the Faculty of Engineering and moves were made during mid-1986 to bring these people together to form an Alumni Association.

All graduates of the department and academic staff (past and present) as well as technical personnel and postgraduate students of the department are eligible to be members of the association.

The association aims to operate both on a social and professional level. For example, at the social end of our activities we aim to meet once or twice a year for an informal dinner or other function.

On the professional level, the department can offer services to alumni and the companies that they represent.

These services include consulting activities, research projects, special seminars or intensive courses, and other collaborative agreements of mutual interest.

The alumni, on the other hand, could provide publicity for the department, provide it with potential students, suggest and commission special research, provide openings for vacation experience for undergraduate students and assist in the placement of graduates, and comment on existing and proposed course structures among many other possibilities.

Alumni of the department first met as a body in mid-1986 for an informal dinner; and then again in May 1987 when an inaugural annual general meeting was held.

Mr Peter Aird was elected to the position of president at that meeting and the elected committee plans to meet twice a year. The meeting was also the focal point of a series of seminars from six of the alumni and the evening was rounded off with a dinner at a restaurant.

It can now be said that the Materials Engineering Alumni Association is up and running. Written inquiries can be addressed to The President, c/- the Department of Materials Engineering, or information can be obtained over the telephone from Chris Berndt on 565 4930.



• Nancy Hogan

ALUMNI NOTICEBOARD

CHEMICAL ENGINEERING

The department of Chemical Engineering is planning to initiate a number of social functions to enable an Alumni Association of the department's graduates to come into being.

To this end a number of graduates working in locations within a reasonable distance of the university will be contacted and invited to join an interim committee to help organise an initial gathering.

At this meeting the level of enthusiasm for the formation of an association will be established and if found to be adequate an executive committee will be formed to co-ordinate and plan future activities.

In view of the arduous nature of these tasks, the interim committee will probably convene over dinner at the private dining room of the Monash University Club, as guests of the department, while the initial gathering will probably take

the form of a cocktail party in the same general area, similarly hosted.

It is hoped that the interim committee may be formed by the middle of this month, while the initial meeting might be in the last week of the month.

While the department is happy to supply the secretarial backup for the executive committee, it hopes that the committee members will be the ones to provide the initiative for the form that the association will take and the services that it will make available to its members.

In the event that a graduate of the department who would like to take an active part in the formation of the association, but who has not at the time of reading this, been contacted regarding committee membership, Dr Eric Olbrich on 565 3436 would be only too pleased to hear from her or him.

EDUCATION

Monash Education graduates now have the opportunity to keep in touch with each other and the university by becoming members of the newly formed Monash Education Alumni.

The Vice Chancellor, Professor Logan, was one of the guest speakers at the Reunion/Seminar held to launch the Alumni on 5 November. Ms Rhonda Galbally, Director of the Commission for the Future and past student of the faculty, also spoke.

The Alumni will send out regular newsletters and organise seminars and workshops on educational issues given by the staff and overseas visitors to the faculty. Social activities will also be an important part of the Alumni's activities.

The Acting Dean of the Education Faculty, Professor Dick Tisher, commented on the importance of an Alumni

association in providing support and ideas for the faculty and maintaining both professional and social contact for colleagues, and hoped that many past students would take the opportunity to become members.

We are trying to contact as many past students as possible, but unfortunately may be unable to inform many of our Dip.Ed. students.

If you know of any or could contact these past students it would be gratefully appreciated.

There has been a great response and we have over 200 financial members at present, and the number is increasing daily.

Membership forms and further information can be obtained from the Education Faculty by contacting the executive officer, Joan Szalman, on 565 2858 or 704 6571 (after hours).

ELECTRICAL ENGINEERING

Monash Electrical Engineers held a candle-lit inaugural dinner to celebrate their first anniversary. They are a generation old, having started with Monash 26 years ago.

SMEEA (Society of Monash Electrical Engineering Alumni), with a membership of 280 out of a total of over 1000 graduates, brought together 73 people for dinner. Most were from Melbourne but Alan Finkel came from San Francisco and Michael Krochmal returned from USA just in time for the evening.

Like any two-generation family, SMEEA has its generation and vocabulary gap. When the electrical engineering component of the engineering course was started in 1961 by Jack Philips (who was at the dinner) and Professor Douglas Lampard founded the department in 1962, computers were in their 1st/2nd generation and 'crunched' numbers.

Professor Ray Jarvis, who joined the department in 1985, brought computer vision and intelligent robotics interests using 4th/5th generation computers

which now 'process' lists and symbols. In between, the graduates of the department represent the transition from the transistor to VLSI (Very Large Scale Integration — microchip to the layman), encompass computer applications to medicine, bionic ear, satellites and power systems and are now using robots and optical fibres.

The whole of the first (1964) graduating class of one, and three out of five of the second batch, were present, sharing memories of the hectic early days with Professor Lampard while the others recalled relatively more recent times with staff members.

But the oldies are not outdated — far from it. They have become senior engineers and managers and are directing applications of technologies which did not exist when they were students. That proves the value of a solid fundamental education.

This changing technology and emphasis has been reflected in the changing course which became Electrical and

Continued Page 23



● Pictured at the Law Institute of Victoria with his Honor Judge Alwynne Rowlands, second from right, are Law Alumni office-bearers Damien Lockie, treasurer, left, Marilyn Pittard, president and Chris Jessup, vice-president.

LAW

Monash University Law Alumni mark their sixth year of existence with the publication of the first issue of *Inter Alia*, the law alumni newsletter.

In his editorial, Dr Chris Jessup encourages members to contribute articles, news and notes of professional interest. Copies of the first newsletter are being sent to all current subscribed members of the alumni.

Law graduates who wish to join should contact the faculty's recently appointed PR/Alumni Officer, Elana Markowitz (565 3032, Mondays and Tuesdays only).

Among the functions held this year by the Law Alumni was an address on 5 October 1986 at the Law Institute of Victoria by His Honor Judge Alwynne Rowlands, president of the Victorian Administrative Appeals Tribunal on *Freedom, Information and The Administrative Appeals Tribunal*. His Honor was the first member appointed to the tribunal when it started in Vic-

toria in 1984, and he was able to give many valuable insights into its philosophy and mechanics.

The Law Alumni's forthcoming Annual General Meeting and Annual Dinner will be held at The Dorchester on Wednesday 25 November. This year's special highlight will be a 'Celebrity Moot' in which one 'team' will consist of the first Monash alumni to have become Queens Counsel — Michael Rozenes QC, Ray Finklestein QC and Mark Weinberg QC* — and the other 'team', of three faculty professors — Michael Prydles, Francis Trindae and Bob Williams.

Master of Ceremonies will be Campbell McComas — also a Monash law graduate.

* Ray Finklestein, Michael Rozenes and Mark Weinberg, all 1969 B.Juris LLB graduates, have recently been appointed Queens Counsel. They are the first three Monash law graduates to achieve this distinction.

LIBRARIANSHIP

On Saturday, 17 October, 1987 the Alumni of the Graduate School of Librarianship held their first 'research and innovation update'.

The seminar opened with a paper by Brian Haratsis on the economic environment for libraries in the next decade, and closed with a personal assessment of professional priorities by Professor Jean Whyte.

Other papers dealt with historical research into the censorship of Zola's novels in the 19th century, by Brian Hubber, and with the attitudes of library school students to reference inquiries on material about illegal and violent activities, sexual divergence or fringe religions, by Graeme Johanson.

The divergent views of the founders of the public library development in New South Wales were well researched and reported by Rodney Snibson, and Margaret Eastman summarised her thesis research on teachers' perceptions of the role of school libraries.

Andrew Rooke outlined the planning of library services for the new Monash Medical Centre. Don Schauder, the only speaker not connected with Monash, took a look at progress and prospects for research in librarianship in Australia.

The meeting discussed the proposed

constitution for the association, which will soon be ratified. Office-bearers are: **President:** Mari Davis, Head, Family Information Centre, Institute of Family Studies; **Secretary:** Margaret Smith, Consultancy & Public Libraries Section, State Library of Victoria; **Treasurer:** Henning Rasmussen, Information Manager, Australian Wool Corporation. These people are supported by a committee of five.

In future it is hoped to hold these seminars in the new Monash centre in the city.



● Mari Davis



● Dr Paul Kenins uses a fine platinum probe to test response to wool fabrics.

Finding the answer to prickliness is a boon to wool industry

Research carried out for the Australian Wool Corporation by the Monash Physiology Department in collaboration with the CSIRO has determined why certain fabrics feel prickly when worn next to the skin.

By monitoring the activity of fine nerves in the skin, Dr Paul Kenins found that the prickliness of wool, for instance, depends on physical irritation caused by skin contact with the ends of coarse wool fibres, which directly stimulate the body's pain sensors.

In people who are sensitive to wool this can cause itchiness and even skin reddening, but Dr Kenins found no evidence to suggest that these people were actually allergic to wool.

"Australia's wool industry is a \$3000 million a year business and, as prickliness is a problem for some consumers, it is an important economic question," Dr Kenins said.

Dr Kenins now is working at the CSIRO Division of Textile Industry in Geelong.

His findings should help manufacturers to design fabrics which are more widely acceptable in the marketplace.

A way to avoid needless experimentation

With the opening of a Centre for Biomedical Simulation this year, Monash entered a field totally new in Australia.

Following closely in the footsteps of Duke University, North Carolina, the Monash department of Physiology has installed software which allows computer simulations of biological systems.

In the process, it has made a constructive move to answer criticisms about

animal experimentation, says researcher, Dr Tim Neild, associate director of the centre.

"Through simulation the critical experiments required to test a hypothesis can be identified and unnecessary experiments avoided.

"A simulation can never replace an experiment because it uses only knowledge that has been given.

"But it can rearrange that knowledge, present it to us in new ways, and help us to draw conclusions from it.

"In particular, a simulation can be used to test proposed experiments and determine the correct experimental

conditions."

The software being used at the Monash centre was developed by researchers at Duke University's National Biomedical Simulation Resource.

The Monash-Duke link was established by Dr Brian Chapman, senior lecturer in Physiology, who has worked at the Duke resource on study leave.



● More than 70 people attended the inaugural dinner of the Society of Monash Electrical Engineering Alumni at the Monash University Club last month. Among them were Mr Jack Philips, third from right, who founded the course in 1961, and Dr Kishor Dabke, second from right, secretary of the alumni. (See story page 13).

University tackles two issues: Equal opportunity and occupational health

Dr Cheryl Tillman and Dr Margaret James have taken on the separate tasks of investigating university policy in the fields of occupational health and equal opportunity.

Dr Tillman, 38, the university's first health and safety manager, was the architect of the Monash University Occupational Health and Safety General Policy Statement introduced in March to replace the Safety Policy of 1974.

Later in the year, the Vice-

Chancellor, Professor Logan, announced the official formation of the Occupational Health and Safety Branch. Its members include Dr Tillman, manager; Mr Teng Tan, radiation protection officer, Mr Alan Wilson, safety officer and Sister Kathy Hill, occupational health nurse. Dr David Barton, a Monash graduate, is consultant occupational health physician.

Dr James, 47, is working to establish new policies on equal opportunity within the university in accordance with the Affirmative Action (Equal Employment Opportunity for Women) Act, 1986.

This requires that an affirmative action program for women be instituted and an annual report submitted to the government detailing its progress.

Dr James is using recommendations from Dr Gabrielle Baldwin's report on equal opportunity as a basis for her inquiries into staff policies and practices.

In late May the university introduced an Affirmative Action and Equal Opportunity program. In September, five staff members were appointed as advisers on sexual harassment. Their role is to deal with internal complaints from staff or students who believe they may have been subjected to sexual harassment.

Student solves intractable problem

Jon Wagg, a postgraduate student in Physiology, has found a solution to a problem that has plagued some of the brightest minds in chemistry and biochemistry for years.

At the same time, he has come up with a general mathematical technique which will allow researchers to simulate the flows of molecules through a series of linked reactions.

Mr Wagg's findings are so important that his paper *A method for defining steady-state unidirectional fluxes through branched chemical, osmotic and chemiosmotic reactions*, will be

published in the *Journal of Theoretical Biology*.

Mr Wagg's supervisor, Dr Brian Chapman, said there had been no accurate theoretical basis for interpreting how molecules flowed in one direction through a series of biochemical reactions such as, for instance, through the widespread enzyme transport system whereby sodium is pumped out of cells.

"Jon recognised there was a functional gap in the general theory, that there was no mathematical way of treating these complicated reactions adequately.

"Now for the first time we can

simulate the full complex behavior of an enzyme system. We have a satisfactory answer to the way molecules flow through the reaction system.

"This is a powerful technique which applies to the workings of all chemical or bio-chemical reactions in the steady state," Dr Chapman said.

The work has also been praised by several prominent US scientists, a couple of whom expressed surprise that research of such quality had emerged from someone so early in his career.

Mr Wagg's paper was the first submitted to the new Monash Centre for Biomedical Simulation.

1987: THE YEAR IN REVIEW

Growing interest in religions from Japan

A lecturer in Japanese says that there is a growing following among university students and Asian migrants in Australia for a series of Japanese "new religions".

Dr Yutaka Yamada says the teachings of these religions include faith healing, peace, self-improvement, ritual expulsion of evil spirits and transmigration of the soul.

His studies reveal that more than one third of the members of the most popular of these religions in Melbourne, the Nichiren Shoshu, are single

Malaysian-Chinese men, many of whom study at either Monash or La Trobe universities.

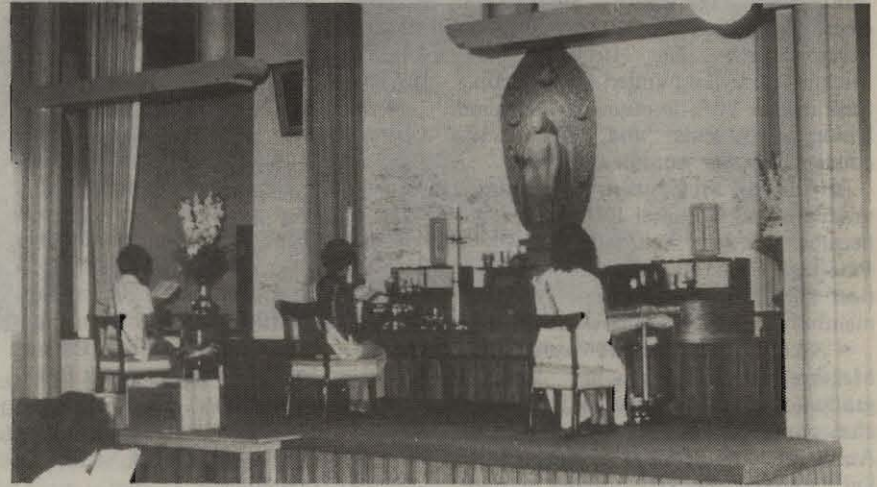
Most were members of Nichiren Shoshu before coming to Australia.

Nichiren Shoshu is one of more than 100 "New Religions" which flourished after the Japanese constitution introduced freedom of religion at the end of World War II. Before that time, Shintoism was the officially sanctioned religion.

Dr Yamada is interested in the extent to which the New Religions, such as Nichiren Shoshu, most alter their traditional values and practices to attract non-Japanese membership.

He says he wants to determine whether the growth of these religions in Australia is linked in any way with increased Asian immigration.

He will also investigate whether sufficient numbers of non-Asians have entered these religions to make their continued existence probable if Asian support diminishes.



• Rishso Kosekai, one of the new Japanese religions, being celebrated in Melbourne.

Former registrar honored

The former Registrar, Mr Jim Butchart, this year became the first Australian university administrator to receive the honorary degree, Doctor of Laws.

He was presented to the Chancellor, Sir George Lush, by Professor Ross Day, chairman of the department of Psychology, whose speech concluded with the following words:

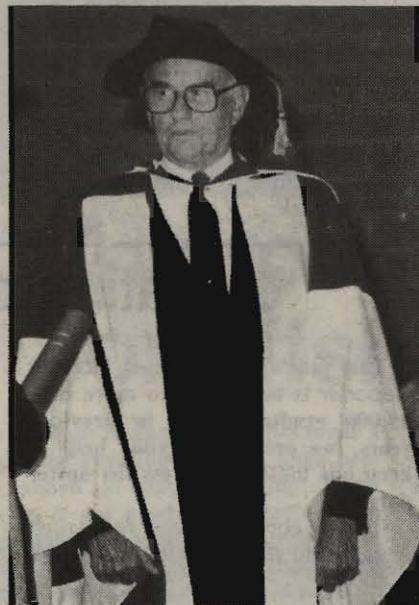
"Jim Butchart came to Monash when it was paddocks and pine trees, and a few people of remarkable vision.

"He came well prepared to join the embryo university in the enterprise of establishing a new centre for teaching, research and scholarship.

"He had received the degree of Bachelor of Economics from the University of Sydney and a Bachelor of Arts from the University of Melbourne.

"He set about the business of developing academic administrative services with confidence, shrewdness, and uncanny skill.

"It is mainly for his contribution to this often forgotten but key side of university life that we honor him and pay tribute to him today."



• Dr Jim Butchart

B. Wongar as guest writer

The mysterious Arnhem Land writer, B. Wongar, this year became the first Writer-in-Residence at the Aboriginal Research Centre.

He completed his 12-week term with a public reading from his new novel, *Gabo Djaru*, the final volume of a "nuclear trilogy" which gives an Aboriginal view of the devastation caused by uranium mining and nuclear weapons testing.

Since 1972, Wongar's short stories

and novels have been published and acclaimed overseas as the voice of Aboriginal Australia — but his identity remained a mystery.

It took novelist Robert Drewe, in an article titled *Solved: The Great B. Wongar Mystery* (*The Bulletin Literary Supplement*, 21 April, 1981) to tie all the loose ends together and reveal publicly that Wongar was the Aboriginal alter-ego of a middle-aged Yugoslav immigrant, Sreten Bozic.

He had lived among tribal communities, so his extraordinary understanding of Aboriginal culture, lore and legend made the deception possible.

As Writer-in-Residence, a position funded by the Literature Board, Wongar took creative writing classes for students of MOSA (Monash Orientation Scheme for Aborigines).

Researcher finds new hope for alcoholics

The body can repair a significant part of the brain damage sustained by long-term alcoholics, a researcher in the department of Anatomy has found.

Dr Stephen Phillips, who has been examining the brains of people who died after at least 10 years of alcoholism, says that a significant portion of the damaged tissue in the area of the brain known as the cerebellum could regenerate with abstinence from alcohol and a good diet.

"The attitude of many doctors towards alcoholics is simply to detoxify them in hospital, administer drugs to offset the withdrawal symptoms, and get them back on a balanced diet. We now know that trying to work out therapy to encourage brain tissue repair in these people is very worthwhile.

"At least half the damage I detected was in the repairable part of the cerebellum. But at the moment we have no prescription to help with the repair work."

Dr Phillips received attention worldwide for his earlier research on alcoholism using rats and mice. He showed that not only does alcoholism damage the brain directly, but that additional damage occurs when alcohol is withdrawn from an alcoholic animal.

This implies that a sudden drying out period could contribute to an alcoholic's degeneration, and that phased withdrawal of alcohol may lessen, but not stop, brain damage.

In this latest research, Dr Phillips set out to see what physical brain damage was caused by alcoholism in humans. He also wanted to determine how closely the effects of alcohol on the human brain compared with what he had seen in rat and mice brains.

Monash leads in Australian studies

A Centre for Australian Studies is being planned for Monash — a recognised leader in the field.

Professor John Hay, Dean of Arts, says a wide range of undergraduate and postgraduate courses with varying amounts of Australian content have been on offer for some years. The centre would aim to promote such courses and develop a research program.

Professor Hay says he also hopes the centre will act as a focus for the development of Australian studies at other tertiary institutions.

"The opportunity exists to establish a National Centre for Research and Development in Australian studies that could extend its activities to incorporate

all studies in Australian tertiary institutions," he said.

In this way, the university could develop links with outside bodies, corporations and individuals with an interest in the development of such studies at tertiary institutions.

A further proposal is looking at establishing a program that will lead to a Masters degree in Australian Studies.

The program would cater for both pass and honors students, with the latter having only to complete the second of two parts to qualify for the Masters degree.

Graduates make their mark in ... Law, politics and arts

Monash graduates are always in the news. Here is a quick round-up of some of this year's media items that caught *Monash Reporter's* attention:

● **Michael Kroger**, 30, Law graduate, "learned his rhetoric and honed his skills in student politics at Monash in the mid-1970s". He has been elected president of the Victorian Liberal Party. *The Australian* says Michael and like-minded other people took on the Left-dominated Australian Union of Students "and, by most accounts, mortally wounded them".

● **Julian McGauran**, Economics graduate and National Party candidate became a Federal Senator, as did **Kay Patterson** (Liberal), graduate in Education and Monash University Council member (see separate story).

● **Allan Griffiths** was re-elected ALP Member for Maribyrnong. Alan, a graduate in Economics and Law, is chairman of the National Crime Authority. The "former St Kilda Street kid" entered university under a pilot scheme for people with no formal qualifications.

● **Joan Sheen**, BA, Dip.Ed, B.Ed and M.Ed, and tutor in the Faculty of Education, was elected to Springvale Council.

● **Kay Stammers**, Honors Arts graduate, became a television personality in NSW as presenter of the ABC's arts program, *Billboard*. Kay is also an aspiring actress, painter, sculptor, photographer and committed health fanatic.

● **Paul McNamee**, 32, graduate in Science, former tennis champion and founder of Oz Tennis, a charity which introduces tennis to children from poor backgrounds, was elected King of Moomba.

● **Peter Mitchell**, 24, Science graduate, was as surprised as anyone when he was appointed to run the marathon for Australia with Robert de Castella and Steve Moneghetti in the world championships in Rome.

● **Mark Preston**, 25, "a very modest suburban solicitor", and Monash Law graduate, won the Law Institute's 'super solicitor' award for voluntary community service. Mark "gets a great kick out of educating people by demystifying the law".

● **Angela Nordlinger**, partner in Corrs Pavey Whiting and Byrne, represented the Herald and Weekly Times in the Victorian Supreme Court following what *Business Review Weekly* described as the most complex takeover in Australian corporate history. Angela graduated in Economics from Sydney University in 1963 and with first class honors in Law from Monash in 1981 as runner-up for the Supreme Court Prize.

● **Anthony Pratt**, 27, Economics graduate, was appointed executive director of his father Dick Pratt's Visyboard group of companies.

● **Ruth Abbey**, 26, Honors Arts graduate, won a prestigious Commonwealth postgraduate scholarship which allows her to undertake a Masters degree and Ph.D in Politics at McGill University, Montreal. Ruth has been working as a tutor in the Politics department for the past two years.

● **John Storey**, who began his career as an astrophysicist by gaining a Ph.D in Physics at Monash, became the 1987 winner of Australia's most prestigious scientific awards, the Pawsey medal.

● **Karen Mumford**, Economics graduate, caused a stir with the findings of her postgraduate work at Macquarie University on *Women and Work in Australia*. "On the plus side the female component of the Australian workforce has risen dramatically; on the minus side the majority of women are rigidly confined to a few large industries and their occupational grouping has little to do with their level of education".



Monash at Moomba

It was a Monash Moomba this year — the King and Queen were past and present Monash students.

Queen Marita Jones, 19, of Mulgrave, is a second year Arts/Law student who works part-time in a fashion shop at Brandon Park.

King Paul McNamee, Science graduate, has long held sway in the tennis world. As one half of the Super-Macs, he shared with Peter MacNamara two Wimbledon doubles victories (1980 and 1982), numerous Davis Cup titles and the Australian Open doubles title (1979). Photo courtesy *The Sun*.

Keeping wills on file

Where there's a will there's a way to settle deceased estates — but what if nobody knows where the will is?

Each year Australians spend more than \$1 million on advertising to make sure the deceased's last will is found and acted upon.

Vital link

Monash is set to become Australia's premier university for students of European languages and culture with the establishment of a Centre for European Studies on campus.

Professor Brian Nelson, the chairman of the department of Romance Languages, says the new centre will provide a vital link between the humanities, social sciences and foreign languages.

He believes it will become the chief centre for European studies in Australia.

It will take over the existing MA in 18th Century European Studies.

Professor Nelson is hopeful that full undergraduate facilities and a post-graduate program will be available by 1989.

But this process should be much easier and less costly in the future if solicitors make use of a new computerised register of wills — the first of its kind in the world — which has been set up at Monash using special software developed by the department of Computer Science.

For a fee of \$25, solicitors can lodge information with the Wills Records Office (a subsidiary of Montech Pty Ltd) about the date on which a client made or amended a will, and the name of the solicitor who prepared it. The client is issued with a plastic registration card confirming the computer file entry, and the information can be updated at any time.

When a client dies, the solicitor can apply to the Wills Records Office for a report which will show all his or her registered wills and codicils in chronological order.

The company can also provide regular listings of all a solicitor's registrations so the solicitor can advise clients when wills might need updating.

Inquiries about the Wills Records Office should be directed to Montech on ext. 3038 or 3039.

Updating our records

This year's final issue of *Monash Reporter* is being sent to more than 35,000 graduates. As in previous years, we are asking your help to keep our massive address list up-to-date.

If your copy has been forwarded from an old address or you know you

will be changing your address — or name — before the next graduates' issue in November, 1988 would you please return this form complete with all details.

If you give insufficient information we may not be able to identify you.

TO: Mr John Kearton
Administrative Officer,
Monash University, Clayton, 3168

Surname at time of graduation:

Christian names:

New surname if applicable:

Last address notified:

..... Postcode:

New address:

..... Postcode:

Degree and year graduated:

Student I.D. number, if known

Stockbrokers' records a valuable acquisition

After 147 years in business, J.B. Were and Sons, the Melbourne stockbroking house, recently dissolved its partnership and became a limited liability company.

On that historic day for the firm, it formally presented the Donald Cochrane Economics and Politics Library at Monash with more than 9000 files containing material on stock exchange listed companies amassed between about 1917 and 1970.

The collection represents the public face of Australian business during that time — annual reports, statements of accounts, dividend reports, prospectuses, documents relating to share releases, newspaper clippings.

The Donald Cochrane librarian, Mr Henry Thorburn, said he thought Monash had been selected to house the files because it had the room to do so without breaking up the collection — about 135 metres of shelving in all. In addition, the library could guarantee Weres access to any file within a day.

The library is in the midst of determining whether it is worth putting the most commonly sought information into a computer database, so that staff and students can have access to it without continually disturbing the files.

A group of files on about 100 companies has been selected to see whether they contain the data to answer a series of questions commonly asked about businesses. The questionnaire was drawn up by Merrett and Trace.

Mr Thorburn said that the Weres files would add to the Cochrane Library's significant collection of business records.



Librarian, Mr Henry Thorburn, with part of the Weres collection now held in the Donald Cochrane Library. Photo — Tony Miller.

"We have bound records of the Stock Exchange information service going back to 1966, and an important collection of company reports. Also, our holdings in economic statistical material are really very significant; we have very substantial holdings of Australian Bureau of Statistics records."

Accident Research Centre plans wide-ranging attack on road toll causes

Despite a remarkable reduction in the road toll over the past few years, traffic accidents still cost an estimated \$1000 million a year and cause much emotional distress.

The State Government has taken a big step to encourage research to overcome this by establishing an Accident Research Centre at Monash to bring all the experts together.

The new \$1 million centre was announced earlier this year by the Transport Minister, Mr Roper, who said it would be jointly funded by the Transport Accident Commission and the Road Traffic Authority.

"In order to show a worthwhile return in its first three years, the centre need only identify and develop one major initiative which reduces the severity of road crashes by only one per cent (\$10 million a year)," he said.

It is staffed by a director, Dr Peter Vulcan (seconded from his position as chief general manager responsible for road safety at the Road Traffic Authority) and a small team of full-time employees including three researchers and a secretary.

Many Monash departments in engineering, education, science, law and medicine have long been involved in traffic accident research.

Dr Vulcan said some of the areas which the centre hoped to tackle included driver fatigue, young driver accidents, ways to identify and treat potential accident blackspots, and accidents at traffic signals.



"Glasgow University has defended its policy of warning medical students against studying in certain African countries because of the risk of AIDS, despite criticism in *The Lancet* that the policy is misguided.

In the middle of their medical course, students undertake a month's elective of practical study, often in a developing country. Glasgow is now advising its students against electives in countries where AIDS is endemic.

"If we did approve an elective in one of these countries, and a student were to come home an AIDS carrier, I think we would be open to criticism," said Dr Fiona Miller, clerk to Glasgow's medical faculty.

— Times Higher Education Supplement

The United States Agency for International Development has given \$US28 million to Family Health International, specifically to study methods for containing the spread of AIDS in developing countries.

Roger Short, Professor of Reproductive Biology at Monash and chairman of the board of directors of Family Health International, says the

money is being used for a number of projects including the development of new plastic condoms which will sell for one cent rather than 50 cents each.

The latest figures available show that as of 1 July, a total of 53,121 cases of AIDS have been reported to WHO from 119 countries.

The organisation claims these cases represent only a fraction of the total problem, for the following reasons:

- HIV (Human immunodeficiency virus) infection is probably life-long; infected persons are capable of infecting others;

- WHO estimates that a total of at least 100,000 AIDS cases have occurred to date and that between 5 and 10 million persons worldwide are currently infected with the HIV virus.

- Of AIDS cases diagnosed before 1982, around 90 per cent have died.

- Of all HIV-infected persons, 10-30 per cent will develop clinical AIDS, and another 20-25 per cent will develop AIDS-related syndromes within a five-year period.

Monash Reporter reaches out to community

Monash Reporter went public this year with the distribution of a Community Special issue to 40,000 neighboring households.

In a foreword to the issue, the Vice-Chancellor, Professor Logan, said the university was conscious of its obligation, as a publicly-funded institution, to make its work widely known to the taxpayers who supported it.

"As you leaf through this edition, you

will, I think, come to appreciate some of the truly exciting things that are part and parcel of the everyday life of a modern university.

"You will also learn of the many ways in which we interact with the community — from popular concerts in Robert Blackwood Hall (many of which are free to all), to the sponsorship and encouragement of sporting events of all kinds, to collaboration with the business

and industrial world in the highly specialised fields of advanced technology and science.

"As it happens, this community issue of *Monash Reporter* coincides with the completion and imminent opening of what many of us believe to be a most significant development in the south-eastern region of the Melbourne metropolitan area — the new *Monash Medical Centre*.

"Far from being simply a campus-based teaching hospital, as was originally envisaged back in the 1950s, or even a regional community hospital, the Monash Medical Centre will, I believe, become a key component in the whole of this state's health care system.

"I trust you will enjoy reading this special issue of *Monash Reporter* — and take an early opportunity of joining in some of our activities."

Cyclorama 'obsession' brings Mimi a Ph.D.

Mimi Colligan, primary school "drop-out", Monash graduate and former research assistant in the English and History departments, will take out her Ph.D in History next month.

Her thesis, entitled *Canvas and Wax: Images of Information in Australian Panoramas and Waxworks*, concentrates on panoramas, cycloramas and



waxworks in 19th century Melbourne.

Ms Colligan was an asthmatic in primary school and the Education Department directed that she should study by correspondence.

She stayed in fifth grade to age 14, then "kept reading" at home, returning to formal study at age 28.

It was while Ms Colligan was working in the English department that her obsession with cycloramas and waxworks began.

Senior lecturer, Ian Laurenson asked her to verify that there had been a cyclorama show in George's Hostess Store in Little Collins Street. She also kept tripping over waxworks advertisements while researching Harold Love's book, *The Golden Age of Australian Opera*.

She says people attended cyclorama, moving panorama and waxworks shows for entertainment, and at the same time gained information on historic battles, foreign cities, current events and people in the news.

"Cycloramas were huge circular oil paintings which gave the viewer the illusion of being within the scene depicted."

On moving panoramas, she says: "People went to motion pictures long before there were 'movies'."

"These long canvas paintings, sometimes up to 3000 metres, were unrolled



● Above: The Battle of Gettysburg cyclorama building in Victoria Parade, Fitzroy, circa 1896.

● Left: Mimi Colligan with a cyclorama of early Melbourne.

across a stage from one spindle to another.

"A lecturer pointed out areas of interest and told jokes while he 'shovelled in the information'."

The Melbourne waxworks, run by Frank Thring's grandfather, would show the latest image of Queen Victoria and her family beside a tableau of the latest grisly murder or an effigy of a recently hanged killer.

All this was a 19th century equivalent of 20th century cinema newsreels and travelogues, and television shows like the *Leyland Brothers* and *Life on Earth*, Ms Colligan says.

She believes her research could be relevant to pre-cinema studies as well as to popular culture in general, and hopes to publish all or part of her thesis as a book.

Another of Ms Colligan's interests is writing biography, particularly the lives of unusual women such as Marion "Bill" Edwards, male impersonator; Alice Anderson, 1920s garage proprietor; and Caroline Pohl, Lonsdale Street "Madame" of the turn of the century.

After about 10 years as part-time research assistant in Melbourne for the ANU's *Australian Dictionary of Biography*, Ms Colligan was recently appointed senior research officer with Australia Post Stamps and Philatelic Branch, where she researches pictorial references and writes background material for new stamps.

Poetry draws huge crowd

It's not often in Australia that a crowd of about 1000 people gathers for a poetry reading — but that's what happened at Monash on a recent Sunday afternoon.

Factory workers, teachers, a bus-load from Geelong, a large group from Thomastown, they all came to see more than 400 students compete in the Slavic Reciting Competition organised by Radmila Borkovic, a PhD student in Slavic Languages.

Public poetry readings are a normal part of the cultural life of Eastern Europe, and attract the same sort of attention as musical recitals or art shows.

Ms Borkovic, whose work includes research into the educational resources and needs of the Yugoslav community in Victoria, was delighted with the response.

"The competition will definitely

become an annual event," she said.

"It not only demonstrated the cultural wealth of the South Slavic languages and literature, but also helped to foster multi-culturalism."

"In promoting the maintenance of Yugoslav languages and cultural identity, it allowed students from the various teaching centres to meet and compete."

"Another aim of the competition was to inform students from a Yugoslav background about the courses offered at university level."

The competition was held in seven sections based on the level of educational achievement in each of three Yugoslav languages — Croatian, Macedonian and Serbian.

There were three primary school sections, three secondary school sections and an open tertiary section.

Students were encouraged to learn their poems, some of which were up to six pages long. The poems were recited before a panel of judges.

Parents insisted that the whole thing be public, so what initially was going to be held in the department of Slavic Languages had to be moved into three of the Humanities lecture theatres.

After their recitation, students could make their way to the Sports and Recreation Centre to use its facilities or partake of a barbecue of traditional sausages and hamburgers provided by four Yugoslav butchers.

The folkloric dance group *Makedonka* and piano-accordionist Olivera Petrovic also performed.

In the early evening about 1000 gathered in the Main Dining Room of the Union for the closing ceremony at which prizes were awarded for overall excellence in each language.



● Radmila Borkovic hands a certificate to a young contestant.

Bowen visits legal service

The Federal Attorney-General, Mr Lionel Bowen, last month visited the Springvale Legal Service which is affiliated with Monash and is the busiest centre of its type in Australia, handling more than 10,000 interviews yearly.

Mr Bowen met with staff and Monash senior law students working through a clinical education program.

Only Monash and the University of New South Wales have such programs, where students have the opportunity to make a supervised contribution to one of the nation's 54 community legal centres.

In an address to Mr Bowen, staff said the centre appreciated the Hawke Government's support for community legal centres and called for Mr Bowen's support for increased funding for clinical legal education programs.

They expressed concern over continual federal government delays in taking up the referral of state powers in relation to ex-nuptial children.

More than 200,000 Australian children and their families were inadequately protected under the present system, they said.

They expressed further concern over mooted changes to the Family Law Act which would see the "fragmentation of the Family Court" and the referral of contested custody and property cases "to state inferior courts".



● Pictured at the Springvale Legal Service with Mr Bowen, third from right, are Chris Slattery, left, Susanne Liden, Sue Miller (barrister and locum) with baby, Simon Smith (co-ordinator) and Judy Taylor.

Learning how the other half lives

If you wanted to know about research into golden staph or how sewerage is purified, you could ask a microbiologist — or a Monash administration staff member.

More than 45 administration staff were last month taken on a tour of the department of Microbiology as part of a program organised by the Staff Development section.

Laboratory manager Ian Ray arranged the tour to take in as many facets of microbiology as possible and to give administration staff the opportunity to talk with researchers about projects under way.

He arranged for staff to peer down microscopes at leptospire — potentially fatal bacteria recently found in dangerous levels in the dairying community of south-western Victoria — and to watch germs being cultivated on agar plates.

They also walked through the refrigeration and heating laboratories kept at four degrees and 37 degrees respectively, and were shown a sterile room where 50,000 to 80,000 agar plates are produced yearly.

"At the end of their tiring walk they

were treated to refreshments of a microbiological nature — wine and cheese," Mr Ray said.

He approached Mr Bruce Shields, Assistant Registrar and organiser of the Staff Development program, after the success of the engineering tour by administration staff earlier this year.

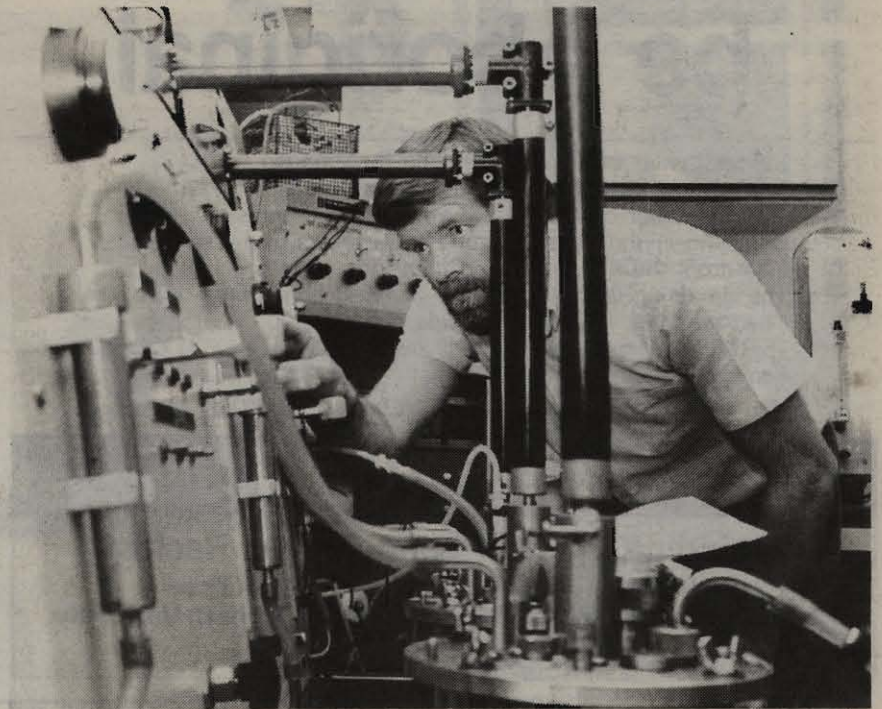
"I think the tours are an excellent idea, and a very good public relations exercise for both admin. and the participating departments."

★ ★ ★

Last year microbiology began a short course series on topics ranging from DNA practical techniques to a workshop on the techniques likely to be used by high school science teachers.

Another such course, to be run in conjunction with Montech, will be held early next year.

It will be designed for lawyers and patents attorneys who are confused by licensing laws concerning genetic engineering.



● Microbiology laboratory manager, Ian Ray, explains the workings of a fermenter which is used for growing bacteria.

Mixing up gender the Masai way

The fierce Masai warrior is probably seen to be the most macho male on earth outside the realms of fiction. Yet he begins life linguistically, at least, as female.

In the Masai culture, weaker or more fragile objects are referred to as feminine, while stronger things are typically considered masculine — so the infant male is said to be female.

Dr Keith Allan, lecturer in linguistics, who is just back from an overseas study trip to Kenya, has explained this and other apparent oddities in the Ma language classification of gender.

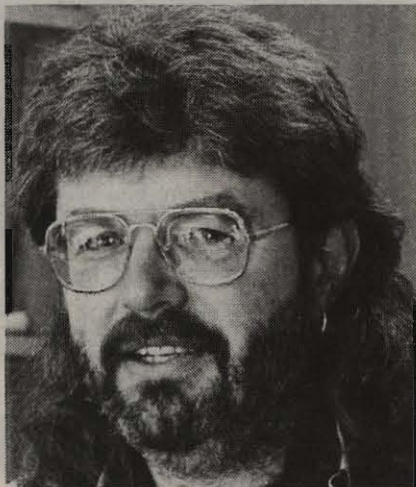
He said that a sword was considered masculine, but its baby counterpart, the hunting knife, was feminine. A mountain was masculine but a hill was feminine.

"Since in the Masai society women are considered the weaker of the sexes and there remains a powerful and strong warrior group, the metaphor is a fair one."

Dr Allan, who emphasised that he was not a Ma language expert, said the

Masai were a proud people with a wealth of religious and ceremonial commitment, living in the harshest conditions.

He told of how a friend working for the Kenyan equivalent of the flying doctor service was called to pick up a wounded Masai warrior.



● Keith Allan

"This guy had been gored by a buffalo and his stomach had been ripped right open.

"He had pushed his innards back in and pinned the skin together with the aid of large safety pins for the two-day walk to the pick-up point."

Dr Allan said it was curious that while Masai people believed God to be male, linguistically he was assigned to the feminine gender and called "she".

The gender issue was further exemplified by the case of a male demigod, Naiterukop.

"His name, broken into parts, literally means 'she who began the earth'."

Another curiosity surrounds the ceremonies performed when boys are initiated into the warrior class, and then again from a warrior to elderhood.

"The thing is that, at these ceremonies and for a period afterwards, the males wear brass ornaments which are otherwise considered solely female ornaments," Dr Allan said.

"I find it fascinating that men, who hold the wealth and power, attempt to

emulate female appearances and characteristics.

Dr Allan said when people first communicate the communicator will present the simpler or more familiar of two pieces of information.

To test this he has been investigating ways of presenting information in languages which have a verb-subject-object order, of which the Ma language is one; subject-object-verb languages such as Korean and Japanese; verb-object-subject languages like Malagasy, and the English subject-verb-object order.

Understanding global change

The Australian Academy of Science is organising an Elizabeth and Frederick White Research Conference on Global Change.

The conference will highlight problems to be tackled at the International Geosphere-Biosphere Program (IGBP) to be conducted throughout the 1990s.

The IGBP will be the most comprehensive attempt ever made to understand global change and the world's top scientists will assemble to partake in the program.

Whereas previous studies have tended to focus on specific problems, IGBP will seek a highly multidisciplinary approach.

The Global Change conference, to be held in Canberra from 24-27 February next year, will aim to develop Australian input into IGBP. The first two days will be open to the public and pressing problems will be addressed.

Only researchers who register for the conference will be invited to participate in these working parties.

Further information on the conference, which is jointly sponsored by the Australian Academy of Science and the Federal Government, is available from the Academy (062) 47 3966.

Casting light on the health debate

It seems the further medical research goes, the more confusing life becomes. One day you read that something is bad for you, and the next day that it will prolong your life.

We are constantly battered with masses of information about the impact of drugs on our lives, how to avoid heart

disease, how to cope with stress — but rarely does somebody put it all together into a coherent whole.

In collaboration with a team of experts Mr Frank Campbell, a former editor of *Monash Review*, and Dr George Singer, Professor of Psychology at La Trobe University, have done just

that in their new book *How to Care for Yourself*.

The text is easy to understand, as one might expect from someone with Frank Campbell's long experience of putting across science to the layman — and the book is lightened by a series of cartoons by Paul Schofield.

How to Care for Yourself is the latest in a series of books by Frank Campbell and George Singer in association with the Brain-Behavior Research Institute at La Trobe, of which Professor Singer is the director. It is being distributed worldwide by Pergamon Press.

Sadly this will be the last such collaboration, as Mr Campbell died earlier this year.

How to Care for Yourself is published by Macdonald Futura Australia and sells for \$8.95 (RRP).

Lectures on menopause

The Centre for Reproductive Biology will run a series of lectures on the menopause in February and March.

The lectures will be designed to provide women with a practical understanding of the menopause, its management, and related issues such as why women's bones are more susceptible to fractures

after the menopause.

It will also provide women with an opportunity to have their concerns and questions addressed by experts in the field.

For further information, contact Rebecca Lodge, Centre for Reproductive Biology, ext. 2765.

What it is to be Aboriginal

I am a hunter of animals imitating their stance.
I am what I hunt, I am its spirit in the dance.
I am a painter of walls. I am an artist of dreams
Depicting mythological creatures and spirits in my senses.
I am from the never never, a time long gone by.
The dreaming is my creating — I am at home when I die.
I own no land, for the land owns me.
That's how it has been, how it always will be,
For I am ... what I am ... I am ... Aborigine.
—From *I am*, a poem by Stephen Clayton, in *MOSA Magazine*

IN REVIEW

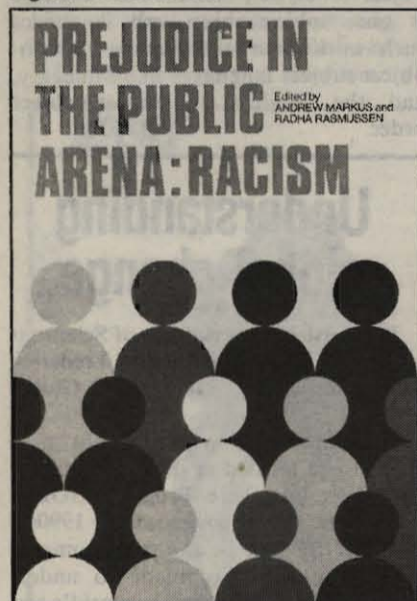
Prejudice in the Public Arena: Racism

eds. Andrew Markus and Radha Rasmussen
Centre for Migrant and Intercultural Studies, Monash University,
1987.

The Centre for Migrant and Intercultural Studies, and especially its chairman, Radha Rasmussen, are to be congratulated on the publication of the papers from a most informative conference held at Monash in November 1986 on *Prejudice in the Public Arena: Racism*.

It has more coherence than most seminar proceedings, dealing as it does with theoretical underpinnings of racism, some of its many manifestations and even possible antidotes.

Erin Tucker gives a brief outline of racist thought in this century, including a 'new' racism, the pseudo-science of socio-biology, with its emphasis on biological determinism.



The unconscious rationale behind this theory is explained by Andrew Markus in a quotation from Rossiter on how we tend to 'search for the source of our discontents in defective human nature rather than in defective social order'. (p23).

Dr Markus goes on to deal with the 1984 Blainey debate, which tapped the endemic anti-Asian prejudices of Australian society, and which he links with the anti-land rights campaign in Western Australia by international mining companies.

This was to prove entirely successful since it led to the indefinite abandonment by the Federal government of a national land rights policy.

The sanctity of private property is one of the key tenets of conservative ideology which feels itself threatened by the

recent findings of Henry Reynolds and other historians who have been engaged in unearthing a strictly legal base for Aboriginal rights to land.

In the event, Asian immigration was not similarly affected, despite a lengthy and vicious campaign from the 'new' (or, to be more accurate, the resurgent) right. Was this because of a basic humanism in public and official circles, or was it because such restrictions might have brought an angry retaliation in the form of Asian trade barriers?

Dr Markus continues with a perceptive account of the recurrent themes of the right and the use to which they are put in public discourse to denigrate multiculturalism and stir up racism.

It is still fairly rare in academic conferences of this kind to hear an Aboriginal voice speaking from a theoretical and also a personal base. Such a one is Eve Fesl, of Monash University, who believes that there is a crucial role played by the media in the propagation of racism.

She cites instances of deliberate misconstruing of public opinion polls on land rights as examples in often successful bids to influence government policy. On a more personal note, Ms Fesl poses the difficulties of combating the spread of prejudice on both sides of the racial divide.

How does one counsel a six-year-old black child, she asks, who has been beaten up because of her/his race? To hit back or to submit? The learned bigotry of children in Northern Ireland comes to mind.

After citing some of the unending examples of anti-Aboriginal distortion in the media, both print and electronic, Ms Fesl concludes on a note of frustrated anger: there is no legal redress because there is no law against group defamation nor against incitement to racial hatred.

Bill Cope gives an account of a large-scale research project in which he examined 630 social science texts used widely from 1945-85 'on the compulsory site of enculturation that is institutionalised education'. (p73)

A striking change was observed in the underlying philosophy of this period, from assimilation to multiculturalism. Assimilation implied an inevitable change from the inferior to the superior, from the simple to the technological.

It was customary, only 20 or 30 years ago, to juxtapose Aboriginal with 'our' society and to imply that Aborigines



were a race of have-nots, with 'none of the useful and beautiful things we have today' (p82) and lives akin to those of animals. There was an implication that by patient endeavor 'we' could lift 'them' up to our heights.

Frequent use was made of the concept of exploration, as though Europeans were the first to set foot on the Australian continent to open up an uninhabited land.

A note of racism crept into accounts of black-white encounters, always seen strictly from a white viewpoint, with the indigenes demarcated only as 'the Aborigines'.

Though Dr Cope has found new attitudes in the majority of textbooks of the 1980s they still do not escape from their own brand of racism.

Immigrant groups are treated culturally, with emphasis on visible difference, which leads to stereotyping of the maypole-and-custard variety.

Emphasis on ethnicity and Aboriginality as cultural difference all of an equally valid kind is apt to ignore the realities of unequal social power.

One of the most useful chapters in this discourse on racism in the public arena is that of Jan Pettman, which focuses on institutional racism and endeavors to find counter-measures.

Making media contacts Pettman believes to be essential since 'most of us draw heavily on the media for our images and views of others and for confirmation of our already-held prejudices' (p132).

Other anti-racist tactics outlined include those for use in political forums, in the workplace and in society at large.

Comments on combating racism in educational institutions must, perforce, be brief and therefore inadequate in a brief paper such as this.

Therefore attention could usefully have been drawn (under the listing of Further Reading) to the excellent publications of the Combating Prejudice in

Schools Project of the Richmond Community Education Centre.

The overall impression gained from the work of the fifteen authors involved in this volume is of the unrelenting intensity of prejudice against Aboriginal Australians in particular, which far outweighs that accorded to any other segment of the population.

— LORNA LIPPMAN

• Lorna Lippmann, a former staff member of the Aboriginal Research Centre at Monash, has specialised in various facets of race relations.

(*Prejudice in the Public Arena: Racism* can be obtained from the Centre for Migrant and Intercultural Studies, Monash University, Clayton, 3168, at \$12 a copy. Cheques should be made payable to the centre, and should include \$2 for postage and handling if required.)

NT University College seeks library help

The new University College of the Northern Territory is appealing for donations of library materials including back runs of journals and sets of law reports and periodicals.

The college is offering courses in the following areas: anthropology, economics, English, government, history, law, botany, chemistry, mathematics, physics and zoology.

The librarian, Alan Butler, would be interested to hear from people with books and journals they wish to dispose of. Inquiries should be directed to Mr Butler at the college, PO Box 1341, Darwin, NT, 5794 or by telephone to (089) 46 2255.

MOSA gets top marks in external review

An external review of the first three years of the Monash Orientation Scheme for Aborigines (MOSA) rates the course as "excellent" and judges the bridging year and support strategies as "highly effective".

Dr Deidre Jordan, of Adelaide University, conducted the survey.

The possibility of extending the MOSA program into laboratory-based faculties as recommended by Dr Jordan is under consideration.

The deans of the faculties of Science, Medicine and Engineering have expressed strong support for the proposal subject to funding being available.

Candidates would be admitted to these faculties after they had completed a two-year orientation program consisting of the current MOSA preliminary year (with the history unit replaced by a basic science unit to bring students up to year 11 level) followed by a second year consisting primarily of physics, chemistry, maths and English courses.

MOSA Magazine, Number 1, edited by Virginia Robinson, with contributions from students and staff, has just been published.

Its first editorial says the magazine "may serve to promote a clear perspective . . . of the aims and principles of MOSA. Importantly, the contents . . . will perhaps aid in the pursuit of knowledge for Aborigines and other students."

Contributions include:

- A tribute to Aboriginal poet and playwright Jack Davis: "His dream is of an Aboriginal heritage — not in terms of the past, as such, but as symbolic anchorage for the present, a sure refuge within which people can be positively



identified, providing emotional security, a sense of belonging and a meaning to life . . ."

- A report on an Aboriginal LONG MARCH — from Darwin to Pine Creek — when missions were evacuated in the face of a threat of invasion by the Japanese.

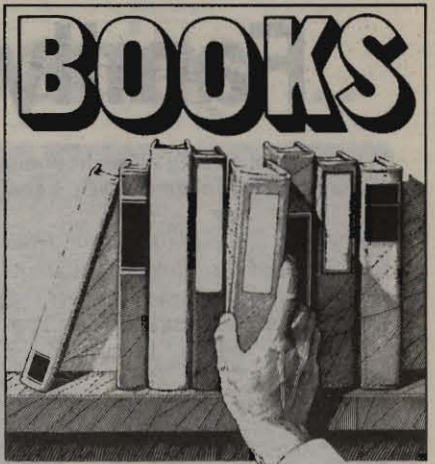
• Life in Broome — a social and historical glance into this small pluralist society. "Many of the Europeans who find Broome an exciting place decide to stay, and they are known to everyone as MUNGBEANS. They do not have a permanent residence but live along the beaches and in sandhills. They are the type that bring different drugs into the town."

• The experiences of an Aboriginal woman at an International Federation of University Women's conference in Christchurch, New Zealand. ". . . New Zealand women were interested because of the Maoris but I kept telling them there was a distinction between Maoris and Aborigines because Maoris had treaties and we didn't . . ."

• The rise and fall of Coranderrk, near Healesville — a report on a thriving Aboriginal community of the 1860s.

• Verse from contributors including Louise Campbell, Troy John Dowling and Stephen Clayton.

• And a secretary's impression of



MOSA: ". . . The sense of community which Aboriginal people display is really commendable. I have not yet met one lonely Aborigine. I wish I could say that about the rest of the Australian population."



• Isaac Brown, director of MOSA

Domestic garbage can mean profits

A comprehensive recycling program in a municipality might make money, cost nothing, or at the very worst cost 50 cents a resident a year.

Even if it was run at a loss, it would be a bargain in terms of satisfaction and benefit to the community so few, if any, residents would complain.

These were the findings of a study by the Graduate School of Environmental Science, now published as Environmental Report No 27, *Domestic Waste Recycling: Municipal, Community and School Involvement*.

The objective of the study, which was funded by the Packaging Council of Australia and the Australian Council of Recyclers, was to "produce a model which will encourage the recycling of domestic refuse in all municipalities and to increase yields in municipalities with existing programs".

It concentrates on recycling operations which use existing resources such as door-to-door collections and drop-off centres.

Among the findings of the study were that:

- Environmental and conservation concerns and charitable inclination appear to be greater recycling motivators to residents than financial savings.

- Independent collectors are now the dominant door to door collectors in Victoria and provide a free garbage reduction service to councils.

- Potential recycling income to the value of about \$7,700,000 a year exists in the glass and paper components of garbage.

• Only seven municipalities are directly involved in the door to door collection of recyclable materials, although 23 council garbage crews collect for their own reward.

The report, by Doug McCann, Doug Hawkins, Jan Makowski and Ian Thomas, was published with the assistance of the Municipal Association of Victoria.

More recycling ideas from the Graduate School of Environmental Science can be found in *Opportunities for Recycling*, by Kathleen Gray and Ian Thomas, which has just gone into its second printing.

Inquiries about both publications should be addressed to the Graduate School.

- Sketch by Simon Kneebone from *Opportunities for Recycling* by Kathleen Gray and Ian Thomas.



Greek journal gets facelift

Monash lecturer in Modern Greek, Pavlos Andronikos, is planning a special bicentennial edition of *Antipodes*, the magazine of the Greek Australian Cultural League of which he is president.

Mr Andronikos took over as editor of the twice-yearly magazine in 1986, and is just finalising the December, 1987 issue.

"I've made substantial improvements to the quality of presentation and content with the aim of establishing *Antipodes* as a serious contribution to Australian and Greek letters," he says.

The magazine is bilingual in that it publishes contributions in either Greek or English (but not both).

It is mainly literary in focus, publishing poems, short stories, literary criticism and book reviews, as well as occasional articles of historical and sociological interest relating to Greece, Greeks in Australia or Australia generally.

Copies are available from Mr Andronikos, and contributions should also be addressed to him, c/- department of Classical Studies, ext. 3262.



Family problems are all the same

"You've been talking all night about our family and you don't even know us . . ."

That's the common response from people involved in Monash's Parent-Teacher Education Centre seminars.

And it doesn't surprise Associate Professor Maurice Balson, director of the centre.

"Most families are the same, therefore most problems are the same," he says.

"Educate and inform the family and most problems disappear."

Yet parent education has been almost totally ignored by governments and the formal educational system, he says.

Dr Balson has just had 650 people for a six-week mini-course in Effective Parenting and Demonstrations of Family Counselling. Eight hundred applied to attend.

The first part of each session was directed at parents, while children went to a play centre under the care and observation of people from the Institute of Early Childhood Development.

The families were reunited for a period, and when the children returned to the play centre the teachers and parents were broken up into training groups according to their involvement with pre-schoolers, primary school or adolescents.

During his 20 years at Monash, Dr Balson has taught on the average two parent groups each week. He is the author of *Becoming Better Parents* and *Understanding Classroom Behavior*.

These are some Balson tenets:

- People need to belong. Children who feel they don't belong behave in silly ways.
- Sources of discouragement to good

behavior are spoiling, rejection, over-protection, sibling rivalry and competition, mistakes in approach, attention-seeking.

- All behavior has a purpose behind it. "We reject causation. We don't believe in causes. If a child is shy, we ask for what purpose is the child shy?"

- We are heavily into individual responsibility. Respect the children's right to choose but be sure they know the consequences of their behavior. Too many parents take over the child's responsibility all the time.

Examples: If he doesn't get up in the morning, he will be late for school; if he doesn't eat he will be hungry; if he leaves his cricket bat on the nature strip it will be lost (don't buy him a new one); if he's late for dinner, he doesn't get fed.

- Choice, decision and consequences. That's what we are on about.

- The family is the best unit to solve problems and children within the family can help each other. It's the same with school classes.

- If you want to change the behavior of someone else, change your own.

Dr Balson says he is amazed at the enormous demand for counselling and parent education.

Next year there will be a further two six-week sessions with shorter seminars in special areas like infant welfare, day care, parents with special problems and leadership.

To help the centre become self-supporting, charges will be made for next year's seminars.

Becoming Better Parents (\$9.95) and *Understanding Classroom Behavior* (\$6.50) are available from the Distribution Services Division, ACER, PO Box 210, Hawthorn, 3122.

Blindfolded, a poem in three parts by Brenda Ludeman, is the winner of the Monash University Prize for Poetry — 1987. Ms Ludeman is a third-year Arts student. Christine Wilksch's poem, *Three Interlocking Pieces*, was given an honorable mention.

BLINDFOLDED

Immolation is the mother of silences
We smoulder together, wrapped in dull sheaves
How you inhabit me you who are mute.

The wind elongates the sound of a child's cry
Horizon lines, descend on the mouth of the mother
clinging like smoke in the still air.

The button eyes of Electra belonged to me
and yet I carried you, an odd doll
with a bright, unwinking gaze, and still
I cannot decipher your silence, the weight of it
under worn linen slapping in the wind.

I see you, inescapably immured, beyond a space
of darkness. When I dream now I cannot remember.
Is this my inheritance?

★ ★ ★

Blindness inhabits me probing
in the dusk, for an imperceptible door
folded shut.

Why have I chosen this?
A secret in which I am embedded,
the place of the unnamed. Here in the damp earth
where a mute child lives, under the weight of stone
crouching in the shadow.
Why has she no name?

A crowd came leaning together
and in their midst a blindfolded woman walked,
the daughter of an immolation.

She mouthed the shape of a word
woven in folds, like a garment of endless threads
falling Beyond the lure of a dead language.

★ ★ ★

The dusk in which the mother's hand awaits
opens.
Why do you work? asked the child.
I work for the return of the daughter,
so that her hand may not become a claw in mine.

What unfolds is a space
giving back all that was given,
A breathing between the eye and the unfolding leaves.

Unfolding between the breath and the eye
magnifying, the supple arms of a child
twisting under the dome sky.

Light unfolds in the wavering leaves
waiting in the early morning
like a woman who can see.

— Brenda Ludeman

Health hazards in the home

The dangerous ingredients in insect sprays, floor polishes or oven cleaners no longer have to remain a mystery, thanks to a new book, *The A to Z of Chemicals in the Home*.

The book's author, Dr Kate Short, gave a talk last month at the Graduate School of Environmental Science which outlined the health hazards some chemicals pose and suggested simple alternatives.

Dr Short, executive officer for the Total Environmental Centre's Toxic and Hazardous Chemicals Committee, wrote the book in response to a deluge of phone calls from concerned consumers.

Chemicals can pose unexpected dangers, she says. For example, dichlorvos, a substance commonly used in surface sprays, pest strips and flea collars, can cause bad asthma attacks and serious skin reactions.

"People don't realise there are numerous ways you can reduce the use of such chemicals."

Dr Short suggests a broom is as effective as insecticide when it comes to killing spiders, for example.

The A to Z of Chemicals in the Home is written in easy-to-understand language and illustrated with cartoons.

It has been endorsed by the National Safety Council.

A consumer can determine how a product is affecting his or her family by simply reading the active ingredient on the product label and referring to the book's alphabetical listing.

Dr Short, a trained political scientist, became interested in the hazards of chemicals while working for the Australian Consumers Association.

During that time she discovered that some substances which had been either banned or restricted elsewhere were still available in Australia.

She said organisations such as consumer and environmental centres have helped place the issue of hazardous chemicals on the political agenda.

"Sections of the chemical industry try to portray environmentalists as anti-chemical activists causing undue public concern. That's quite misleading.

"Of course we can't escape the use of chemicals, but until recently we've been unwilling to see the long-term effects that inappropriate use can cause," Dr Short said.

Long wearisome voyage

MARGIN Number 18, edited by Dennis Davison, features an historical assessment of the theatre of Justin Fleming (*Ripper, Hammer, Indian Summer Doubtful His Empire and Cobra*); a letter from the Melbourne of 1867 (. . . After a long wearisome voyage the first impression is almost one of disappointment at having come so far to see sights and hear sound so familiar. Long before you land, the familiar ugly staring letters, with which the British shopkeeper delights to deface his dwelling, are visible on the waterside houses . . ."); notes on bibliographer Ian McLaren and Jean Uhl's *Index of Supreme Court Records: Criminal Sessions*.

(Margin, a collection of informal notes from the Monash Australian

Research Group, is published twice yearly by the department of English and is obtainable from Dr Davison, c/- the department, for \$3 subscription a year, post free.)



First novel

Former student Cathy Hoffmann has just had her first novel, *Crystal*, published by Greenhouse.

Hungarian-born Cathy, who came to Australia when she was 10, is the author of *Perilous Journey* (1981) and a number of short stories.

Her second novel, *Forms of Bliss*, is due to be published next year.

U3A on the move at Monash ... and around the world

The University of the Third Age (U3A) at Monash this year became the first Australian group to join the International Alliance of U3As.

Its growing profile can be attributed to the enthusiasm and dedication of more than 450 members, who will happily reinforce the Higher Education Advisory and Research Unit's finding that "mature age study is good for you".

This year members enrolled in self-help courses ranging from amateur radio to current affairs debates, Tai Chi to wine appreciation, history to Asian studies.

The "students" are taught by other "students"; retired people who use their wide experience and well-developed skills to help others who have reached the age of active retirement.

Mrs Anne Bell, U3A at Monash's public relations officer, said: "The demand for our classes and services is becoming greater, and we'll just keep growing."

Monash U3A, centred at Normanby House, is an incorporated association

supported by the Centre for Continuing Education.

Members, who range in age from 45 to 85, participate in social activities, conferences and group activities arranged by other U3As, as well as those arranged at Monash.

Some members recently raised their own funds to join Dr Jack McDonell, Director of the Centre for Continuing Education, when he attended the Conference of the International Associations of U3As in Warsaw, Poland, earlier this year.

Mrs Bell said the group's next large event was a history seminar planned for February 1988 as part of the Bicentennial celebrations.

The History department will help organise the seminar and department members have been invited to participate.

Annual membership fees for U3A at Monash are \$15 single and \$25 a couple.

This entitles members to join in all activities and enrol in as many classes as they wish.

The U3A movement is not only alive and well. It is an international phenomenon which is expanding and attracting increasing recognition. This is the message which Jack McDonell, director of the Centre for Continuing Education, brought back from his attendance at two recent conferences in Europe.

The national conference of U3As in the UK, held at Bath on September 8 and 9, was attended by about 150 delegates drawn from the 79 affiliated groups in England, Scotland and Wales.

One obvious difference between U3As in the UK and in Australia is in the sizes of their membership. Here we are accustomed to groups with membership of several hundred — the Monash group, for example has over 470 members. However, 34 of the UK groups have less than 50 members and another 20 are in the 50-100 range. Clearly, their methods of operation and types of program are rather different from those of our much larger groups; so there are some interesting lessons which we can learn, from their experience, as our U3A movement extends to country towns where the potential pools of members will be, relatively, much smaller.

The other aspect of the Bath conference which has relevance for our U3As is the way in which their national organisation is grappling with the same problem as is our Victorian Network — how to maintain a permanent central office, for which there is an obvious need, while maintaining the voluntary, self-help nature of the U3A concept.

The second conference was the more exotic — the Annual Congress of the International Association of Universities of the Third Age, held in Warsaw from September 15-17. Advertised as a congress whose official languages were English and French, it attracted only three native English speakers among the 200 participants — Jack and Win McDonell and a lady from England!

Despite having to struggle through occasionally with our limited French and uncertain translations, we found it to be a most stimulating experience and one which will open up a whole range of international contacts for U3As in Australia.

The main theme of the congress was education and health. As a result, many of the congress papers were presented by academics working in various aspects of gerontology and using U3As as an area for study. There were also several contributions from academics working as resource people — either administrators or teachers — in U3As sponsored by or actually operated by their various universities. In continental Europe, it is a common practice for a university to support a U3A within its own structure, as

part of its overall program of community involvement.

I found the following contributions to the congress particularly interesting:

- There appears now to be emerging some research evidence in support of the proposition that deterioration of mental capacity among older people is not so much associated with the physical ageing process and the inevitable loss of brain weight as with reduction of intellectual activity.
- With increasing frequency, one hears of the "therapeutic by-products" of involvement in U3As — improvements in self-perception, creation of new circles of friends and expansion of the range of topics one thinks and talks about in daily life, new-found admiration from families, alleviation of problems of adaptation to modern life.
- Current educational activities for the elderly predominantly attract the already-educated. We are still far from finding any proven programs of education for under-educated older adults.
- There is a trend in continental U3As towards more academically structured courses, sometimes designed to extend over several semesters and sometimes, even, ending with the award of diplomas.
- Demographic trends in some Western European countries are towards 35 per cent or more of the population being beyond age 60 soon after the end of this century; each member of the work force will then have to support one young person and at least one old person, the latter with much the same consumption requirements as the worker. Since early retirement is not entirely a blessing for everyone — it often leads to cessation of activities and disfunction — it may be both economically and socially desirable (from the viewpoint of health of the individual) to encourage an increase in the retirement age of healthy people.

All in all, I have come back convinced that there are real mutual benefits to be derived from Monash's continuing encouragement of Universities of the Third Age, and particularly from our association with U3A at Monash. This educational innovation is providing a community service of real value and we gain from being seen to be supportive of its activities.

Jack McDonell

Young students show talent

A pedal-powered hydrofoil, a computerised dog, a mathematical analysis of a whirlpool, a hurricane-generating machine — all these and more were on display at Robert Blackwood Hall last month in the annual Science Talent Search run by the Science Teachers' Association of Victoria.

More than 4000 students or groups of students entered this year's competition and 400 children had their winning pro-

jects on display. Several were among the finalists in the Australia-wide AMP and BHP competitions.

The Science Talent Search is the biggest competition of its type in Australia, and one of the longest-running in the world. It is run specifically to encourage Victorian schoolchildren from primary school ages up to Year 12 to try their hand as budding scientists and engineers.

• The Dean of Science, Professor Bill Muntz, was very impressed with entries in the Science Talent Search. He is pictured with a model by Julius Kornides of Essendon Grammar which demonstrates the use of a multi-lens adapter for a telescope. Julius developed the adapter to allow a 40mm telescope tube to accept a 60mm lens without loss of light.



ELECTRICAL ENGINEERING

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Computer Systems Engineering (from plain Electrical Engineering) in 1980 and now the department will have the same name as the course.

SMEEA secretary Kishor Dabke welcomed the alumni and president Bill Bonwick concluded the evening with a discussion of the attitudes of former students to their education in the department. During the dinner, Professor Lampard retraced the history and spoke about recent initiatives, such as a new Chair in Telecommunications and Information Engineering, while Professor

Jarvis outlined future developments including a Centre for Intelligent Robotics.

Inquiries about the alumni should be directed to Dr Dabke on 565 3507 or 565 3480.

Monash Reporter

This is the last *Monash Reporter* for 1987. The next will be published in March, 1988. Contributions (letters, photos) and suggestions should be addressed to the editor, Lisa Kelly (ext. 2085), c/- the Information Office, ground floor, University Offices.

Christmas cards for sale

University Christmas cards are being offered for sale in sets of six (\$4.20) or separately at 80 cents each.

There are four different designs in the laminated cards, which feature color photographs of university buildings.

They come complete with

envelopes, and are available with or without printed greetings.

The cards can be seen and purchased at the inquiries desk at the entrance to the University Offices. Telephone inquiries should be directed to Susan Knight on ext. 2089.



Music of the ages ...

In the deserts of Rajasthan, West India, certain caste groups still earn their living by supplying musical services to patrons in a centuries-old tradition.

"There is a close relationship between certain merchant families and musical families," says Dr Reis Flora, senior lecturer in Music, who recently returned from a study tour of Rajasthan.

There are two or three castes of pro-

fessional musicians in the desert, most notably the Langas and Manganiyars.

"They provide music for, say, marriage ceremonies that might last for weeks, but their patrons can also demand that they perform concerts.

"This means they must develop very high musical skills, not just basic music for rituals. They must also be able to play for entertainment and pleasure," says Dr Flora.

"Rajasthan offers a unique opportunity to study music under changing social, economic and political conditions.

"I went there particularly because there's a pretty complex picture. Music has been and still is associated with the courts.

"The region is going through transition but the music is so energetic and viable."

Dr Flora is particularly interested in the so-called snake-charming instrument, or murli, which the Langas have taken over from another caste group, the Kalbalias, and refined to suit their purposes.

"These musicians are very adaptable; they have made the murli smaller and

turned it into a first class instrument," he says.

The murli is actually encased in a wind chamber. It is made from two parallel wooden pipes, one a drone, the other with finger and thumb holes. A single reed device is inserted into each pipe and the whole thing is inserted into a gourd. There is a natural neck for the musician to blow into.

Dr Flora did his Ph.D research on the sahnai, an Indian instrument similar to the western oboe.



• Staff on the eastern side of the Central Science building watched in amazement over a number of days as this extraordinary plant pushed its thick central stem nearly three metres into the air and then produced a single flower which reached a diameter of around 40cm. Rob McClure from Botany identified it as a *Gymea Lily* (*Doryanthes excelsa*), one of three on campus. Reported to be an Aboriginal food plant, it is a member of the Agavaceae family and native to the coast and ranges around Sydney. Photos — Tony Miller.

... and of youth

From the end of exams until Christmas, Robert Blackwood Hall will echo to the sounds of the young.

But most of the sounds will be quite melodious, involving performances by young people's bands, choirs and orchestras in end-of-year celebrations or Christmas concerts.

The National Boys' Choir, Victorian Boys' Choir, Australian Girls' Choir, Percy Grainger Youth Orchestra, Victorian Children's Choir, Melbourne Youth Orchestra, Melbourne Youth Symphonic Band, John Antill Youth

Band and the Melbourne Youth Choir are all booked to perform between November 24 and December 19.

Ms Joan Sayers, assistant manager of the hall, said she was delighted by the high standard and diversity of the youth presentations.

"They're very popular concerts, attracting on average about 800 people to each performance.

"When you have children involved you always have mum and dad, brother and sister, grandma — and even sometimes great-grandma — coming along to watch."

Ms Sayers said one of the hall's major attractions is its excellent facilities for the elderly, with ground access and very comfortable seating.

"And I honestly believe the difference between Robert Blackwood Hall and other venues is that the staff here care about people.

"If there is any way we can make things more comfortable for the elderly or disabled, then we do so," she said.

When the sounds of singing and music are not filtering from the hall, Melbourne's high schools and colleges will be honoring their pupils at their annual speech nights.

"These occasions always draw a full house," says Ms Sayers.

"With a couple of exceptions, all our bookings, day and night, during this period are for young people."

